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U.S. DEPARTMENT OF ENERGY

HYDROTHERMAL MARKET ESTIMATES PROGRAM

Deliverable Item No. 8

Generic Hydrothermal Resource Characteristics

and

Generic Resource Types

by

Earth Science Laboratory Division

University of Utah Research Institute

Salt Lake City, UT

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INTRODUCTION

The Earth Science Laboratory Division of the University of Utah Research Institute has the task (Technecon, 1980) of determining generic resource types for all hydrothermal resources in the United States for input to an econometric decision-making model (Cassel et al., 1979). Pursuant to this task is the definition of several variable resource characteristics that will distinguish each generic type. Other characteristics of hydrothermal resources are considered common among the generic types and either are not considered here (no economic impact) or are considered but are treated as invariant (constant economic impact). A wide spectrum of resource characteristics is considered in order to include resources for both electric power generation and direct heat utilization.

GENERIC RESOURCE CHARACTERISTICS

Assumptions

Several assumptions are necessary to permit a realistic representation of all known and undiscovered hydrothermal resources by a limited number of generic types. These assumptions are as follows:

1. Data from known hydrothermal systems can be selectively extrapolated to both identified and unidentified systems that lack such data;
2. Mean reservoir temperatures, known and estimated, as published in USGS Circular 790 (Muffler, 1979), apply to the entire population of hydrothermal resources;
3. The selected generic resource characteristics included are sufficient to describe all essential criteria for a valid economic decision-making process; and

4. Resource models developed from known data or developed *a priori* can be used to predict discoveries.

Characteristics

Cassel et al., (1979) have determined from previous work that the resource characteristics listed in Tables 1 and 2 are important in economic decision-making processes leading to development of hydrothermal resources. As a first step in our study, resource and exploration characteristics and data were compiled for the important, known hydrothermal resources in the world. From this data base, typical ranges of values were determined for each resource characteristic. Ranges of values for selected characteristics were then tested in the economic model (Cassel et al., 1979) for model sensitivity to these ranges. The results of this sensitivity analysis (Cassel, 1980; Appendix I) were used to determine a smaller list of characteristics whose values affect the economic model most. This list is given as Table 1, and the ranges in values were used to characterize generic hydrothermal resource types.

Other resource characteristics were relegated to a list of constant or dependent characteristics or were dropped from further consideration because of lack of significant economic impact in terms of the present study. Estimated values for the constant or dependent resource characteristics are included in Table 2. For each constant resource characteristic either the model is relatively insensitive and an average value can be used or the model is sensitive to the particular characteristic but the characteristic does not vary significantly. Each dependent resource characteristic can be determined

from other parameters of the model, and so no independent estimate is required.

The resource characteristics listed in Tables 1 and 2 were reviewed at the Denver meeting of the Hydrothermal Market Estimates Task Force on April 22 and 23, 1980. A few changes in these characteristics had been made from those used by Cassel et al. (1979) in earlier studies. The most significant change is the inclusion of pumping in the model. A second significant change that was then anticipated, namely the inclusion of time-varying parameters such as drawdown of reservoir pressure and temperature with time with a compensating increased pump rate with time, is not shown in Table 1 because the economic model cannot incorporate these data.

Table 3 contains the complete list of resource parameters that were investigated for this study.

GENERIC RESOURCE TYPES

The resource characteristics in Table 1 are believed to provide sufficient range to develop generic categories for both electric power generation and direct heat applications. The presence of a range category in Table 1 does not imply that resources exist within that range. A maximum of 9408 different generic resource types are possible from the number of range values in Table 1. This study has identified a total of 85 generic resource types thought to be representative of all known and undiscovered hydrothermal resources. These generic resource types are listed in Table 4 and details are presented in Appendix II. The data shown on each form in Appendix II have

been derived so far as possible from consideration of known resources. However, these data may not be entirely representative of the geothermal resource base since most recent geothermal exploration has been performed by private industry, and most of the resulting information is proprietary.

The generic type is expressed as a number such as 441351, and is derived from the range numbers shown in Table 1 by listing in order the range number for the following characteristics: temperature, unpumped flow rate, brine contamination index, well costs, pumped flow rate, and maximum producible acreage. Thus generic type 441351 has moderate temperature (250-300^{o}F), moderate unpumped flow (200-400 x 10^3 lbs/hr), low salinity (<2000 ppm TDS) fairly low well costs ($0.5M - $1.0M), a high pumped flow rate (to 400-600 x 10^3 lbs/hr), and a producible acreage of less than 10,000 acres.

A number of assumptions have been made in selecting the appropriate range numbers defining a generic resource type. Moreover, estimates of some resource characteristics can be made with greater confidence than can others since there are few data available for some of the resource characteristics considered. A discussion of these assumptions and the varying levels of confidence associated with estimating resource characteristics is given below.

Well-Head Temperature. In general, the confidence level for the temperature data is fairly high. Well-head temperature values are based upon geothermometer estimates (Muffler, 1979) or, where available, from measured down-hole temperatures. A comparison of measured down-hole temperatures with temperatures estimated from geothermometry suggests that, at least at high temperatures, geothermometers provide a fairly reliable estimate of reservoir temperature.

The minimum, most likely and maximum values noted for well-head temperature do not reflect variation about a mean. Rather, these temperatures represent the actual variation of temperature at a given site as known or inferred from measured temperatures or geothermometer estimates. The most likely temperature listed is the actual measured down-hole temperature where available. For systems with no bottom-hole temperature-data, the most likely temperature value is selected from the most reliable geothermometer estimate for the system. The most likely temperature value determines selection of the temperature range number.

Unpumped Well Flow Rate. The confidence level for this parameter is considerably less than that for well-head temperature. Flow rates are known only in systems with production test data. Flow rates for systems with no or limited production test data have been estimated from the flow rates known in geologically similar systems. It should be noted, however, that flow rates within a given system are variable and reflect the selection of a successful drilling site and the use of appropriate drilling and completion techniques to allow maximum obtainable flow. Therefore prediction of flow rates is very difficult.

The value estimated for the most likely unpumped flow rate is used to establish the range number. In systems for which flow data are available, the minimum, maximum and most likely unpumped flow rates reflect the actual flow rate variation for these systems. In systems with no production data the minimum and maximum flow rates were selected so as to fall within the range number determined by the value for most likely unpumped flow rate.

Brine Contamination Index. In general the fluid chemistry of most geothermal systems is known with some confidence. Thus the values selected for brine contamination index are probably fairly reliable. In most cases higher temperature fluids contain more dissolved solids than lower temperature fluids. However, some low- to moderate-temperature geothermal fluids derived from aquifers within deep sedimentary basins may be fairly saline.

Producer Well-Cost. Well costs are expressed in 1978 dollars per agreement with T.A.V. Cassel. Actual well cost minimum, maximum and most likely values are given for systems for which they are known. All other well costs were estimated using the data from Chappell et al. (1979) and were checked with the well-cost analysis provided by Lawford (1980). In this case the minimum and maximum well costs were selected so as to fall within the range number determined by the value for most likely well cost. Drilling costs are fairly well known, resulting in a fairly high level of confidence for producer well cost, assuming that our perceptions of target drilling depths are accurate.

Pumped Well Flow Rates. The discussion of availability of only very limited data, selection of minimum, maximum and most likely values, designation of range number, and level of confidence for unpumped flow rate also applies to pumped flow rate. Several additional assumptions were made in determining pumped flow rate:

1. In systems with high unpumped flow rates, pumping will not be necessary. This is particularly true of high-temperature resources which commonly flash under reduced pressure, resulting in higher

unpumped flow rates than for lower-temperature systems. Thus the range numbers for unpumped and pumped well flow rates are the same in this case. In addition, most present pumps cannot tolerate temperatures in excess of 350°F.

2. For systems with moderate unpumped flow rate, pumping will increase the flow by one range number. In systems with low unpumped flow rates pumping will increase the flow by one to two ranges.

3. Systems with no flow have not been considered since they will not be economic.

Maximum Producible Acreage. Information on maximum producible acreage was available for only a few systems. In most cases estimates were made on the basis of geologic setting. The conceptual model for Basin-and-Range type, fault-controlled systems suggests that these resources are site-specific. It was thus assumed that the 99% confidence area was very limited and generally restricted to no more than 1000 acres. The 50% confidence zone averages about 3200 acres and the 1% confidence level is a step out to about 6400 acres. In contrast, the 99% confidence level for a resource controlled by an aquifer in a deep sedimentary basin is essentially infinite, since a properly drilled and completed well drilled anywhere into the hot aquifer has an excellent chance of production. To reflect these areal differences when all other resource characteristics are identical, we have used two areal generic types, one for restricted systems of generally less than 10,000 acres, and the other for larger systems.

Total Expected Finding Costs. Two different exploration cost constants were selected for electric and non-electric exploration sites. Based upon available geothermal exploration case histories (Ward, 1977; Ward et al., 1979), electric exploration costs are assumed to be $6 million per site, and non-electric exploration costs are assumed to be $1 million per site.

REFERENCES

Cassel, T. A. V., 1980, Letter to P. M. Wright, April 7, 1980 (included in Appendix I).

Cassel, T. A. V., Edelstein, R. H., Blair, P. D., Amundsen, C. B., 1979, Geothermal investment and policy analyses with evaluation of California and Utah resource areas: Technecon Analytic Research, Inc. and the University of Pennsylvania, Philadelphia, PA, DOE/RA/4713-1.

Chappell, R. N., Prestwich, S. J., Miller, L. G., and Ross, H. P., 1979, Geothermal well drilling estimates based on past well costs: Geothermal Resources Council, Transactions, v. 3, Sept., p. 99-106.

Lawford, T., 1980, Deep well costs, Deliverable Item No. 5.

Muffler, L. J. P., editor, 1979, Assessment of geothermal resources of the United States - 1979: U. S. Geol. Survey Circular 790, 163 p.

Technecon, 1980, Specifications of regional boundaries and deliverable items; Technecon Analytic Research Inc. Rept., April 28, 1980.

Ward, S. H., 1977, Geothermal exploration architechture: Univ. Utah report, Dept. of Geology and Geophysics, Salt Lake City, UT.

Ward, W. H., Ross, H. P. and Nielson, D. N., 1979, A strategy of exploration for high temperature hydrothermal systems in the Basin and Range province: Univ. Utah Research Inst., Earth Science Lab.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

TABLE 1

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

TABLE 2

CONSTANT OR DEPENDENT RESOURCE CHARACTERISTICS

PARAMETER	VALUE		
	ELECTRIC	NON-ELECTRIC	FUNCTION OF
EXPLORATION COSTS	$6M	$1M	-
WELL SPACING	40 ACRES	NA	-
RESERVOIR LIFE	30 YRS	30 YRS	-
INJECTION WELL COSTS	0.9	0.9	WELL COSTS
INJECTION WELL FRACTION	0.5*	0.8*	NO. PRODUCTION WELLS
REDRILLING (WORKOVER) COSTS	0.35	0.35	WELL COSTS
REDRILLING (WORKOVER) FRACTION	0.33	0.33	NO. PRODUCTION WELLS
DRY WELL COSTS	0.9	0.9	WELL COSTS
DRY WELL FRACTION	0.25	0.25	NO. PRODUCTION WELLS
SPARE WELL FRACTION	0.2	0	NO. PRODUCTION WELLS

*AT LEAST ONE INJECTION WELL NEEDED.

TABLE 3

RESOURCE CHARACTERISTICS CONSIDERED

PHYSICAL CHARACTERISTICS

- Temperature (measured)
- Temperature (estimated)
- Salinity
- Fluid Phase
- Reservoir Lithology
- Type of Porosity
- Permeability/Transmissivity
- Areal Extent and Geometry
- Depth
- Surface Manifestations
- Geologic Setting

EXPLORATION CHARACTERISTICS

- Exploration Costs
- Topography
- Number of Wells Drilled

DEVELOPMENT AND PRODUCTION CHARACTERISTICS

- Well Free Flow Rate
- Well Pumped Flow Rate
- Well Costs
- Well Spacing
- Well Life
- Reservoir Decline Characteristics
- Reservoir Production Capacity
- Reservoir Life
- Injection Well Costs
- Injection Well Fraction
- Injection Well Pumping Costs
- Redrilling (workover) Costs
- Redrilling (workover) Fraction
- Drywell Costs
- Dry Well Fraction
- Spare Well Fraction
- Current Development Status

TABLE 4

GENERIC RESOURCE TYPES

111321	211321	411421
111332	211421	412321
111421	212321	421431
111432	212332	422331
112321	212421	422431
112332	212432	441351
112421	221331	442251
112432	221431	442351
121331	222331	442451
121332	222332	
121431	222431	512231
121442	241351	512331
122331	241451	522331
122342	242351	541351
122431	242352	542251
122442	242451	542351
141351	243352	542451
141352		622331
141451	311431	642251
141452	312321	642351
142351	312332	642451
142352	312421	652461
142451	321331	
142452	322331	722231
143352	322431	751361
151361	341351	752261
151362	342251	752361
	342351	
	342451	812231
		832241
		852261
		853262
		862361

The Generic Category Number is determined by listing in order the Range Number for the following resource characteristics as shown in the table: Temperature, Unpumped Flow Rate, Brine Contamination Index, Well Costs and Pumped Flow Rate.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

APPENDIX I.
Cassel (1980)
Resource Characteristic Sensitivity Study

TECHNECON ANALYTIC RESEARCH, INC.
2400 CHESTNUT STREET
PHILADELPHIA, PENNSYLVANIA 19103
(215) 561-5462

PRELIMINARY INFORMATION

April 7,1980

Dr. P. Michael Wright, Associate Director
University of Utah Research Institute
Earth Science Laboratory
420 Chipeta Way (Suite 120)
Salt Lake City, UT 84108

Dear Mike,

Enclosed are the results of parametric sensitivity evaluations performed by Technecon to assist UURI with generic geothermal resource characterization. Ten parameters were tested, as defined on the attached page titled, "Definition of Resource Parameters".

The basecase for these evaluations is the 100 megawatt level of development at a resource with characteristics similar to the East Mesa KGRA. This basecase was selected because it is neither an extremely high quality nor an extremely low quality resource, and because the 100 megawatt level of development is not heavily encumbered with front-end resource finding costs (as is the initial 50 megawatt level) nor is it hampered by a high level of uncertainty (as are much larger levels of development).

Each of the ten parameters was tested for its effect upon the Expected Utility of the basecase. Expected Utility, as discussed in our report DOE/RA/4713-1, is a measure of the attractiveness of hydrothermal ventures as perceived by investment decision makers within the resource industry. It incorporates measures of capital efficiency, project magnitude, duration of investment exposure and risk of loss into a single value.

Each of the ten enclosed graphs includes a supplementary curve showing the probability that the Expected Utility of the geothermal venture (EU_G) is greater than or equal to the Expected Utility of the firm's alternative investment (EU_A). This may be interpreted as the likelihood that the geothermal venture will be preferable to a firm's alternative and it accounts for idiosyncratic differences in utility preceptions within the resource industry as well as for differences in the quality of investment alternatives.

Based upon these results, and upon discussions in your offices on March 17th and 24th, the following conclusions are drawn:

Dry Hole Fraction. Unless it is expected to be greater than 0.2 during developmental drilling (i.e. *after* confirmation), sensitivity appears low therefore it may be excluded from generic characteristics.

Initial Redrill Fraction. Sensitivity appears low therefore exclude from generic characteristics.

Producer/Injector Ratio. *If* it is expected to vary significantly from one resource to another, sensitivity is significant therefore include it in generic characteristics. Perhaps it can be fixed at 2?

Replacement Redrill Fraction. Sensitivity is low therefore exclude from generic resource characteristics.

Salinity Index. Sensitivity is significant therefore include in generic resource characteristics. Results indicate that the five-point index used previously (0,1,2,3,4) can be simplified to a two-point index (i.e. low salinity and high salinity). See also the discussion for well life below.

Spare Well Fraction. Sensitivity is significant; however, this fraction may be dependent upon industry reliability concerns moreso than resource characteristics and may, therefore, be excluded from generic resource characteristics.

Temperature. Sensitivity is significant therefore include in generic resource characteristics. Results indicate decreasing marginal sensitivity with increasing temperature which permits wider temperature bands for generic classification at higher temperatures. Resources may be generically grouped in temperature bands of 300-320F, 320-350F, 350-400F, and greater than 400F.

Well Cost. Sensitivity is significant therefore include in generic resource characteristics. Results indicate that uniform increments of $200,000 may be used to generically group resources, i.e. $200-400K, $400-600K, $600-800K, etc. Both well depth and type of geology (i.e., igneous or sedimentary) are incorporated into well cost according to Figure 2-2 on page 2-7 of Report DOE/RA/4713-1, therefore these two characteristics may be excluded from generic characteristics.

Well Flow. Sensitivity is significant therefore include in generic resource characteristics. Results indicate decreasing marginal sensitivity with increasing well flow which permits wider flow rate bands for generic classification at higher flow rates. Resources may be grouped generically in well flow bands of less than 250,000 lbs/hr, 250,000-300,000 lbs/hr, 300,000-400,000 lbs/hr, 400,000-700,000 lbs/hr, and greater than 700,000 lbs/hr.

Well Life. Significant sensitivity appears for well lives of less than five years. If the Salinity Index may be used as the determining factor for well life, these two characteristics may be coupled such that a low salinity implies a well life of greater than five years, while a high salinity implies a well life of two to five years. If this is possible, Well Life need not appear as an explicit generic resource characteristic.

Other important characteristics which were not tested but which we have discussed include well spacing, probabilistic resource size, and probabilistic resource performance (e.g., decline of temperature and flow) over time. If, for the purposes of the analysis at hand, well spacing may be fixed at 40 acres per well, I would suggest that we do fix it. Size and performance characterizations will have to be discussed in meetings within the next few weeks.

If you have any questions about this sensitivity evaluation, please give me a call.

Regards,

Thomas A.V. Cassel,Ph.D.,P.E.

encl.
TAVC/tw

PRELIMINARY INFORMATION

Attachment
P. Michael Wright
April 7, 1980

DEFINITION OF RESOURCE PARAMETERS

Dry Hole Fraction. Fraction of total production wells drilled during resource development (i.e. *subsequent to* resource confirmation) which are abandoned as nonproducible.

Initial Redrill Fraction. Fraction of successful production wells drilled during resource development which must be redrilled to achieve satisfactory producibility.

Producer/Injector Well Ratio. Ratio of number of production wells to reinjection wells in a well field.

Replacement Well Fraction. Fraction of replacement production wells which are redrilled old wells rather than new wells.

Salinity Index. An index which, as used in Report DOE/RA/4713-1, ranges from 0 for uncontaminated, low salinity geothermal brines to 4 for highly contaminated, highly saline geothermal brines. It is used to adjust well field operating and maintenance costs.

Spare Well Fraction. Fraction of total successful production wells which represent spare standby production capacity as opposed to active production capacity.

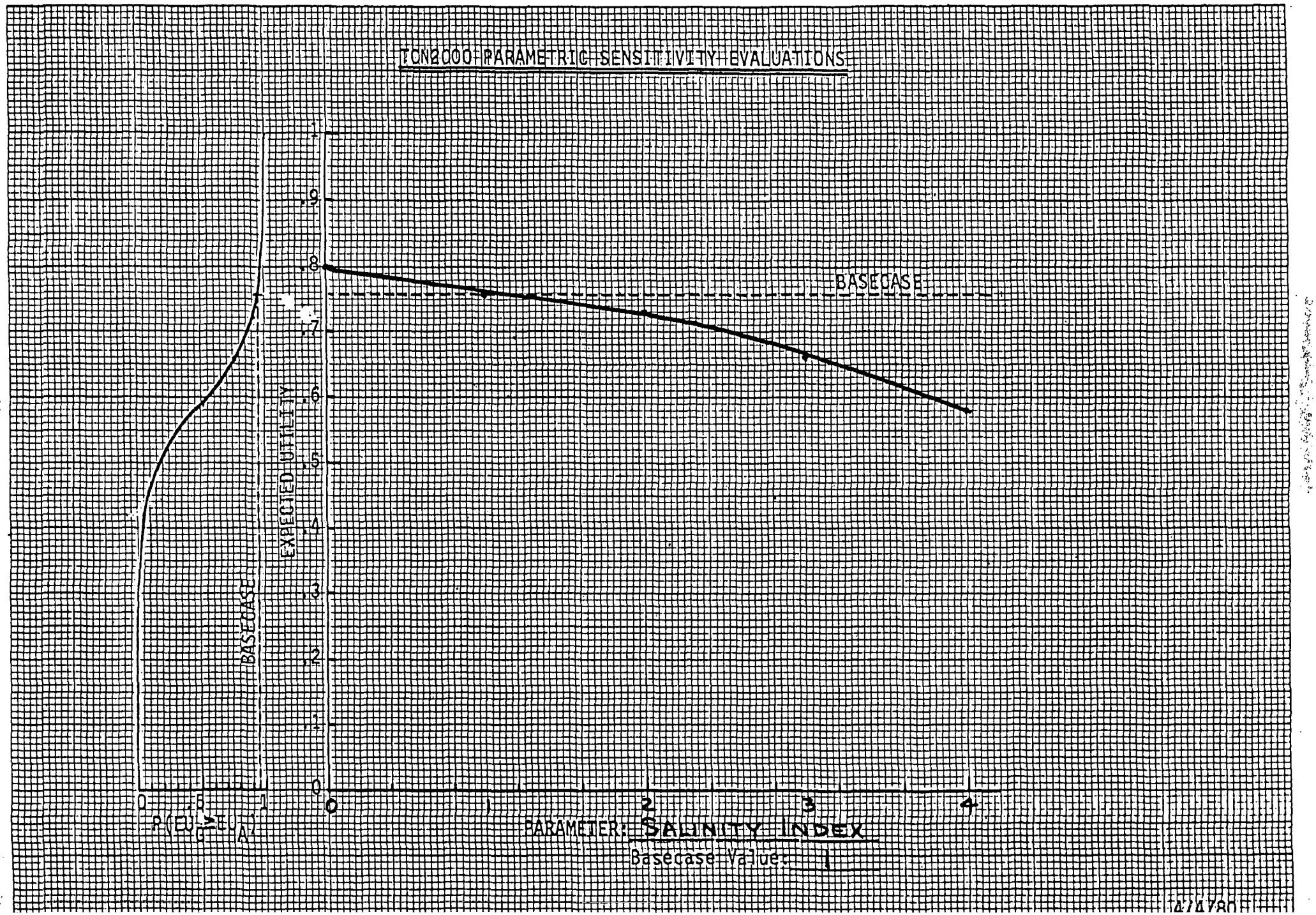
Temperature. Well head temperature of geothermal fluid in degrees F.

Well Cost. Total cost of a successful production well including drilling costs, casing and well head equipment. Expressed here in 1978 dollars.

Well Flow. Production rate of a successful well expressed in thousands of pounds of geothermal fluid per hour.

Well Life. Life time of successful production wells until replacement is required. Expressed in years.

cc: Dr. Harpal Dhillon, EER
Mr. Thomas Lawford, EG&G Idaho



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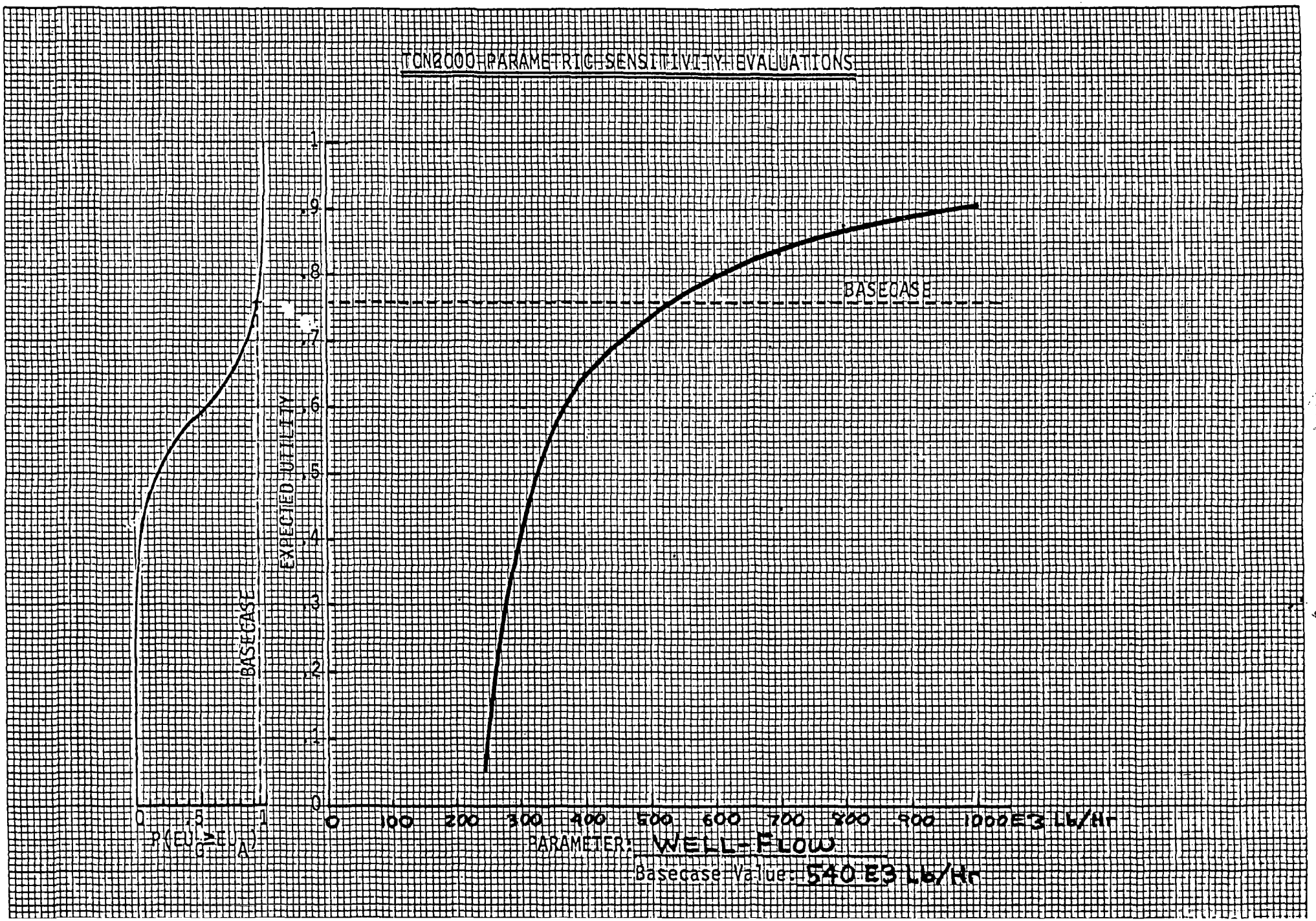

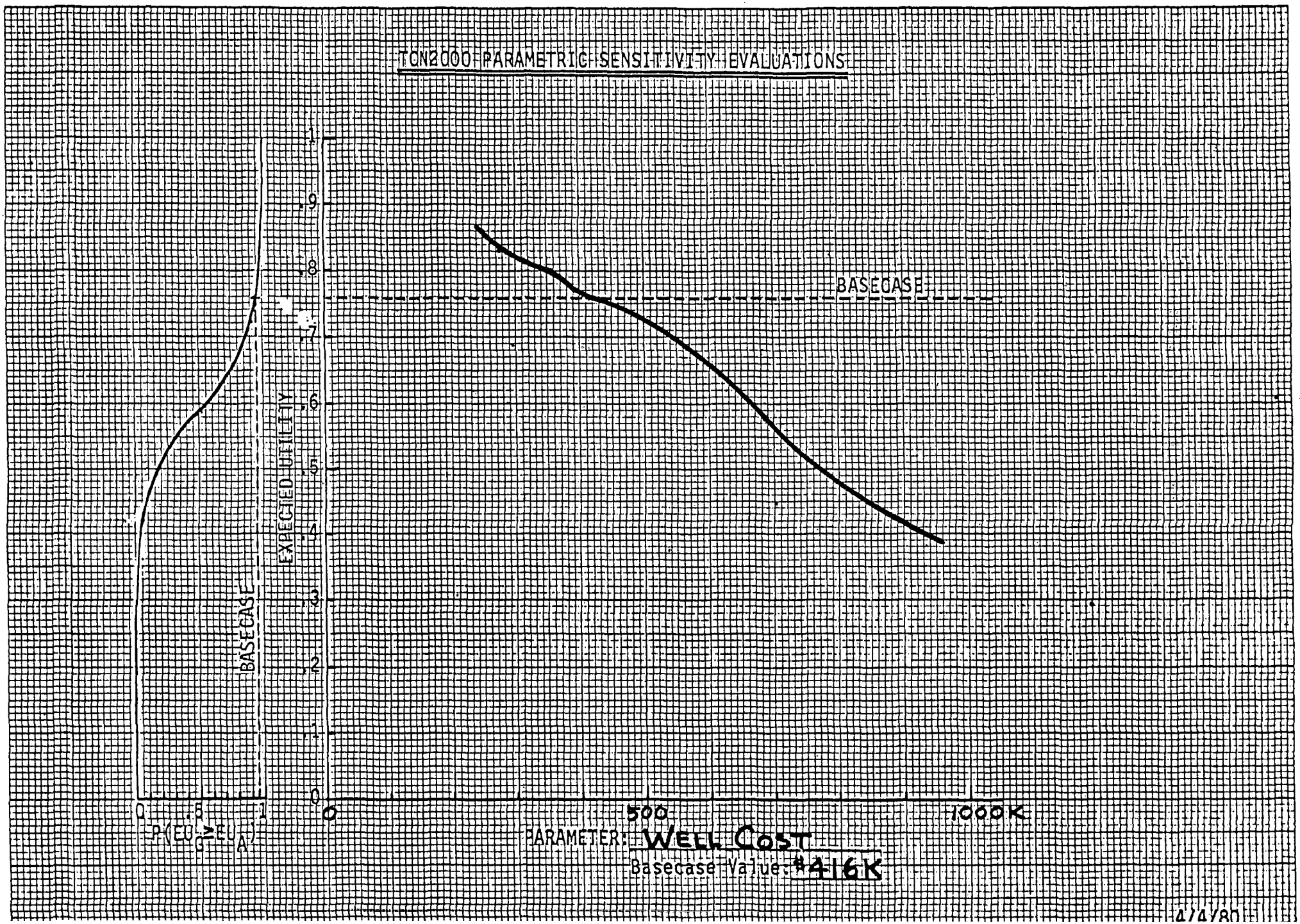

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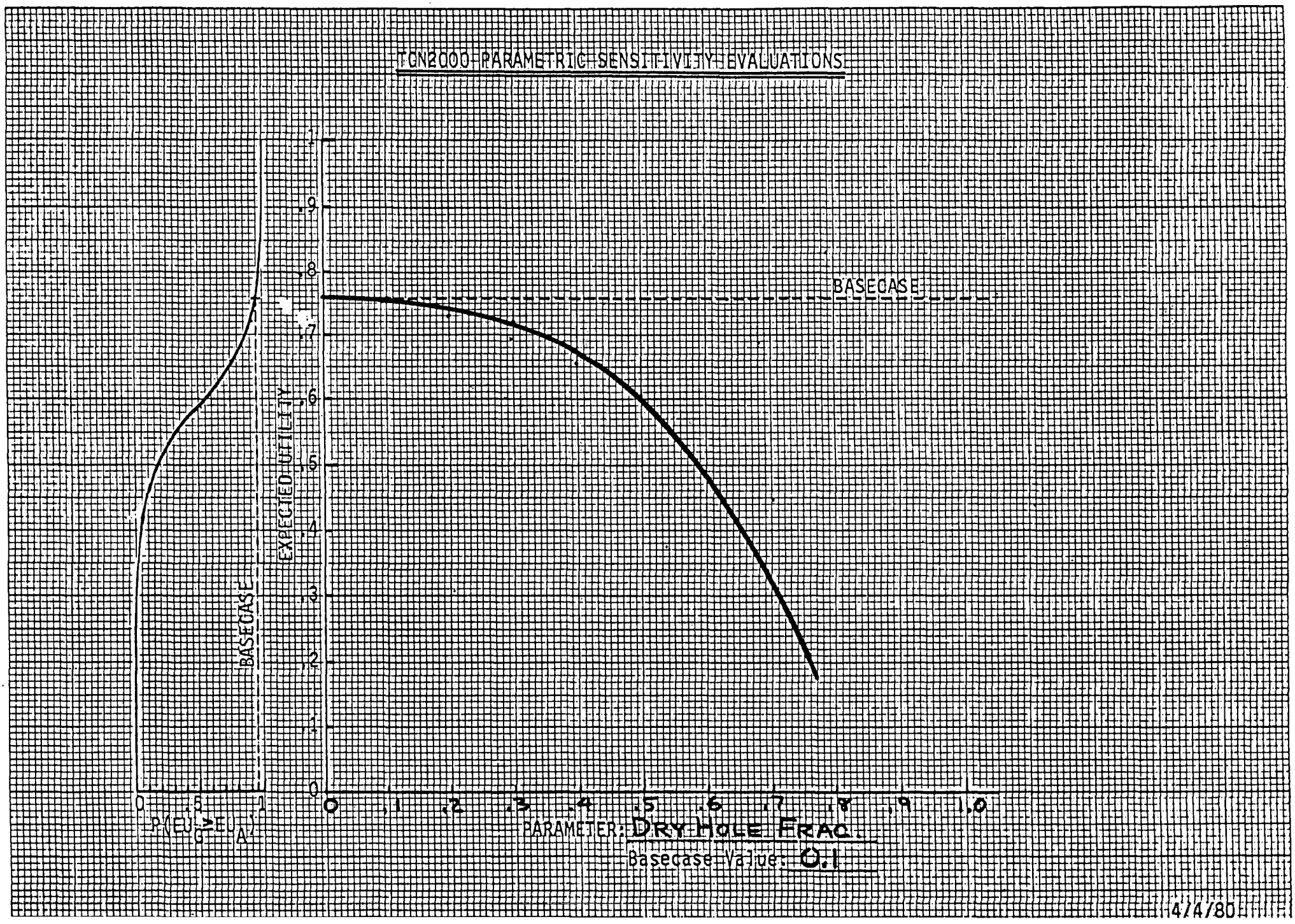

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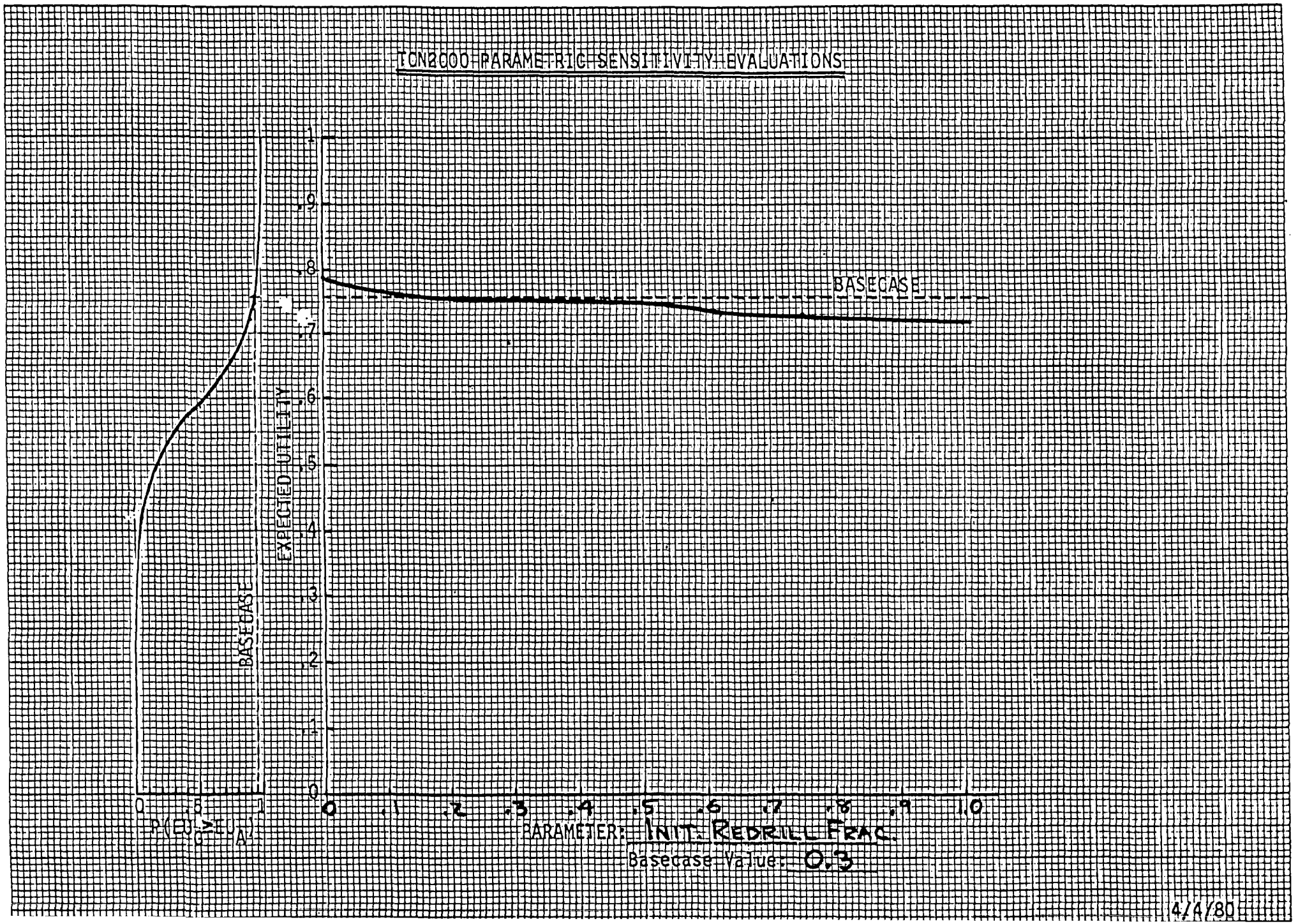

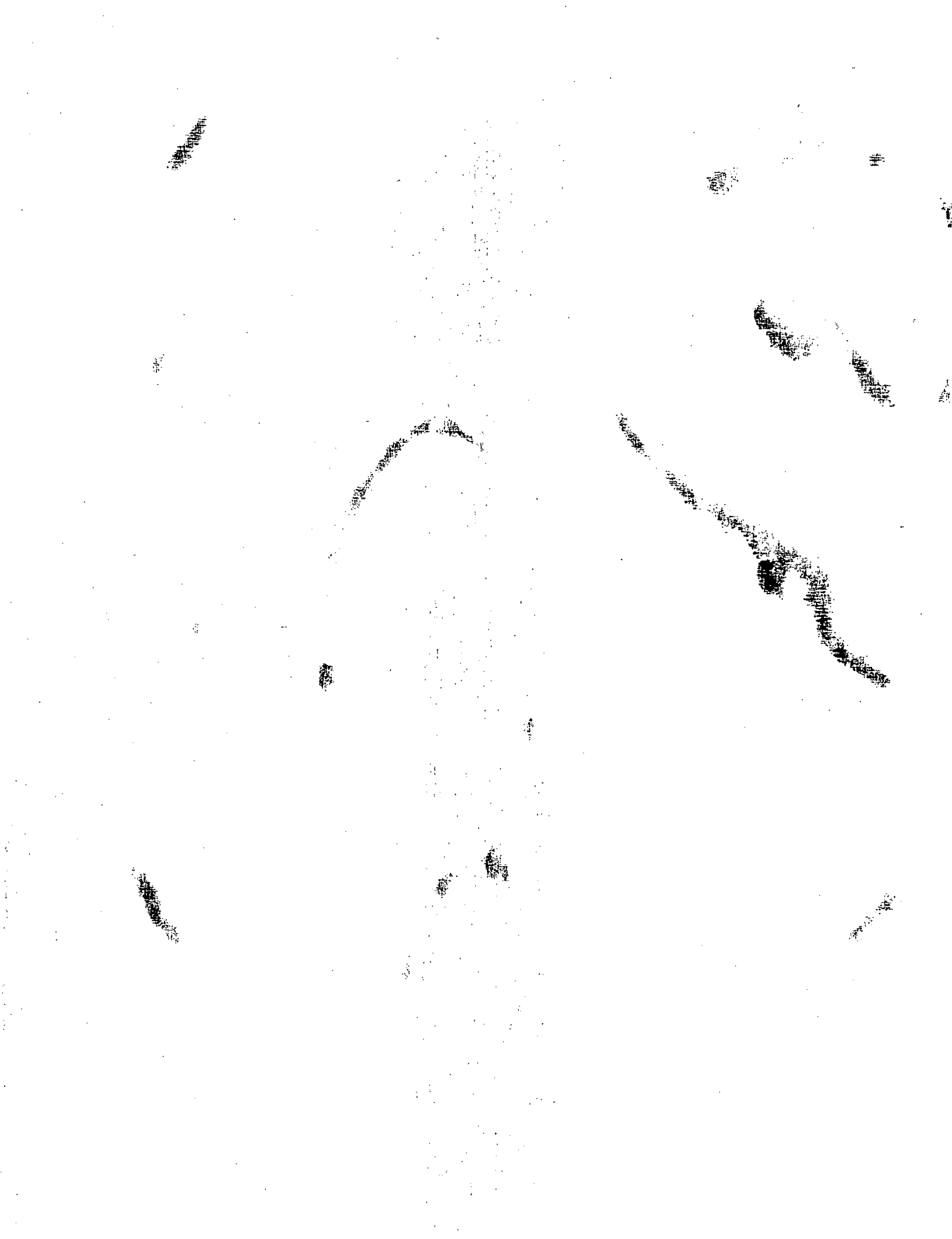

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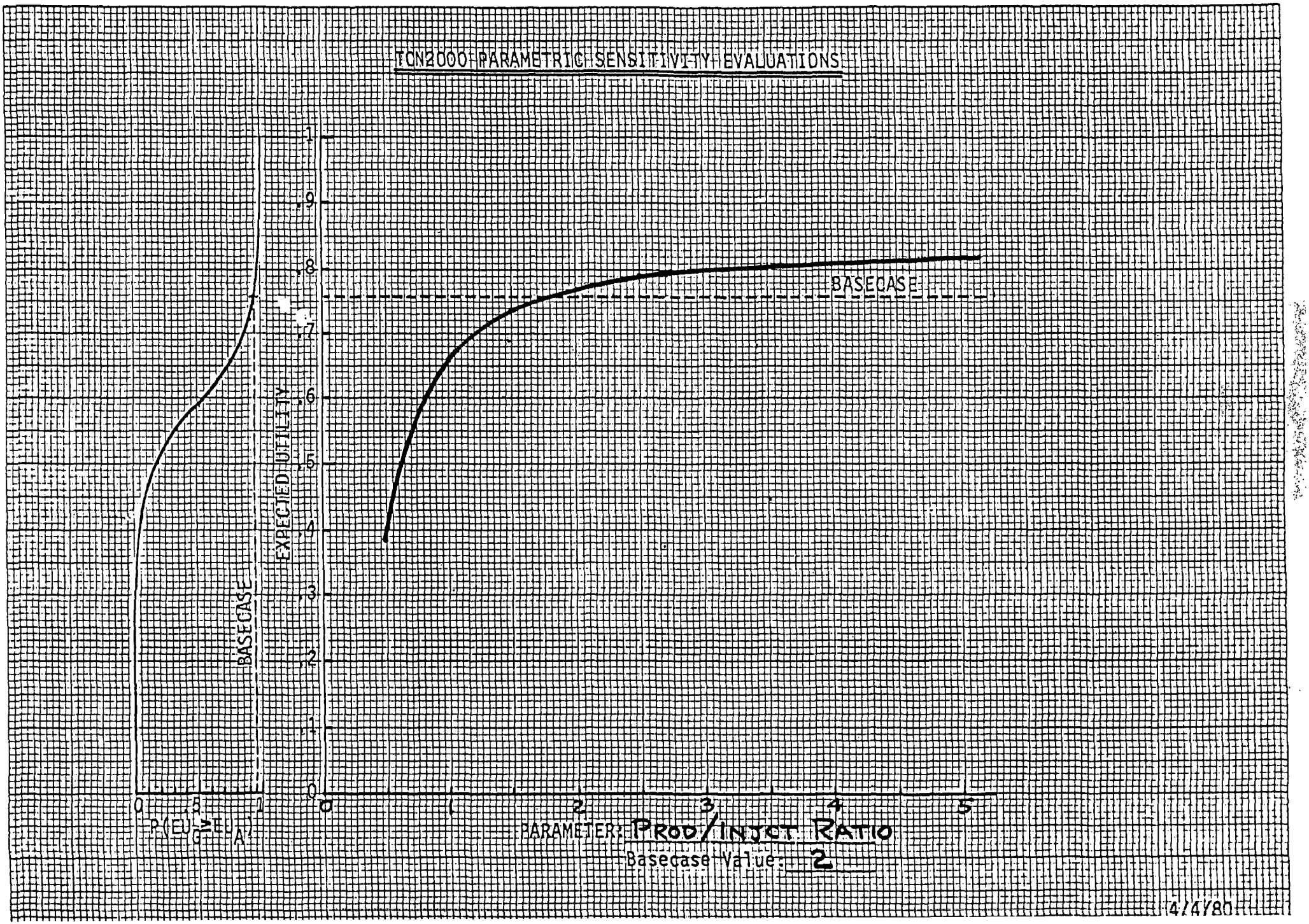

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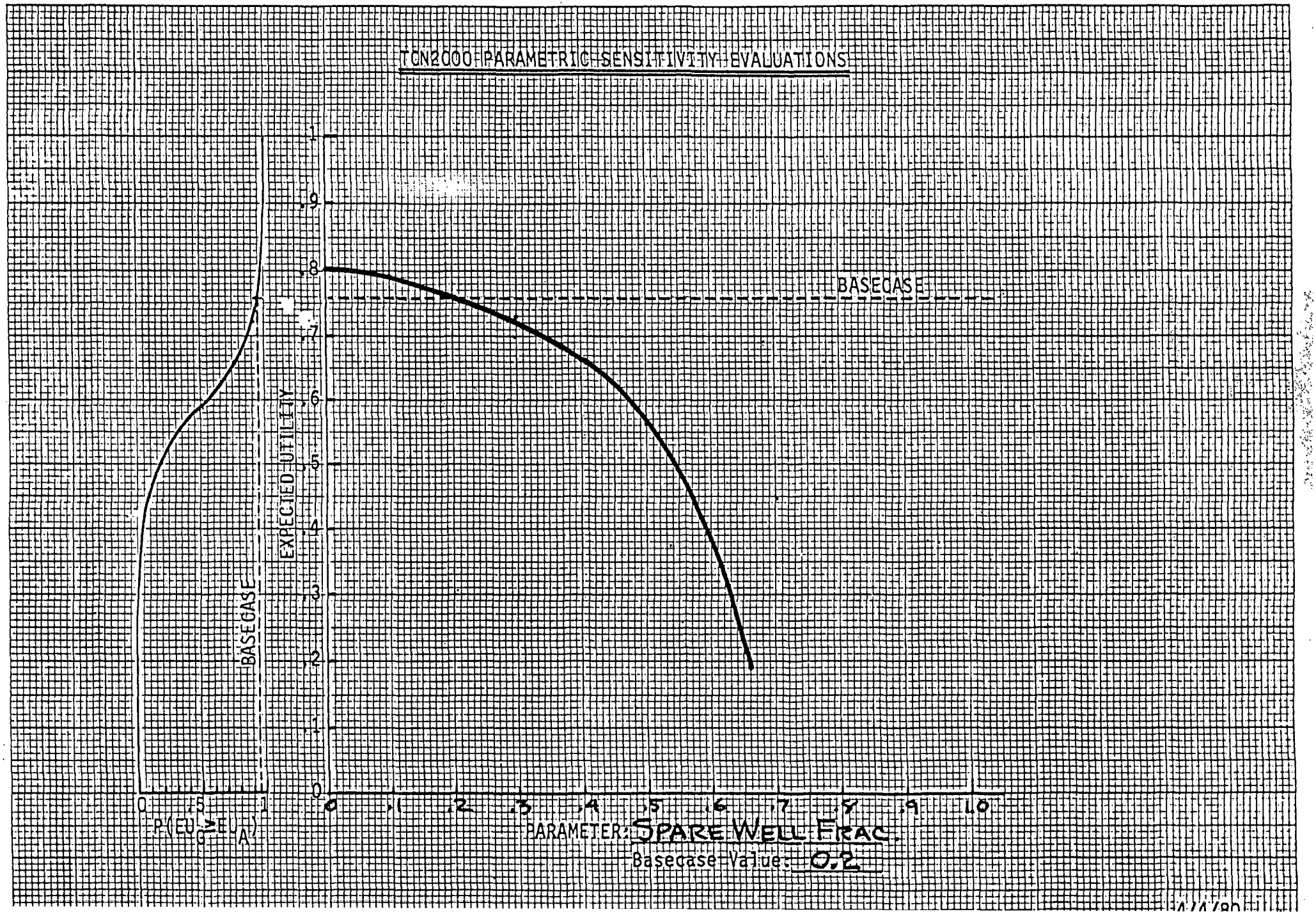

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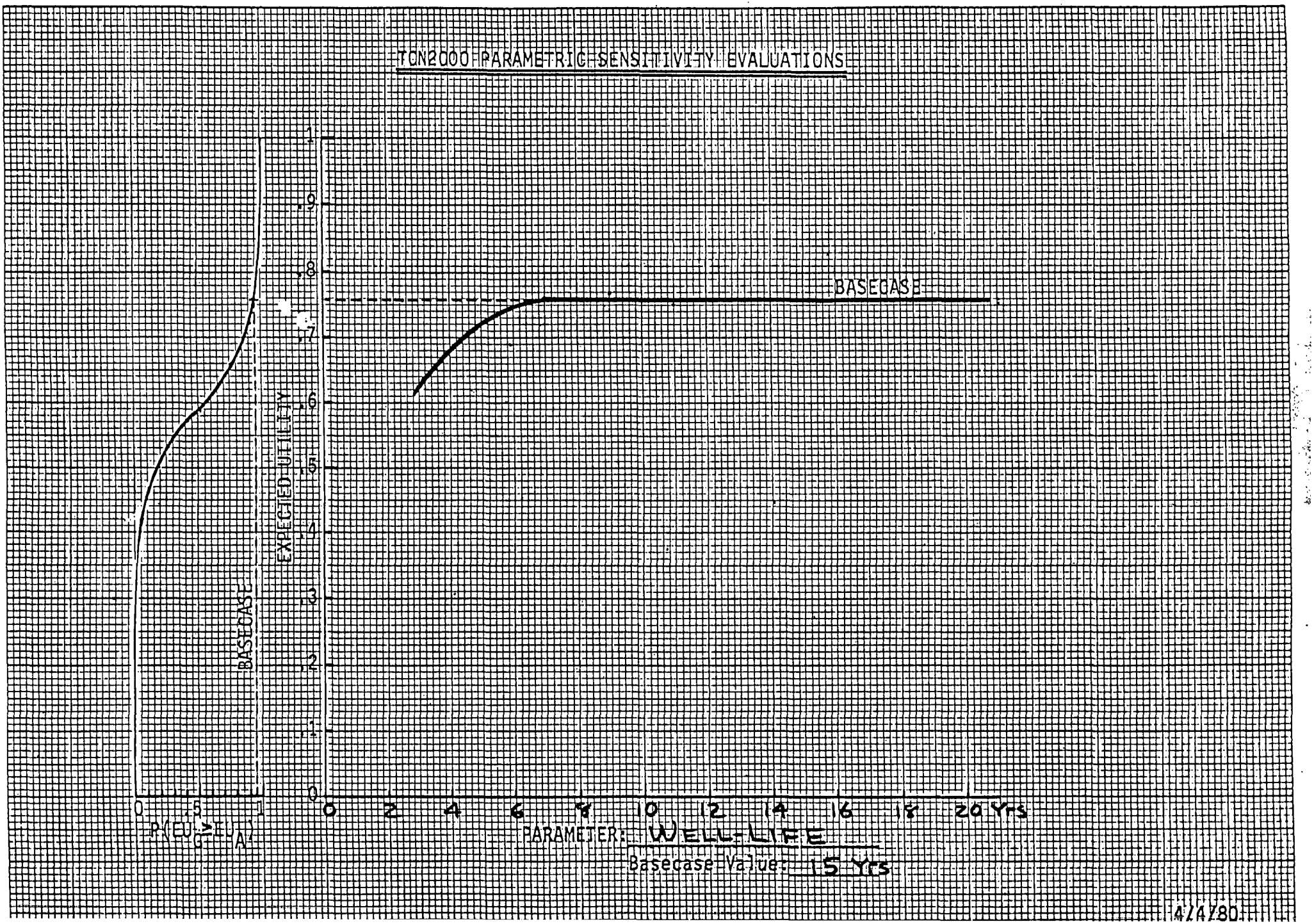

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APPENDIX II.
GENERIC RESOURCE TYPES

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 1 3 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 100, Most Likely 125, Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 30, Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000, Most Likely 600,000, Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50, Most Likely 100, Maximum 125

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1,500, @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS Widespread, fault-controlled, low-flow hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 111322 TYPE Moses Lake, Wash

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 1 3 3 2

TYPE Texas
Balcones F.Z.
Houston-Trinity-Edwards

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 80,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 50
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS Aquifer-controlled, deeply buried sedimentary rocks. Producible acreage unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 11L421 TYPE SITE(S) Eastern States + Fault Controlled Geo

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30 000
Maximum 50 000

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 30 000
Most Likely 75 000
Maximum 150 000

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 4500
@ 1% Probability 8000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50000
Most Likely 75000
Maximum 100 000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1 000 000

COMMENTS

Widespread, fault-controlled, small, low-flow rate hot spring

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VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 1 4 2 1 TYPE Eastern States Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 100, Most Likely 125, Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 30, Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 30,000, Most Likely 75,000, Maximum 150,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50, Most Likely 75, Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 4,500, @ 1% Probability 8,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, small, low-flowrate hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 111422 TYPE SE Kansas

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1L143L TYPE Low temp - Washington

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 1 4 3 2 TYPE Texas - Balcones

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 80,000
Most Likely 200,000
Maximum 350,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability ≥ 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer, deeply buried sedimentary rocks. Producible acreage unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 2 3 2 1 TYPE General - fault controlled

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 75
Most Likely 100
Maximum 125

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3,200
@ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, small volume hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 2 3 3 2 TYPE Texas - Balcones F.Z.

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 250,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200.

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer, buried sedimentary rocks. Producible acreaga unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 2 4 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 130
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 100,000
Most Likely 150,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 1,000
@ 50% Probability 10,000
@ 1% Probability 100,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, small volume hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 1 2 4 3 2 TYPE Atlantic Coastal Plain
Texas - Balcones F.Z.

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 130
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 100,000
Most Likely 150,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifers in buried sedimentary rocks. Texas (Balcones Fault Zone) and Atlantic Costal Plain. Producible acreage unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 1 3 3 1 TYPE Fault-controlled
General

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, moderate-flow hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 1 3 3 2 TYPE Balcones F.Z.

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 80,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability >10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Moderate flow aquifer in buried sedimentary rocks. Producible acreage unlimited. Must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 1 4/2 1 TYPE General low temp fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 1 4 3 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 50,000
Most Likely 125,000
Maximum 300,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 60
@ 50% Probability 600
@ 1% Probability 6,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distribution, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 121432 TYPE Aquifer (basalt) type in WASHINGTON

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 1 4 4 2 TYPE Balcones Fault Zone Region 15

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 115
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 60
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 80,000
Most Likely 200,000
Maximum 350,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 300
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Moderate flow aquifer in buried sedimentary rocks. Producible acreage unlimited. Must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 2 3 3 1 TYPE Fault zone general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 1,000
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, moderate flow hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 2 3 4 2

TYPE Balcones F.Z.
Madison SD & ND

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 300
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Moderate flow, moderate salinity aquifer in buried sedimentary rocks. Producible acreage unlimited as long as colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 2 4 3 1 TYPE Fault Controled - general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 60
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 250,000
Most Likely 400,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled, moderate flow hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 2 2 4 4 2 TYPE Balcones Fault Zone Madison - ND and SD

Well-Head Temperature (°F)[2,3]: Minimum 100, Most Likely 120, Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 60, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 250,000, Most Likely 400,000, Maximum 600,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200, Most Likely 300, Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability > 10,000; @ 50% Probability ____; @ 1% Probability ____

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in buried sedimentary rocks. Producible acreage unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 131241 TYPE General Fault Controlled

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 150
Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum
Most Likely
Maximum

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 131341 TYPE Mono, Calif / Benton, Calif

Well-Head Temperature (°F)[2,3]: Minimum 100 / Most Likely 125 / Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100 / Most Likely 150 / Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000 / Most Likely 750,000 / Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200 / Most Likely 300 / Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability 640 / @ 50% Probability 1500 / @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 131491 TYPE West Virginia H. Springs, Georgia Springs, Saratoga, NV

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 150
Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 300
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 1 3 5 1 TYPE Fault controlled - general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread, fault-controlled high volume hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 1 3 5 2 TYPE Interior Snake River Plain

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in buried volcanic rocks, large flow rates. May apply to Eastern Washington, too. Producible acreage may be large and dependent upon User location.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 1 4 5 1 TYPE Fault Zone General

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 200,000
Most Likely 350,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Fault controlled, widespread distribution

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 1 4 5 2 TYPE Interior Snake River Plain

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 120
Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 200,000
Most Likely 350,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in volcanic rocks. Producible acreage may be very large; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 2 3 5 1 TYPE Fault Zone - general

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3,200
@ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread fault-controlled high volume hot spring

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 2 3 5 2 TYPE Interior Snake River Plain Madison ND and SD

Well-Head Temperature (^{o}F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in volcanic rocks or buried sedimentary rocks. Prodicible acreage large; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 2 4 5 1 TYPE Fault-controlled General

Well-Head Temperature (°F)[2,3]: Minimum 100, Most Likely 120, Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1,500, @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distribution, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 2 4 5 2 TYPE Madison SD/ND Interior Snake River Plain

Well-Head Temperature (°F)[2,3]: Minimum 100, Most Likely 120, Maximum 140

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000, Most Likely 350,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000; @ 50% Probability ____; @ 1% Probability ____

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in volcanic rocks or buried sedimentary rocks. Producible acreage large; must be colocated with User

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VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 4 3 3 5 2 TYPE Madison--SD and ND

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 2

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Saline portions of buried sedimentary aquifers. Producible acreage large; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 5 1 3 6 1

TYPE Hot Springs, VA
Also high flow CA

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 105
Maximum 125

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 600
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 5,000
@ 50% Probability 10,000
@ 1% Probability 30,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 1 5 1 ~~4~~ 3 6 2 TYPE Aquifer

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 151461 TYPE Warm Springs, VA

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 16137_1 TYPE High flow fault controlled springs

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 600
Most Likely 700
Maximum 800

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,00
Maximum 4000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 161471 TYPE CAMPBELL RANCH HS, NV

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 600
Most Likely 700
Maximum 800

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 171371 TYPE CONTRA COSTA, CA

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 700
Most Likely 800
Maximum 900

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 171471 TYPE Buffalo Sp. West VA
Berkeley W. VA.
Nevada, Oregon

Well-Head Temperature (°F)[2,3]: Minimum 100
Most Likely 125
Maximum 150

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 700
Most Likely 800
Maximum 900

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 3000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 1 3 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS
Widespread occurrence, fault-controlled hot spring; low flow.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 211322 TYPE Aquifer (basalts) (W) ASHINGTON

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 1 4 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150, Most Likely 175, Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 30, Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 30,000, Most Likely 75,000, Maximum 150,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50, Most Likely 75, Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 4,500, @ 1% Probability 7,800

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrance, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 211422 TYPE Basalt Aquifer - WASHINGTON

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 200,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 2 2 2 1 TYPE Cochise County, Ariz.

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 2 3 2 1

TYPE Salton Trough
Glamis Dunes

Well-Head Temperature (^{o}F)[2,3]: Minimum 150
Most Likely 200
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 800,000
Maximum 1,200,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 90
Maximum 150

Maximum Producible Acreage[2]: @ 99% Probability 1,500
@ 50% Probability 3,000
@ 1% Probability 8,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 2 3 3 2 — TYPE Madison SD/ND

Well-Head Temperature (°F)[2,3]: Minimum 150; Most Likely 180; Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0; Most Likely 45; Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000; Most Likely 400,000; Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100; Most Likely 150; Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability > 10,000; @ 50% Probability ____; @ 1% Probability ____

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in sedimentary rocks. Producible acreage large; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 2 4 2 1 — TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150; Most Likely 175; Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0; Most Likely 30; Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 100,000; Most Likely 300,000; Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50; Most Likely 75; Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 1,000; @ 50% Probability 10,000; @ 1% Probability 100,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Fault-controlled, widespread occurrence

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 1 2 4 3 2 TYPE Atlantic Coastal Plain Aquifer

Well-Head Temperature (°F)[2,3]: Minimum 150, Most Likely 175, Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 40, Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability > 10,000; @ 50% Probability ____; @ 1% Probability ____

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Producible acreage large; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 2 1 3 3 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 70
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 221332 TYPE Basalt Aquifer - Washington

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: D

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 2 1 4 3 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150, Most Likely 175, Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 75, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 100,000, Most Likely 300,000, Maximum 400,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1,500, @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 221422 TYPE Basalt Aquifer Washington

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 221432 TYPE Basalt Aquifers - Washington

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 2 2 3 3 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS
Widespread, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 2 2 3 3 2 TYPE Madison SD/ND

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 180
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in buried sedimentary rocks. Producible acreage widespread; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 2 2 4 3 1 TYPE Fault-controlled
General

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000
Most Likely 400,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 1 3 5 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 4,500
@ 1% Probability 7,800

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 231441 TYPE Carlin, Nevada

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 150
Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 100,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 300
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 1 4 5 1 TYPE Wally's Hot Springs Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150, Most Likely 181, Maximum 185

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 100,000, Most Likely 300,000, Maximum 700,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 400, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 23, @ 50% Probability 50, @ 1% Probability 150

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 2 3 5 1 TYPE Fault Zone - General

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 170
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 125
Most Likely 250
Maximum 500

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000
Most Likely 700,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS
Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 2 3 5 2 TYPE Madison

Well-Head Temperature (°F)[2,3]: Minimum 120
Most Likely 170
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 125
Most Likely 250
Maximum 500

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000
Most Likely 700,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 250
Most Likely 500
Maximum 750

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Aquifer in buried sedimentary rocks. Producible acreage unlimited; must be colocated with User.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 2 4 5 1 TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000
Most Likely 400,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3,200
@ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distribution.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
	RANGES							
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 2 4 3 3 5 2 TYPE Madison SD/ND

Well-Head Temperature (^{o}F)[2,3]: Minimum 150
Most Likely 180
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 2

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability > 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Saline portions of buried sedimentary aquifers like the Madison. Producible acreage unlimited; must be colocated.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 251471 TYPE San Jacinto, NV

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Producible Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 261371 TYPE Fault-controlled High flow, general

Well-Head Temperature (^{o}F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 600
Most Likely 700
Maximum 800

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 261471 TYPE McDermitt Ok.

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 600
Most Likely 700
Maximum 800

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC CATEGORY NO.[1] 271471 TYPE LATHROP Wells NV.

Well-Head Temperature (°F)[2,3]: Minimum 150
Most Likely 175
Maximum 200

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 700
Most Likely 800
Maximum 900

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 311321 TYPE General fault-control

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 311431 TYPE Mineral H.S., NV

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 1 1 4 3 1

TYPE Rio Grande Rift Fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 200; Most Likely 400; Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0; Most Likely 45; Maximum 75

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 100,000; Most Likely 400,000; Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100; Most Likely 150; Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640; @ 50% Probability 1,500; @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence - moderate-temperature, low salinity, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 311432 TYPE YAKIMA WASH

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 1 2 3 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 220
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 50
Maximum 75

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000
Most Likely 600,000
Maximum 800,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 60
@ 50% Probability 600
@ 1% Probability 6,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 1 2 3 3 2 TYPE Atlantic Coastal Plain Aquifer

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 205
Maximum 212

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability ≥ 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, must be colocated with User. Costain's numbers.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 322342 TYPE Madison N. Dakota (Deep Aquifer)

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 10,000
@ 50% Probability
@ 1% Probability

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $):

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
[illegible]	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 1 2 4 2 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 220
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000
Most Likely 400,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distribution, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 2 1 3 3 1

TYPE Rocky Mountains Fault-controlled

Well-Head Temperature (°F)[2,3]: Minimum 160; Most Likely 248; Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50; Most Likely 100; Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 200,000; Most Likely 500,000; Maximum 100,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100; Most Likely 175; Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640; @ 50% Probability 1,500; @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 2 2 3 3 1 TYPE Fault-controlled
General

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3,200
@ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 2 2 4 3 1 TYPE Fault-controlled General

Well-Head Temperature (°F)[2,3]: Minimum 200, Most Likely 225, Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 75, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1,500, @ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 4 1 3 5 1

TYPE Interior Snake River Plain Fault-controlled

Well-Head Temperature (°F)[2,3]: Minimum 158; Most Likely 220; Maximum 257

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 125; Most Likely 200; Maximum 547

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 200,000; Most Likely 500,000; Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200; Most Likely 400; Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640; @ 50% Probability 3,200; @ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 341451 TYPE Elko H.S., NV.

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 4 2 2 5 1

TYPE Fault-controlled
General

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1,500
@ 1% Probability 5,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS
Widespread occurrence, fault-controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 4 2 3 5 1 TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 1000
@ 50% Probability 3000
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 3 4 2 4 5 1

TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 200, Most Likely 225, Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 371371 TYPE Crump H.S., Oregon

Well-Head Temperature (°F)[2,3]: Minimum 200
Most Likely 225
Maximum 250

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 700
Most Likely 800
Maximum 900

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 411321 TYPE LASSEN, CA.

Well-Head Temperature (°F)[2,3]: Minimum 250
Most Likely 270
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 20
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 1 1 4 2 1 TYPE SITE(S) Buffalo Valley HS

Well-Head Temperature (^{o}F)[2,3]: Minimum 195, Most Likely 255, Maximum 284

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0, Most Likely 30, Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 200,000, Most Likely 300,000, Maximum 700,000

Maximum Producible Acreage[2]: @ 99% Probability 640; @ 50% Probability 1,200; @ 1% Probability 7,690

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC CATEGORY NO.[1] 4 1 2 2 2 1 TYPE YUMA, ARIZONA

Well-Head Temperature (°F)[2,3]: Minimum 250
Most Likely 275
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 1 2 3 2 1

TYPE Fault controlled
general
Buffalo Valley

Well-Head Temperature (°F)[2,3]: Minimum 250
Most Likely 275
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Fault controlled, widespread occurrence

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 412421 TYPE LYON COUNTY NV

Well-Head Temperature (°F)[2,3]: Minimum 250
Most Likely 275
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 150 000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 2 1 4 3 1

TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 75, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 300,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 2 2 3 3 1

TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 75, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000, Most Likely 600,000, Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 3200, @ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled)

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 2 2 4 3 1

TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50, Most Likely 75, Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 100,000, Most Likely 300,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100, Most Likely 150, Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 4 1 3 5 1

TYPE Fault controlled general Snake River Plain

Well-Head Temperature (°F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 125, Most Likely 200, Maximum 547

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 400,000, Most Likely 900,000, Maximum 1,100,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200, Most Likely 400, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 3200, @ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distribution, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 4 2 2 5 1

TYPE Fault controlled general

Well-Head Temperature (^{o}F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000, Most Likely 1,500,000, Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 4 2 3 5 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 250
Most Likely 275
Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 125
Most Likely 200
Maximum 547

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 700,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 400
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread occurrence, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 4 4 2 4 5 1 TYPE Fault-controlled general

Well-Head Temperature (°F)[2,3]: Minimum 250, Most Likely 275, Maximum 300

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 200,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Widespread distributions, fault controlled.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 511321 TYPE Modoc Lake Counties (etc.)

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 1 2 2 3 1 TYPE Cove Fort

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 340
Maximum 356

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 0
Maximum 0

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 600,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 2600
@ 50% Probability 6500
@ 1% Probability 11,600

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 1,000,000

COMMENTS

Low flow, expensive drilling, fault controlled CA and Basin and Range.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 1 2 3 3 1

TYPE Fault controlled
NV UT ID
Lightening Dock

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 650
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

High temperature fault controlled in UT, ID, NV Basin and Range.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 521931 TYPE GERLACH, NV

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1000
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 2 2 3 3 1 TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 600,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Widespread distribution, fault controlled

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 531491 TYPE Wabuska, NV

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 150
Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200
Most Likely 300
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 4 2 2 5 1 TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 325
Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Widespread distribution.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 4 2 3 5 1

TYPE Heber
East Mesa
Raft River

Well-Head Temperature (°F)[2,3]: Minimum 300
Most Likely 350
Maximum 375

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 250
Maximum 440

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 700,000
Maximum 1,200,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 300
Most Likely 450
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 3500
@ 50% Probability 7500
@ 1% Probability 14,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Widespread distribution

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 5 4 2 4 5 1

TYPE Fault controlled general

Well-Head Temperature (°F)[2,3]: Minimum 300, Most Likely 325, Maximum 350

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200, Most Likely 300, Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 300,000, Most Likely 400,000, Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400, Most Likely 500, Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 1000, @ 50% Probability 1500, @ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Fault controlled widespread distribution

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 611421 TYPE HUMBOLDT NV

Well-Head Temperature (°F)[2,3]: Minimum 350
Most Likely 375
Maximum 400

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 90

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 50
Most Likely 75
Maximum 100

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 612321 TYPE Brady, NV

Well-Head Temperature (°F)[2,3]: Minimum 350
Most Likely 375
Maximum 400

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 30
Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 6 2 2 3 3 1 TYPE Fault controlled NV, UT, AZ, ID

Well-Head Temperature (°F)[2,3]: Minimum 350
Most Likely 375
Maximum 400

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 6 4 2 2 5 1

TYPE Westmoreland Fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 340, Most Likely 400, Maximum 500

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100, Most Likely 225, Maximum 450

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 800,000, Most Likely 1,200,000, Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 200, Most Likely 450, Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 5,000; @ 50% Probability 7,000; @ 1% Probability 15,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Also in NM, NV, UT, AZ

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 6 4 2 3 5 1

TYPE East Mesa
Fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 320
Most Likely 360
Maximum 370

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 200
Maximum 350

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 800,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 300
Most Likely 450
Maximum 850

Maximum Producible Acreage[2]: @ 99% Probability 3000
@ 50% Probability 7000
@ 1% Probability 15000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Widespread distribution in Basin and Range

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 6 4 2 4 5 1

TYPE Brady
Fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 330
Most Likely 357
Maximum 418

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 400
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 125,000
Most Likely 300,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 600
Maximum 700

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 5000
@ 1% Probability 12,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Distribution = NV and Southern California

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 6 5 2 4 6 1 TYPE SITE(S) Brady

Well-Head Temperature (^{o}F)[2,3]: Minimum 330
Most Likely 357
Maximum 418

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 100
Most Likely 400
Maximum 700

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 125,000
Most Likely 300,000
Maximum 1,000,000

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 4,500
@ 1% Probability 10,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 7 2 2 2 3 1

TYPE Fault controlled Cascades, Basin and Range

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 50
Most Likely 75
Maximum 100

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 150
Maximum 200

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Distribution in Cascades and Basin and Range

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 7 4 2 2 5 1 TYPE Fault Controlled

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 500
Maximum 600

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3,200
@ 1% Probability 6,400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 742261 TYPE Imperial Valley Lawton H.S., NV

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 200
Most Likely 300
Maximum 400

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	->100 <150	->150 <200	->200 <250	->250 <300	->300 <350	->350 <400	->400 <450	->450
Unpumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 ->1	<1 ->0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	->50 <100	->100 <200	->200 <400	->400 <600	->600 <800	->800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 7 5 1 3 6 1 TYPE SITE(S) Beowawe

Well-Head Temperature (^{o}F)[2,3]: Minimum 240
Most Likely 414
Maximum 446

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 400,
Maximum 630,

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 1,000,000
Maximum 2,000,000

Maximum Producible Acreage[2]: @ 99% Probability 250
@ 50% Probability 4,600
@ 1% Probability 6,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

May not find another one as clean.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 751431 TYPE Resource-type

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 1200

Brine Contamination Index (0, 1 or 2)[2,4]: 0

Producer Well Cost (1978 $)[2,5]: Minimum 150,000
Most Likely 300,000
Maximum 500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 700
Most Likely 800
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] Z 5 2 2 6 1

TYPE Westmoreland
Salton Trough

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Cascades and Basin and Range (UT, NV, NM)

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC CATEGORY NO.[1] 752361 TYPE Brady-type

Well-Head Temperature (°F)[2,3]: Minimum 400
Most Likely 425
Maximum 450

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 750,000
Maximum 1,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 1500
@ 1% Probability 5000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): _____

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS *CONFIDENTIAL*

GENERIC CATEGORY NO.[1] 7 5 2 3 6 1

TYPE Desert Peak
Geysers

Well-Head Temperature (°F)[2,3]: Minimum 406
Most Likely 410
Maximum 442

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 450
Maximum 500

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 900,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 600
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 1240
@ 50% Probability 7000
@ 1% Probability 20,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Distribution = Geysers/Clear Lake, Northern Nevada

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 8 1 2 2 3 1

TYPE SITE(S) Rio Grande Rift - Valles Caldera type

Well-Head Temperature (^{o}F)[2,3]: Minimum 400; Most Likely 500; Maximum 600

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0; Most Likely 30; Maximum 50

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 800,000; Most Likely 1,500,000; Maximum 2,000,000

Maximum Producible Acreage[2]: @ 99% Probability 640; @ 50% Probability 1,500; @ 1% Probability 5,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100; Most Likely 150; Maximum 200

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 8 3 2 2 4 1 TYPE Valles/Geyser

Well-Head Temperature (^{o}F)[2,3]: Minimum 400
Most Likely 550
Maximum 630

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 0
Most Likely 175
Maximum 200

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 800,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 100
Most Likely 250
Maximum 400

Maximum Producible Acreage[2]: @ 99% Probability 2000
@ 50% Probability 5000
@ 1% Probability 15,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Will find one more in the Geysers.

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (^{o}F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 8 5 2 2 6 1

TYPE Cascade type
Fault controlled

Well-Head Temperature (°F)[2,3]: Minimum 450
Most Likely 500
Maximum 550

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 400
Most Likely 500
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 1,000,000
Most Likely 1,500,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 600
Most Likely 700
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 640
@ 50% Probability 3200
@ 1% Probability 6400

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Find one in Cascades

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	RANGES 1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 8 5 3 2 6 2 TYPE Salton Sea/Niland

Well-Head Temperature (°F)[2,3]: Minimum 350
Most Likely 480
Maximum 680

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 300
Most Likely 400
Maximum 600

Brine Contamination Index (0, 1 or 2)[2,4]: 2

Producer Well Cost (1978 $)[2,5]: Minimum 800,000
Most Likely 1,400,000
Maximum 2,000,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 400
Most Likely 600
Maximum 800

Maximum Producible Acreage[2]: @ 99% Probability 5000
@ 50% Probability 10,000
@ 1% Probability 30,000

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

Restricted to Southern California

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER	RANGES							
Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						

GENERIC HYDROTHERMAL RESOURCE CHARACTERISTICS

GENERIC CATEGORY NO.[1] 8 6 2 3 6 1 TYPE Roosevelt

Well-Head Temperature (°F)[2,3]: Minimum 467
Most Likely 500
Maximum 516

Unpumped Well Flow Rate (10^3 lbs/hr)[2,3]: Minimum 500
Most Likely 700
Maximum 900

Brine Contamination Index (0, 1 or 2)[2,4]: 1

Producer Well Cost (1978 $)[2,5]: Minimum 500,000
Most Likely 900,000
Maximum 1,500,000

Attainable Well Flow Rate with Pumping (10^3 lbs/hr)[2]: Minimum 500
Most Likely 700
Maximum 900

Maximum Producible Acreage[2]: @ 99% Probability 3200
@ 50% Probability 3500
@ 1% Probability 8500

Total Expected "Finding Costs" (Including Expenses on Unretained Land) Up To and Including Discovery of One Producible Well (1980 $): 6,000,000

COMMENTS

VARIABLE GENERIC RESOURCE CHARACTERISTICS AND THEIR RANGES

PARAMETER / Range No.	1	2	3	4	5	6	7	8
Temperature (°F)	=>100 <150	=>150 <200	=>200 <250	=>250 <300	=>300 <350	=>350 <400	=>400 <450	=>450
Unpumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Brine Contamination Index (TDS)	0 (<2000)	1 (2000-100,000)	2 (>100,000)					
Well Costs ($M)	>2	<2 =>1	<1 =>0.5	<0.5				
Pumped Flow Rate (10^3 lbs/hr)	<50	=>50 <100	=>100 <200	=>200 <400	=>400 <600	=>600 <800	=>800	
Max. Produc. Acreage	Small	Large						