CONFIDENTIALITY AGREEMENT

This Agreement, effective February 8, 1991, is made by and between Geo-Energy Partners-1983, Ltd., a Colorado limited partnership (OWNER), and Great Basin Energy Company, a Nevada corporation (CONFIDANT).

OWNER and CONFIDANT have engaged in discussions regarding CONFIDANT'S interest in certain proprietary and confidential data and/or information with regards to certain geothermal leasehold and other interests of OWNER in the Fish Lake Geothermal Prospect Area, Esmeralda County, Nevada ("Fish Lake") of owner (the "Information") for the purpose of evaluating whether OWNER and CONFIDANT might enter into a business arrangement with regard to Fish Lake.

Therefore, in consideration of the disclosure of the Information by OWNER to CONFIDANT, the parties to this Agreement do hereby agree as follows:

1. CONFIDANT, shall maintain confidential and not disclose to others, except as herein set forth, any and all Information provided by OWNER hereunder;

2. OWNER agrees that the Information which it deems confidential shall, at the time of its disclosure to CONFIDANT, be so identified and hereby identifies as confidential all the Information set forth in Exhibit A hereto, which is incorporated herein;

3. CONFIDANT may, in order to evaluate whether it might wish to enter into certain business arrangements with regard to Fish Lake with OWNER, desire to convey all or part of the Information provided to it by OWNER to third party consultants or to another third party that would participate with CONFIDANT in Fish Lake. CONFIDANT shall be entitled to do so provided that it identifies said third party consultants or such third party that would participate with CONFIDANT in Fish Lake to OWNER and obtains OWNER'S prior written approval of disclosure to same, and further provided that CONFIDANT obtains confidentiality agreements in similar form to this Agreement from such third party consultants, all prior to such disclosure. Jack J. (Jack) McNamara, or his designated representative, shall have sole authority to approve disclosure to such third party consultants on behalf of OWNER;
4. The Information is subject to the obligations of confidentiality set forth in Para. 1. Therefore, CONFIDANT shall make no commercial or other use of the Information whatsoever without first receiving the prior written approval from OWNER, to be withheld in OWNER’S sole and absolute discretion;

5. At any time during the term of this Agreement, and before CONFIDANT and OWNER have executed any written agreement which deals with the Information and which supercedes this Agreement, CONFIDANT shall, immediately upon receipt of OWNER’S written request, return to OWNER the Information and any and all copies thereof, whether made by CONFIDANT or by any third party consultant to whom CONFIDANT supplied the Information.

6. The Information shall not include (a) information which was already in CONFIDANT's possession prior to disclosure by OWNER, (b) information which prior to disclosure by OWNER was in the public domain, or after disclosure enters the public domain other by a breach of this agreement by CONFIDANT, (c) information which was received from a third party which was not under an obligation of confidentiality to OWNER, or (d) information which CONFIDANT can demonstrate was independently developed by CONFIDANT's employees, agents or contractors without the use of the Information.

7. All of CONFIDANT's obligations of confidentiality and nonuse hereunder shall expire five (5) years from the date hereof; provided, however, that should OWNER and CONFIDANT enter into a Working Interest Participation Agreement, Operating Agreement or other agreement regarding Fish Lake that CONFIDANT's obligations of confidentiality contained herein shall be governed by such agreement between OWNER and CONFIDANT.

Each of the parties hereby accept and agree to the foregoing. This Agreement is executed, effective the date first written above, and constitutes a legally binding contract between the parties, enforceable in accordance with its terms, governed by the laws of the State of California.

CONFIDANT

BY: William Holnunt
Great Basin Energy Company

Title: CEO

OWNER

BY: John G. (Jack) McNamara

Title: General Partner
May 9, 1991

Dear Dennis:

This letter-report is a follow-up of our February 26, 1991 letter regarding a geologic assessment of geothermal resources located in the Fish Lake Valley Area Of Interest (AOI), Esmeralda County, Nevada. We include clarification of some of the information we discussed with you on Tuesday, February 26, 1991, a discussion of the results of our site inspection, and more detailed recommendations. Our conclusions are based on a review of the original list of eight documents supplied to us in February, 1991, and an additional nine confidential and three non-confidential documents that we obtained in March 1991. Reviewed documents are attached to this report as Appendix A.

SUMMARY OF FINDINGS

1. Available geologic and geothermal data support the presence of two geothermal reservoirs - one shallow and one deep. The geothermal reservoirs are similar in structure, depth and temperature to reservoirs in Nevada that presently support geothermal power plants. This was confirmed by flow tests of the geothermal wells in 1984 and 1985.

2. Leaseshold appear to be more than adequate for the probable extent of the geothermal resource.

3. The site is easily accessible; the existing drill pad and the surface wellhead assemblies appear to be in good condition.

4. Wells 88-11 and 88-11A flowed a mixture of hot water and steam spontaneously when three-inch diameter bleeder valves were opened to test their operation. This is very unusual for geothermal wells in Nevada; most require pumping or artificial stimulation to promote flow.

5. It is our professional opinion that the combined data sets support GeothermEx's estimates that the existing wells are capable of producing 3 to 5 MWe. However, additional flow testing of the two wells must be completed to verify initial results and to obtain longer-term test data.

6. The ultimate extent of the two geothermal reservoir is presently unknown, but if subsequent drilling proves that it is stratigraphic (occurring in horizontal layers as opposed to confined to a vertical fault zone) in nature, the ultimate capacity may be three to four times the current forecasts.
RECOMMENDATIONS

Temperature and geothermal fluid flow predictions are based on the analysis of a short-term flow test from a single commercially productive geothermal well in the Fish Lake AOI. There is no question that the Fish Lake Valley AOI contains a viable geothermal resource, but before the full extent of the reservoir can be quantified the flow test results must be re-evaluated to determine if they are representative. We recommend the following items:

1. **GEOTHERMAL RESERVOIR ENGINEER**: We concur with Great Basin Energy Company's decision to consult a qualified geothermal reservoir engineer to determine the value of the flow tests that were conducted on well 88-11. In our opinion, the data appear promising, but the short duration of the tests may not have stressed the reservoir sufficiently. If this is the case, then long term forecasts of reserves and productivity may be unduly optimistic. In addition, since the forecasts were made in 1985, additional models may now be available. We suggest that the original data (recorded in 1985 on paper tape but hopefully available on floppy disk) be made available for scrutiny.

2. **FLOW TESTS OF GEOTHERMAL WELLS 88-11, 88-11A**: Long term flow tests should be completed on both wells to confirm results of the initial short-term tests completed in 1984, 1985. If the tests prove to be positive and confirm the initial tests, then Great Basin Energy Co. should seriously consider exploratory drilling to determine the full extent of the shallow and deep geothermal reservoirs.

3. **LEASEHOLD EVALUATION**: Our analysis suggests that the Fish Lake Valley AOI contains a considerable amount of "excess acreage." A qualified "landman" should evaluate the lease holdings prior to GBEC making a commitment. Trimming non-productive sections (those outside the zone of the thermal anomaly) from the lease will reduce future rent and royalty payments to government and private landowners. The area shown in Figure 1 encompasses the entire extent of the known geothermal resources in this area.
LEASE HOLDINGS

The Fish Lake Valley Geothermal AOI, outlined in Figure 1, consists of 37 sections (640 acres per section), equivalent to about 24,000 acres. The probable maximum extent of the geothermal reservoir, as determined from the available published and confidential data, is shown as the 11 sections (shaded area) in Figure 1. This area is equivalent to 7,000 acres and includes a buffer zone around the reservoir that precludes the possibility of trespassing on the legitimate geothermal rights of adjacent lease holds.

GEOTHERMAL RESOURCES

Between 1981 and 1984, AMAX Exploration, Inc. conducted a series of geological, geochemical, and geohydrological assessments of the northern portion of the Fish Lake Valley, in the vicinity of the Volcanic Hills. On the basis of the initial surface assessments, a drilling program was conducted that included temperature gradient holes (to measure temperatures at various depths) and production wells (to measure temperature and fluid flow). The following discussion summarizes the results of the drilling program.

Temperature gradient wells drilled throughout the AOI suggest that the reservoir is restricted to the fault zones in the Volcanic Hills (fig. 2). Such a model of the reservoir would limit production and injection wells to the immediate vicinity of the faults.

It is also suggested (in the GeothermEx reports) that the reservoir is contained within a stratigraphic unit, a buried rock layer that is parallel or subparallel to the Earth's surface. If this is true, then the reservoir is considerably larger (than one that is restricted to the immediate vicinity of the fault zones) and may include all of the shaded area in Figure 2 (which is located entirely within the 11 section shaded area of Figure 1). This interpretation was used (by GeothermEx) to compare the Fish Lake AOI to the Desert Peak Geothermal area, shown in Figure 3. Additional drilling throughout the Volcanic Hills area, to depths ranging from 8,000 to 9,000 feet, will be necessary to determine which reservoir model best fits the Fish Lake Valley AOI.

Our analysis of the available geologic data suggests the presence of two geothermal reservoirs, one shallow and one deep. Temperature-depth measurements and drilling reports indicate that a moderate temperature (320°F) resource is located between 460 and 1,000 feet below the surface. Total "lost circulation" (of drilling fluids) was reported to have occurred at a depth of 1,000 feet, which corresponds to the contact between two mid-Tertiary Age (35 million years old) volcanic rock formations: an upper non-welded ash-flow unit and a lower tuffaceous sedimentary unit. Should subsequent drilling and testing indicate that this is a productive and widespread formation, it may qualify as a commercially viable reservoir.

The second reservoir is better understood and occurs at a depth of approximately 8,150 feet. The reservoir rock is believed to be a lower Cambrian (550 million years old) carbonate formation, possibly the Harkless Formation or the Poleta Formation. The maximum measured temperature is 373°F and mass flow rates measured during two short-term flow tests (7 days) ranged between 120,000 to 540,000 pounds per hour. Current production flow rates from wells at existing geothermal power plants in Nevada have range from 450,000 to 750,000 pounds per hour (Table 1), but the reservoir temperatures range from 400°F to 470°F.
Table 1.
Comparison of selected geothermal power plant specifications
with flow test data from Fish Lake Valley AOI.
(Flash plants only)

<table>
<thead>
<tr>
<th>PLANT NAME</th>
<th>GROSS MWe</th>
<th>PRODUCTION WELLS</th>
<th>TOTAL MASS FLOW (lbs./hr.)</th>
<th>AVERAGE FLOW PER WELL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beowawe</td>
<td>16</td>
<td>2</td>
<td>1,254,000</td>
<td>627,000</td>
</tr>
<tr>
<td>Dixie Valley</td>
<td>62</td>
<td>6</td>
<td>4,500,000</td>
<td>750,000</td>
</tr>
<tr>
<td>Desert Peak</td>
<td>10</td>
<td>2</td>
<td>980,000</td>
<td>490,000</td>
</tr>
</tbody>
</table>

Fish Lake Valley

<table>
<thead>
<tr>
<th>Well</th>
<th>Total Mass Flow Rate</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>88-11</td>
<td>120,000 to 540,000</td>
<td>1.5 MWe</td>
</tr>
<tr>
<td></td>
<td>(without liner)</td>
<td>3 to 4 MWe</td>
</tr>
<tr>
<td></td>
<td>180,000 to 400,000</td>
<td>1.0 MWe</td>
</tr>
<tr>
<td></td>
<td>(with liner)</td>
<td>2.4 to 3.2 MWe</td>
</tr>
<tr>
<td>88-11A</td>
<td>77,000 maximum</td>
<td>flow rates consistent with damaged well bore reports</td>
</tr>
</tbody>
</table>

(Data from Fish Lake Valley Table summarized from GeothermEx Report, reservoir life assumed to be 26 years).

The drilling logs do not indicate why well 88-11A, which was completed in the same geologic formation as 88-11, has low and inconsistent flow rates. It is speculated that some well bore damage in the production zone has rendered it virtually useless. It appears that re-drilling and completing the bottom portion of well 88-11A may prove to be a cost-effective strategy to enhance production within the field.

This comparison suggests that the most logical configuration for power production will utilize binary geothermal technology, assuming a wellhead temperature of 350°F and a flow rate of 1,200 gallons per minute (540,000 lbs./hr.).
SITE INSPECTION

An on-site inspection of the southern portion of the Fish Lake Valley leasehold was conducted on March 14, 1991 in order to:

1. review the topography and leasehold accessibility,
2. determine the size and shape of the drill pad used to drill wells 88-11 and 88-1A,
3. verify the existence and condition of these wells and to locate other wells mentioned in the reports, and
4. identify any obvious impediments to development.

After surveying the area, the following observations were made:

1. The leasehold is located on largely flat-lying ground with relatively easy access by four-wheel drive vehicle. Low-lying hills do exist in the center and northern portions of the lease; access to this area is not prohibitive, but may require minor grading for larger trucks and associated equipment. There are many secondary roads and jeep trails throughout the lease.

2. The drill pad is large (roughly 150 by 300 ft.), flat and in very good condition. It is accessed by two roads and the two geothermal wells are located in the west central portion. A very large mud pit (sump), located on the south side of the pad, measures roughly 100 feet in diameter and 15 feet deep. The pit also appears to be usable in its present condition.

3. Two large-diameter geothermal wells (88-11 and 88-11A) are located on the pad and are equipped with a variety of master valves, bleeder valves and flow lines. Both well head assemblies appear to be in good condition and usable at this time. The wells are surrounded by an extensive poured concrete slab. Master valves were chained in a closed position, but small, 3-inch diameter, bleeder valves were unsecured. Bleeder valves at the base of each well head assembly were carefully opened to determine their condition. This induced an immediate flow of a small volume of warm water, followed by an increasing volume of hot water and eventually by a mixture of hot water and steam that flowed, at considerable velocity and pressure, horizontally from the well head an estimated 20 to 30 feet. The entire sequence was completed within 8 minutes. Both wells produced the hot water steam mixture, spontaneously, which is very unusual for Nevada resources. Typically, wells require pumping or are stimulated with an air or nitrogen "lift" to induce flow to the surface. Attempts were made to locate five other test wells (drilled by AMAX) in the vicinity of the drill pad. Evidence of well drilling was identified at four sites and one other well casing was found intact (well #44-14).

4. The leasehold and drill pad site appear to be free from obvious physical impediments to development.

We appreciate the opportunity to have provided you with our views and will look forward to assisting you in the future. Good luck with your project and plans.

Very Sincerely,

Dennis T. Trexler  

Thomas Flynn
Figure 3.