

United States Department of Agriculture
 FOREST SERVICE
 PROSPECTING PERMIT
 (Act of June 4, 1897)
 TO CONDUCT GEOTHERMAL
 RESOURCE EXPLORATION OPERATIONS

Permit No. _____
 Date of Application 7/7/76

Region	State	Forest	Ranger District
6	Oregon	Umatilla	Hepner

PERMISSION IS HEREBY GRANTED TO:

Name : State of Oregon
 Department of Geology and Mineral Industries
 Address (include zip code)
 2033 First Street
 Baker, Oregon

PERMITTEE COPY

To conduct geothermal exploration operations across and upon the following-described lands (give description of lands by township, range, and section, and attach map or maps showing lands to be entered or affected):

NE 1/4 SE 1/4, Sec. 21, Twp. 4 S., R. 28 E.W.M.
 As shown on attached map

Type of operations to be conducted (give brief description): A temperature gradient hole will be drilled to a depth of 1000 ft., using truck-mounted air-rotary equipment, to measure temperature gradients. Holes will be backfilled with drill cuttings and/or cement. Steel casing will be installed as needed to protect groundwater. Temperature will be monitored over a one-year period as a part of a regional study of heat in the Western Cascades.

Exploration operations will be conducted during the period from Aug. 10, 1976 to Sept. 30, 1977
 date date

Attached \$ _____ Surety bond Rider to Nationwide bond Rider to Statewide bond
 Bond to be furnished State-wide Bond No. 57402530

Upon completion of exploration operations, the undersigned agrees to notify the Authorized Forest Officer on Form R-6 2820-4 (Notice of Completion of Geothermal Resource Exploration Operations) that authorized exploration operations have been completed in conformance with the general and special terms and stipulations of the permit.

The undersigned agrees to be bound by the terms and conditions of this permit in the conduct of all exploration operations authorized by this permit.

The undersigned agrees further that all exploration operations shall be conducted pursuant to the following terms and conditions:

- The permittee, in exercising the privileges granted by this permit, shall comply with the regulations of the Department of Agriculture and all Federal, State, county, and municipal laws, ordinances, or regulations which are applicable to the area or operations covered by this permit, including, but not limited to, those pertaining to fire, sanitation, fish, and game.
 * As used herein, Authorized Forest Officer refers to District Ranger of the District on which the operation is located.

2a The permittee shall pay to the Forest Service, U. S. Department of Agriculture, the sum of \$ _____ for each geothermal temperature gradient hole drilled and the sum of \$ _____ for each geophysical shot hole drilled, such payments to be tendered in advance of drilling in units of five or more, except for a final or single payment, which may be for one or more holes.*

~~2b The permittee shall pay in advance to the Forest Service, U. S. Department of Agriculture, an annual rental in the sum of \$ _____.*~~

3. All vehicles shall be operated at a reasonable rate of speed and, in the operation of vehicles, due care shall be taken to safeguard livestock and wildlife in the vicinity of operations. Existing roads and trails shall be used wherever possible. If new roads and trails are to be constructed, the Authorized Forest Officer must be consulted prior to construction as to location and specifications. Reclamation and/or reseeding of new roads and trails shall be made as requested by the Authorized Forest Officer.

4. This permit does not grant any exclusive right to the use of the described lands for prospecting, or other purposes; the area herein described shall be subject at all times to any other lawful uses by the United States, its lessees, permittees, licensees, and assignees.

5. This permit does not grant any rights to any kind of minerals; nor does it grant any preference right of any nature whatsoever in the issuance of a permit or lease for the exploration, removal, or development of the mineral resources in the described lands.

6. The permittee shall take all reasonable precaution to prevent and suppress forest fires. Particularly in connection with operations under this permit, fire prevention and fire-fighting equipment as required by the Forest Supervisor shall be provided, and the burning or other disposal of brush and other inflammable debris shall be done by the permittee in accordance with written stipulations to be issued by the Forest Supervisor.

7. No National Forest timber may be cut or destroyed without first obtaining a permit from the Authorized Forest Officer in charge.

8. The permittee will exercise diligence in protecting from damage the land and property of the United States covered by and used in connection with this permit and will pay the United States for any damage resulting from the violation of the terms of this permit or any law or regulation applicable to the National Forests by the permittee, his agents, or employees, or through negligence of the permittee, his agents, or employees, when acting within the scope of their employment.

9. The permittee shall safeguard with fences, barriers, fills, covers, or other effective devices, any shafts, pits, tunnels, cuts, and other excavations which otherwise would unduly imperil the lives, safety, or property of other persons.

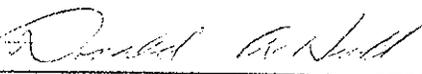
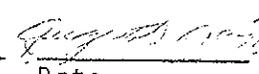
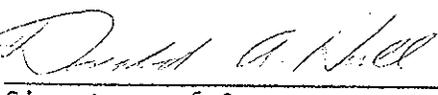
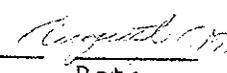
10. Upon expiration, conclusion, or abandonment of operations conducted pursuant to this permit, all equipment shall be removed from the land, and the land shall be restored as nearly as practicable to its original condition by such measures as the Authorized Forest Officer may specify. All geophysical holes shall be safely plugged. The Authorized Forest Officer shall be furnished a Notice of Completion of Geothermal Resource Exploration Operations immediately upon cessation of all such operations and shall be further informed of the completion of reclamation work as soon as possible.

11. This permit may be terminated upon breach of any of the conditions herein or at the discretion of the ~~Authorized Forest Officer~~. Forest Supervisor

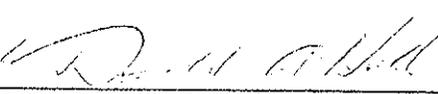
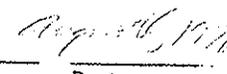
*Strike out 2a or 2b, whichever is inapplicable.

12. The permittee shall fully repair all damage, other than ordinary wear and tear, to roads and trails in the National Forests caused by the permittee in the exercise of the privilege granted by this permit.
13. In case of change of address, permittee shall immediately notify the Authorized Forest Officer.
14. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this permit or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this permit if made with a corporation for its general benefit.
15. The conditions of this permit are completely set forth herein and none of its terms can be varied or modified except in writing by the Authorized Forest Officer issuing the permit, his successor, or superior, and in accordance with applicable law and the regulations of the Secretary of Agriculture.
16. Operator shall contact the Authorized Forest Officer, prior to actual entry upon the land, in order to be appraised of practices which shall be followed or avoided in the conduct of exploration operations pursuant to the terms of this permit and applicable regulations. Operator will conduct no operations on the land unless the attached bond is in good standing.
17. Vegetation shall not be disturbed within 300 feet of waters designated by the Authorized Forest Officer, except at approved stream crossings. Surface damage which induces soil movement and/or water pollution shall be subject to corrective action as required by the Authorized Forest Officer. Trails and campsites shall be kept clean. All garbage and foreign debris shall be eliminated as required by the Authorized Forest Officer. Operator shall protect all survey monuments, witness corners, reference monuments, and bearing trees against destruction, obliteration, or damage. He shall, at his expense reestablish damaged, destroyed, or obliterated monuments and corners, using a licensed surveyor, in accordance with Federal survey procedures. A record of reestablishment shall be submitted to the Authorized Forest Officer. Operator shall make every reasonable effort to prevent, control, or suppress any fires started by the operator, and to report, as soon as possible, to the Authorized Forest Officer location and size of fires, and assistance needed to suppress such fires. Operator shall inform the Authorized Forest Officer as soon as possible of all fires, regardless of location, noted, or suppressed by independent action. No work shall be done within one-half mile of a developed recreation site without specific written authority from the Authorized Forest Officer. Any travel within one-half mile of a recreation site shall be over existing roads or trails.
18. If operations conducted under the provisions of this permit cause any damage to the surface of Forest Service lands, such as, but not limited to, soil erosion, pollution of water, injury or destruction of livestock or wildlife, or littering, operator shall, within 48 hours, file with the Authorized Forest Officer a map showing exact location of such damage and a written report containing operator's plans for correcting or minimizing damage, if possible.
19. Violation of, or failure to comply with any of these terms and conditions shall result in immediate shutdown of field operations until deficiency is corrected. Failure to correct deficiency within the time period allowed by the Authorized Forest Officer shall result in forfeiture of bond.
20. The Forest Service reserves the right to close any area to operators in periods of fire danger or when irreparable damage to natural resource is imminent.

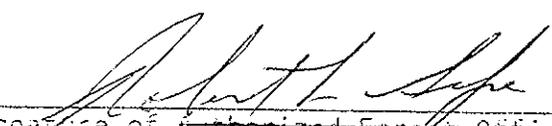
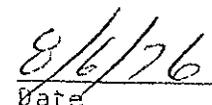
21. Contractor shall be liable for assuring compliance with all terms and conditions of this permit and all actions of his designated operator, agents, and employees.
22. When it is determined by the Authorized Forest Officer that continuation of operations will result in irreparable damage to the land or other natural resources, ~~this permit~~ ^{operations} may be immediately ~~terminated~~ ^{suspended} by the Authorized Forest Officer.
23. At the time of filing "Notice of Completion of Geothermal Resource Exploration Operations," if shallow temperature gradient holes have been drilled, the following information shall be submitted in duplicate by the permittee for each hole drilled:
 - a. Final hole designation and location.
 - b. A drillers log noting water table (if determined) and salt or coal beds (if present).
 - c. Method of completion, cementing, and casing and/or tubing used.
 - d. Details of abandonment.
 - e. Any information on drilling difficulties or unusual circumstances encountered which would be helpful in assuring future safety of operations or protection of the environment in the area concerned.
24. Special Stipulations to be attached, if necessary.

			
Signature of Applicant	Date	Signature of Operator	Date

I hereby agree to the special stipulations added to and made a part of this permit to conduct exploration operations.

			
Signature of Holder of Permit)	Date	Signature of Operator	Date

I hereby approve this Permit to conduct exploration operations.

	Title ACTING FOREST SUPERVISOR	
Signature of Authorized Forest Officer		Date