



KENNY C. GUINN
Governor

STATE OF NEVADA
COMMISSION ON MINERAL RESOURCES
DIVISION OF MINERALS
400 W. King Street, Suite 106
Carson City, Nevada 89703
(775) 684-7040 • Fax (775) 684-7052
<http://minerals.state.nv.us/>

Las Vegas Branch:
1771 E. Flamingo Rd.
Suite #120-A
Las Vegas, Nevada 89119
(702) 486-4343
Fax (702) 486-4345

ALAN R. COYNER
Administrator

NEVADA GEOTHERMAL UPDATE

December 2003

NOTE - UPDATES AND NEW ITEMS ARE HIGHLIGHTED IN YELLOW

CURRENT POWER OPERATIONS

<u>Plant/Operator (year on-line)</u>	<u>Nameplate Capacity *</u>	<u>Location</u>
Beowawe Power Plant (1985) Beowawe Power LLC/Caithness Operating	16.6 MW	S13, T31N R47E

Bradys Power Plant (1992) Brady Power Partners/ORMAT	21.1 MW	S12, T22N R26E
--	----------------	-----------------------

- ♦ ORMAT Nevada Inc. (ORNI 9, LLC); Permit #533; API #27-001-90300 for Observation Well "82-14" issued Nov 3, 2003, NE/4 NE/4, Section 14, T22N R26E; Brady Hot Springs KGRA, Churchill County; PTD 5000'; Will be used to monitor resources currently being used for electrical power generation. Any fluids will be re-injected. New Location.
- ♦ ORMAT Nevada Inc. (ORNI 9, LLC); Permit #534; API #27-001-90301 for Observation Well "55-14" issued Nov 3, 2003, SW/4 NE/4, Section 14, T22N R26E; Brady Hot Springs KGRA, Churchill County; PTD 5000'; Will be used to monitor resources currently being used for electrical power generation. Any fluids will be re-injected. New Location.
- ♦ ORMAT Nevada Inc. (ORNI 9, LLC); Permit #535; API #27-001-90302 for Observation Well "88-11" issued Nov 3, 2003, SE/4 SE/4, Section 11, T22N R26E; Brady Hot Springs KGRA, Churchill County; PTD 5000'; Will be used to monitor resources currently being used for electrical power generation. Any fluids will be re-injected. New Location.

Desert Peak Power Plant (1985) Brady Power Partners/ORMAT	12.5 MW	S21, T22N R27E
---	----------------	-----------------------

- ♦ ORMAT Nevada Inc. (ORNI 3, LLC); Permit #519PA for a geothermal project area issued March 7, 2003; Includes 8 production wells, 3 injection wells, and 2 observation wells; Project area includes sections 13-16 and 21-29, T22N R27E, Churchill County.
- ♦ ORMAT Nevada Inc. (ORNI 3, LLC); Permit #521; API #27-001-90267 for Industrial Well "43-21" issued May 12, 2003, SE/4 NW/4, Section 21, T22N R27E; Desert Peak, Churchill County; PTD 5500'; Will be used to generate power for sale to Nevada Power; Spud June 20, 2003; C and L Drilling Rig #6; Reached TD 5216' Aug 3, 2003; Testing.
- ♦ ORMAT Nevada Inc. (ORNI 3, LLC); Permit #529; API #27-001-90298 for Industrial Well "27-15" issued Aug 11, 2003, SW/4 SW/4, Section 15, T22N R27E; Desert Peak, Churchill County; Second production well location in the Desert Peak Project Area; Spud Aug 8, 2003; C and L Drilling Rig #6; Reached TD 5809'; Injection test performed; Moved rig.
- ♦ ORMAT Nevada Inc. (ORNI 3, LLC); Permit #531; API #27-001-90299 for Industrial Well "37-21" issued Oct 6, 2003, SE/4 SW/4, Section 21, T22N R27E; Desert Peak, Churchill County; Third production well location in the Desert Peak Project Area; Spud Oct 14, 2003; C and L Drilling Rig #6; Set conductor at 100'; Suspended well.

- ♦ ORMAT Nevada Inc. (ORNI 3, LLC); Permit #536; API #27-001-90303 for Industrial Well “74-21” issued Nov 3, 2003, SE/4 NE/4, Section 21, T22N R27E; Desert Peak, Churchill County; Production well location in the Desert Peak Project Area; Spud Nov 16, 2003; C and L Drilling Rig #6; New Location, **Drilled to depth of 4220’; Currently Testing.**

Dixie Valley Power Plant (1988) 62.0 MW S7, T24N R37E
Caithness Dixie Valley/Caithness Operating S33, T25N R37E

Empire Power Plant (1987) 4.8 MW S21, T29N R23E
Empire Energy LLC

Soda Lake No. 1 (1987) 26.1 MW S33, T20N R28E
Soda Lake No. 2 (1991)
Constellation Operating Services

Steamboat I, IA (1986) 10.8 MW S29, T18N R20E
Steamboat II, III (1992) 47.8 MW
S B Geo, Inc./Far West Capital

Steamboat Geothermal Power 14.41 MW S5, 6, T17N R20E
Plant/Caithness Power Plant (1988)
Yankee-Caithness JVLP

- ♦ Yankee Caithness Joint Venture, LLC: Permit #525, API 27-031-90219 for Industrial Production Well # 21B-5 issued Jul 14, 2003; NW/4 NW/4; Section 5, T17N R20E; Steamboat Springs, Washoe County, Nevada; PTD 5000’; Spud Jul 19, 2003, Nabors Rig #58, Rigged down Oct 10, 2003; Completed and tested; New directional completion 21B-5R drilled and currently being evaluated.
- ♦ Yankee Caithness Joint Venture, LLC: Permit #530, API 27-031-90220 for Industrial Injection Well # 64-32 issued Sep 17, 2003; SW/4 NE/4; Section 32, T18N R20E; Steamboat Springs, Washoe County, Nevada; PTD 1850’; Replacement well for the Coxi-1 well; Spud Sep 14, 2003; Lang Drilling Co.; Currently shut-in with plans to run additional cemented liner for completion as a new injection well.

Stillwater (1989) 21.0 MW S1, T19N R30E
Stillwater Holdings, LLC

Wabuska (1984) 2.2 MW S15, 16, T15N R25E
Homestretch Geothermal LLC

* Nameplate Capacity as reported to the Division of Minerals for 2002.

DIRECT USE OPERATIONS

Empire Group LLC; Empire, Washoe County, Nevada
<http://www.empirellc.com>

Gilroy Foods, A ConAgra Food Ingredients Company; Onion Dehydration Plant; Fernley, Nevada
<http://www.gilroyfoods.com/aboutus.html>
Seasonal onion dehydration processing operations currently idle. Plan to commence operations mid-May, 2004.

OTHER ACTIVE AREAS

Gerlach KGRA (T32N R23E), Washoe County

Salt Wells KGRA (T16-17N R30-31E), Churchill County

Hot Sulphur Springs (Tuscarora), Elko County

- ◆ Earth Power Resources announced recent address change: 2407 S. Troost Ave., Tulsa, OK 74114; Contact Ron Barr (918) 743-5593.
- ◆ Earth Power Resources, Inc.; State Permit #526PA issued Aug 5, 2003 for a geothermal project area to include 8 production wells (PTD 4000'), 6 injection wells (PTD 4000'), and 10 observation wells (PTD 4000'); The project area will encompass sections 4,5,8,9,16,& 17, T41N R52E; Hot Sulphur Springs, near Independence Valley and Tuscarora, Elko County, Nevada. The purpose of the project area is to supply a 25 MW power plant for a power purchase contract awarded by Sierra Pacific; Project Area.
- ◆ Earth Power Resources, Inc.; State Permit #527 for Industrial Production Well #57-8 issued Aug 8, 2003; API #27-007-90027; SW/4 SW/4 SE/4, Section 8, T41N R52E; Hot Sulphur Springs, Elko County, Nevada; Projected total depth 4000'; 1st production well location in Project Area 526PA; Spud Nov 14, 2003; Lang Drilling Company, continuous core rig; Did not reach objective, temporarily abandoned Nov 24, 2003; Considering re-drilling with rotary rig. The well name and location have been changed, (originally #46-8).
- ◆ Earth Power Resources, Inc.; State Permit #528 for Observation Well #67-8 issued Aug 8, 2003; API #27-007-90028; NE/4, SE/4, Section 8, T41N R52E; Hot Sulphur Springs, Elko County, Nevada; Projected total depth 4000'; 1st observation well location in Project Area 526PA; Spud Dec 5, 2003; Lang Drilling Company rotary rig; Set 7" at 1350', set 4.5" at 2490', shut down 12/18-28 for Holidays; Resumed operations on Dec 29 with Boart Longyear continuous core rig; Drilling.
- ◆ Earth Power Resources, Inc.; Permit for 2D shot hole seismic survey; Project Area 526Pa; Hot Sulphur Springs, near Tuscarora, Elko County, Nevada; Approximately 7 line miles of acquisition planned including sections 4,5,8,9,10,16 &17, T41N R52E; Exploration survey permit.

Rye Patch/Humboldt House KGRA, Pershing County (Rye Patch Power Plant, 12 MW, 90% complete)

Fly Ranch Geothermal Prospect Area; West Black Rock Desert, Washoe County

Blue Mountain Geothermal Prospect Area, Humboldt County

- ◆ NORAMEX CORP. Permit #500, API #27-013-90014 for Observation Well "Deep Blue #1 issued March 20, 2002; SE/4 SW/4, Section 14, T36N R34E, Humboldt County; PTD 2000'; Drilled in May, 2002; Plan to test the #1 well in near future. See current leasing activity.
- ◆ NORAMEX CORP. Permit #532, API #27-013-90015 for Observation Well "Deep Blue #2" issued Nov 3, 2003; SW/4 NE/4, Section 14, T36N R34E, Humboldt County; PTD 3400'; Blue Mountain area; Will be used to further evaluate the commercial potential of the geothermal resource. New Location.

Fallon Naval Air Base; T18N R29E; Churchill County

- ◆ Geophysical survey application received at BLM on November 4, 2003; Dawson Geophysical Company, Section 13, T18N R29E, Case number NVN 77785. See GRC Bulletin Sep/Oct 2002 for paper by Francis C. Monastero, Geothermal Program Office, U. S. Naval Air Weapons Station, China Lake, referencing "Future Prospects on Military Lands" and planned exploration and development of the Fallon and Hawthorne, Nevada military sites. <http://www.geothermal.org/articles/coso.pdf>

Recent BLM Geothermal Leases Filed

- ◆ For more information on BLM leases in Nevada, see the website: <http://www.blm.gov/lr2000>. This information has been provided courtesy of the "Nevada Oil Reporter", Ehni Enterprises, Inc.

Non-Competitive Geothermal BLM Lease Applications (07/03-12/03), Pending:			
ORMAT Nevada Inc	NVN 77296; 1920 acres	T24N R26E (20,30,32)	Churchill Co.
ORMAT Nevada Inc	NVN 77297; 1920 acres	T23N R25E (12) T23N R26E (6) T24N R25E (36)	Churchill Co.
Western Geothermal Ptnrs	NVN 77435; 1260 acres	T18N R31E (30,31)	Salt Wells
Western Geothermal Ptnrs	NVN 77436; 2560 acres	T18N R30E (25,34-36)	Salt Wells
ORMAT Nevada Inc.	NVN 77481; 1920.0 acres	T27N R40E (15,16,20)	Pershing/Lander Co.
ORMAT Nevada Inc.	NVN 77482; 1920.0 acres	T26N R40E (3,4,5)	Pershing/Lander Co.
ORMAT Nevada Inc.	NVN 77483; 2560.0 acres	T27N R40E (21,22,27,34)	Pershing/Lander Co.
Western Geothermal Ptnrs	NVN 77538; 2660.0 acres	T38N R62E (4,16,18,20,30)	Wells, NV, Elko Co.
Western Geothermal Ptnrs	NVN 77550; 1036.57 acres	T38N R62E (6,28,32,34)	Wells, NV, Elko Co.
Western Geothermal Ptnrs	NVN 77551; 160.0 acres	T38N R62E (32)	Wells, NV, Elko Co.
Western Geothermal Ptnrs	NVN 77552; 160.0 acres	T38N R62E (28)	Wells, NV, Elko Co.
Western Geothermal Ptnrs	NVN 77600; 1280.0 acres	T11N R25E (27)	East of Smith Vly, Lyon Co.
Western Geothermal Ptnrs	NVN 77602; 1311.2 acres	T10N R25E (2,3)	East of Smith Vly, Lyon Co.
Geo-Energy Partners	NVN 77627; 2560.0 acres	T01S R36E (14,15,21,22)	Fish Lake Vly, Esmeralda Co.
Geo-Energy Partners	NVN 77628; 2556.24 acres	T01S R36E (3,10,11,13)	Fish Lake Vly, Esmeralda Co.
NORAMEX CORP.	NVN 77668; 1959.00 acres	T36N R34E (10,12,22)	West of Blue Mtn, Humboldt Co.
NORAMEX CORP.	NVN 77669; 1338.94 acres	T36N R34E (24,26)	West of Blue Mtn, Humboldt Co.
Stillwater Holdings LLC	NVN 77690; 400.00 acres	T19N R30E (28,29)	Stillwater, Churchill Co.
Western Geothermal Ptnrs	NVN 77711; 1280.00 acres	T17N R31E (33,34)	Salt Wells, Churchill Co.
Western Geothermal Ptnrs	NVN 77712; 1296.58 acres	T16N R31E (3,4)	SE of Salt Wells, Churchill Co.
Western Geothermal Ptnrs	NVN 77722; 1920.00 acres	T18N R30E (22,26,27)	North of Salt Wells, Churchill Co.
Kingzett, James M.	NVN 77739; 2560.00 acres	T19N R26E (6) T20N R25E (34,36) T20N R26E (31)	Hazen, Churchill & Lyon Cos.
Kingzett, James M.	NVN 77740; 2560.00 acres	T21N R26E (2,8,12,16)	N of Hazen, Churchill & Lyon Cos.
Kingzett, James M.	NVN 77741; 2560.00 acres	T21N R26E (4) T22N R26E (34,35,36)	N of Hazen, Churchill & Lyon Cos.
McGee, Charles M.	NVN 77801; 640.00 acres	T12N R43E (34)	Big Smoky Valley, Nye County
Signorotti, Stephen G	NVN 77942; 240.00 acres	T31N R55E (36)	East of Dixie Flats; Elko Co.
Signorotti, Stephen G	NVN 77943; 1240.00 acres	T30N R55E (12,13,14)	East of Dixie Flats; Elko, Co.

Geothermal BLM Leases Issued (07/03-12/03):			
Vulcan Power Co.	NVN 66738; 655.0 acres	T17N R30E (15)	Salt Wells, Churchill Co.
PSG Resources LLC	NVN 77112; 628.3 acres	T2S R39E (3)	Silverpeak, Esmeralda Co.
PSG Resources LLC	NVN 77113; 640.0 acres	T1S R39E (34)	Esmeralda Co.
ORMAT Nevada Inc.	NVN 76209; 2560.0 acres	T24N R47E (10,15,16,20)	Grass Valley, Lander Co.
ORMAT Nevada Inc.	NVN 76210; 2563.0 acres	T24N R47E (2,3,4,9)	Grass Valley, Lander Co.
ORMAT Nevada Inc.	NVN 76211; 2560.0 acres	T24N R47E (21,22,28,29)	Grass Valley, Lander Co.
PSG Resources LLC	NVN 77110; 640.0 acres	T02S R39E (15)	Silverpeak, Esmeralda Co.
PSG Resources LLC	NVN 77111; 640.0 acres	T02S R39E (10)	Silverpeak, Esmeralda Co.
Competitive Sale Geothermal BLM Lease Applications, Pending:			
Western Geothermal Ptnrs	NVN 77268; 1662.05 acres	T32N R23E (15,16,21,22)	Gerlach
NGP Power Corp	NVN 77269; 1346.92 acres	T16N R30E (1) T16N R31E (6)	Salt Wells
NGP Power Corp	NVN 77270; 1360 acres	T16N R30E (2,3)	Salt Wells
Nevada Geothermal Spec	NVN 77271; 2520 acres	T17N R30E (23-26)	Salt Wells
Nevada Geothermal Spec	NVN 77272; 1274 acres	T17N R31E (35,36)	Salt Wells
Western Geothermal Ptnrs	NVN 77273; 1865.64 acres	T17N R31E (19,30,31)	Salt Wells

OTHER NEWS

“Exploring Utah Geothermal Opportunities: Development and Financing” January 20, 2004, Salt Lake City, Utah

- ◆ One day event hosted by the Utah Geothermal Working Group, the National Geothermal Collaborative, and the Geothermal Resources Council. Explore issues and opportunities pertaining to geothermal development in Utah. Marriott Salt Lake City Downtown, RSVP by Jan 14, 2004 to Lora Rees, Utah Energy Office, (801) 538-4791. Draft Agenda available online – <http://www.geocollaborative.org/>

Energy Legislation Does Not Pass Senate

- ◆ The Geothermal Industry stood to benefit from tax credits and leasing program improvements contained in the long-awaited Energy Bill. However, the Senate failed to pass the energy legislation and the bill will remain undecided until early next year when Congress resumes. Additional information about geoscience provisions in the energy bill can be found in the Special Update at http://www.agiweb.org/gap/legis108/energy_update1103.html

Enhanced Geothermal Systems (EGS) Grant Solicitation Issued November 12, 2003

- ◆ The Department of Energy's Office of Energy Efficiency and Renewable Energy is seeking applications for research projects to expand the Enhanced (Engineered) Geothermal Systems (EGS) knowledge base. Through financial assistance awards, DOE intends to provide financial support for research directed to improving the technology to recover heat from rock with low permeability and at a greater depth than presently feasible.
Enhanced (Engineered) Geothermal Systems (EGS) Research and Development (R&D)
DE-PS36-04GO94001; Applications due January 30, 2004
<http://www.fedgrants.gov/Applicants/DOE/PAM/HQ/DE-PS36-04GO94001/Grant.html>

USDA Farm Bill Section 9006 Update; November 6, 2003

- ◆ Section 9006 of the 2002 Farm Bill provided \$23 million in FY 2003 for wind, solar, biomass, geothermal, hydrogen from renewables, and energy efficiency projects. Eligible projects include systems that generate energy from wind, solar, biomass, or geothermal source or that produce hydrogen derived from biomass or water using a renewable energy source. In 2003, a total of \$21.7 million in grant money was distributed to 114 projects in 24 states. For fiscal year 2004, a Federal regulation will be proposed that outlines how the USDA will adhere to the requirements of Section 9006. All parties interested in pursuing the funding opportunities available under the Renewable Energy Systems and Energy Efficiency Improvements Programs should work with rural energy coordinators at the respective USDA State Rural Development Offices to prepare and submit applications. Interested parties should also contact these rural energy coordinators to learn when the proposed regulation will be made available for public comment and when funds will be available for FY 04. A list of these rural energy coordinators can be found by visiting <http://www.rurdev.usda.gov/rbs/farmbill/contacts.htm>. Further information can also be found at <http://www.rurdev.usda.gov/rbs/farmbill/resourc.htm>.

ORMAT Nevada Inc. Press Release November 22, 2003

- ◆ ORMAT Nevada Inc. was successful in an auction for all of the geothermal assets of Covanta Energy Corp. ORMAT's bid of \$214 M was accepted and ORMAT was declared the winner on November 21. The US Bankruptcy Court approved the purchase agreement. ORMAT plans to complete the acquisition before December 31, 2003. Assets included in the sale are 100% interest in the Heber Geothermal power plant near Heber, CA; 100% interest in the SIGC geothermal power plant adjacent to the Heber plant; and 50% interest in the Mammoth Geothermal power plant near Mammoth, CA. This acquisition, along with the acquisition of the Steamboat Nevada geothermal assets, will bring the total geothermal power plants owned and operated by ORMAT in the USA to over 250 MW. An additional 30 MW is under development in Nevada. <http://www.ormat.com>

Sierra Pacific Resources Evaluating Bids for New RFP

- ◆ Sierra Pacific Resources' two Nevada subsidiaries issued a new Request for Proposals for energy generated by renewable energy fuel sources. Responses were due to the utilities and bidding was closed on August 18, 2003; For more information see the website at: <http://www.sierrapacificresources.com/company/renewables/>
News release: <http://www.sierrapacificresources.com/news/releases/spr/1056956400.html>
"On October 24, 2003, Sierra Pacific Power and Nevada Power (Companies) issued letters to the respondents of the 2003 Renewable Energy RFP indicating if they were on the "Short List", the "Secondary List" or the "Not Successful List"....
<http://www.sierrapacificresources.com/company/RFPs/>

Western States Renewable Energy Summit, October 8, 2003; Presentation Links.

- ◆ “Join U.S. Senator Harry M. Reid for the First Annual Western States Renewable Energy Summit focusing on the effects of adding renewable energy to the grid, the impact of aggregating western states for maximum leverage, and negotiating in the rapidly changing arena of national energy policy”; Atlantis Casino Resort, Reno, Nevada Wednesday October 8, 2003 7:30 AM – 6: 30 PM; **Links available to download PowerPoint presentations, listed according to speaker;** <http://www.renewableenergysummit.com>

Utah BLM Competitive Geothermal Resources Lease Offering, December 9, 2003

- ◆ The Utah State BLM office announced a Competitive Geothermal Lease Sale to be held December 9, 2003. They are offering 18 parcels containing approximately 34,000 acres located in 4 KGRAs. To purchase a sale list, submit payment of \$5.00 to the BLM, Utah State Office, P. O. Box 45155, Salt Lake City, Utah 84145-0145.

POWER-GEN International 2003, December 9-10, 2003 Las Vegas, Nevada

- ◆ Conference and Exhibition, Las Vegas Convention Center, with 20,000 attendees and more than 1,200 exhibiting companies; Visit website for Call for Papers, Program, and Registration information: <http://pgi03.events.pennnet.com>

POWER-GEN Renewable Energy Conference and Exhibition, March 1-3, 2004

- ◆ PennWell Corporation and the American Council for Renewable Energy (ACRE) have formed a partnership for the creation of POWER-GEN Renewable Energy. The conference will be held at the Flamingo Hotel in Las Vegas, Nevada on March 1-3, 2004. The purpose of the conference is to bring together all sectors of the energy industry to discuss issues and plan for the future. Abstract deadline for papers is August 1, 2003. See the website for more information: <http://pgre04.events.pennnet.com>

Geothermal Resources Council's 2004 Annual Meeting, August 29-September 1, 2004

- ◆ Hyatt Grand Champions Resort, Palm Springs, CA. <http://www.geothermal.org/meet.html>

Bureau of Land Management, Nevada Public Land Records Website

- ◆ The site provides access to the BLM Nevada's official Public Land Records. Master Title Plats, Use Plats, and Historical Indices are available though the Internet or from any one of the BLM Nevada's Information Access Centers. The centers are located in Battle Mountain, Caliente, Carson City, Elko, Ely, Las Vegas, Reno, Tonopah, and Winnemucca and are open Mon-Fri 7:30 am - 4:30 pm. The Land Record Internet site is available 24 hours per day, 365 days a year. Plans for this site are for expansion to include Cadastral Survey Records, Mineral Surveys, and Protraction Diagrams. <http://www.nv.blm.gov/landrecords/>

DOE/INEEL Geothermal Resource Location Maps for 13 Western States

DOE News Release; October 8, 2003

"New maps reveal expanded geothermal energy potential." The regional geothermal resource map and the maps for each of the 13 Western states (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington and Wyoming) are available on the Internet at; <http://geothermal.id.doe.gov/maps-software>

Geothermal Energy Report Released

- ◆ The DOE Energy Efficiency and Renewable Energy and Department of Interior Bureau of Land Management (BLM) have released a geothermal energy report entitled *"Opportunities for Near-Term Geothermal Development on Public Lands in the Western United States."* <http://www.nrel.gov/docs/fy03osti/33105.pdf>
The report identifies 35 sites in the Western U. S. as having the greatest potential for short-term development of geothermal power. Ten of these sites are in Nevada: Fish Lake, Beowawe, Salt Wells, Soda Lake, Steamboat, Stillwater, Dixie Valley, Brady, Rye Patch, and San Emidio.

Great Basin Center for Geothermal Energy

- ◆ Great Basin Center Contact Information:
 - Dr. Jane C. S. Long, Professor of Hydrologic Sciences; Director, Great Basin Center for Geothermal Energy; Director, Department of Geological Sciences, University of Nevada, Reno, MS 172, Reno, NV 89557-0138.
 - Dr. Lisa Shevenell, Associate Director, Great Basin Center for Geothermal Energy, Nevada Bureau of Mines and Geology, University of Nevada, Reno, MS 178, Reno, NV 89557-0057
 - Contact information for the Great Basin Center for Geothermal Energy
Email: geothermal@mines.unr.edu
Phone: (775) 784-7018
Department of Geological Sciences, University of Nevada, Reno, MS 172, Reno, NV 89557-0138.
- ◆ Update from Lisa Shevenell;
Three researchers from the Great Basin Center for Geothermal Energy, University of Nevada, Reno, received best paper awards at the annual Geothermal Resources Council Meeting held in Morelia, Mexico in October, 2003: Greg Arehart (title **Evidence for a Magmatic Source of Heat for the Steamboat Springs Geothermal System Using Trace Elements and Gas Geochemistry**), Geoff Blewitt (title **Targeting of Potential Geothermal Resources in the Great Basin from Regional to Basin-Scale Relationships Between Geodetic Strain and Geological Structures**), and Mark Coolbaugh (title **Geothermal GIS Coverage of the Great Basin, USA: Defining Regional Controls and Favorable Exploration Terrains**).
- ◆ On October 8, a new geothermal Web site was introduced at the Western States Renewable Energy summit held in Reno, NV. This new Web site was constructed at the Nevada Bureau of Mines and Geology (NBMG) with partial financial assistance from the 2001 DOE State Energy Program Special Projects funding. The site, located at <http://www.nbmgs.unr.edu/geothermal/gthome.htm>, focuses on geochemical data and maps for thermal waters in Nevada. Although still under construction, it is publicly accessible and acts as an update to "Thermal Waters of Nevada" by Larry Garside and John Schilling, published by the NBMG in 1979."

LINKS: USEFUL DATABASES AND GEOTHERMAL INFORMATION

- ◆ American Council for Renewable Energy (ACRE) – <http://www.americanrenewables.org/>
- ◆ Black Rock-High Rock NCA (National Conservation Area) planning website – <http://www.blackrockhighrock.org>
- ◆ Bureau of Land Management – Nevada Geothermal Program - <http://www.nv.blm.gov/minerals/geothermal/index.htm>
- ◆ Council of State Governments – TrendsAlert; Renewable Energy and State Economics – <http://www.csg.org>. Summarizes issues and policy options for state officials, regarding economic potential of renewable energy.
- ◆ Geo-Heat Center, Oregon Institute of Technology, Klamath Falls, Oregon - <http://geoheat.oit.edu/>
- ◆ GeoPowering the West - <http://www.eere.energy.gov/geothermal/>
- ◆ GeoPowering the West, Geothermal Related Events Calendar – <http://www.eere.energy.gov/geothermal/geocalendar.html>
- ◆ Geothermal Biz.com - <http://www.geothermal-biz.com/>
Geothermal biz.com was created to help the geothermal entrepreneur—companies, small businesses, Native American tribes, homeowners, and individuals—develop geothermal direct use and small power generation projects.
- ◆ Geothermal Education Office - <http://www.geothermal.marin.org/>
- ◆ Geothermal Energy Association - <http://www.geo-energy.org/>
- ◆ Geothermal Resources Council - <http://www.geothermal.org>

- ◆ **Great Basin Center for Geothermal Energy at the University of Nevada, Reno -** <http://www.unr.edu/geothermal/>
- ◆ **Idaho National Engineering and Environmental Laboratory (INEEL) -** <http://geothermal.inel.gov/>
- ◆ **James & James Science Publishers; Provider of information for energy and environment professionals worldwide; On-line database of renewable energy suppliers –** <http://www.jxj.com/>
- ◆ **National Geothermal Collaborative –** <http://www.geocollaborative.org/>
- ◆ **National Renewable Energy Laboratory (NREL) -** <http://www.nrel.gov/geothermal>. Geothermal Program; Access reports and publications on geothermal energy by Gerald Nix, Charles Kutscher, Barbara Farhar, Keith Gawlik, Brandon Owens, Walter Short.
- ◆ **Nevada Bureau of Mines and Geology, MI-2002, “The Nevada Mineral Industry 2002” -** <http://www.nbmq.unr.edu/hits.php?p=dox/mi/02.pdf>
- ◆ **Nevada Bureau of Mines and Geology, Geothermal Energy -** <http://www.nbmq.unr.edu/geothermal/index.html>
- ◆ **Nevada Commission on Mineral Resources, Division of Minerals -** <http://minerals.state.nv.us/programs/ogg.htm>
- ◆ **Nevada State Office of Energy, Renewable Energy & Energy Conservation Task Force, including report by Mary Riddel “Potential Economic Impact of Nevada’s Renewable Energy Resources” -** <http://energy.state.nv.us/taskforce/default.htm>
- ◆ **Nevada Public Utilities Commission -** <http://www.puc.state.nv.us/>
- ◆ **Office of the Governor, Nevada State Energy Office -** <http://energy.state.nv.us/taskforce/default.htm>
- ◆ **Office of Scientific and Technical Information; Subject portals on renewable energy and energy efficient technologies** <http://www.osti.gov/subjectportals/>
- ◆ **Renewable Energy Policy Project & CREST (Center for Renewable Energy & Sustainable Technology) -** <http://www.repp.org/>
- ◆ **Sandia National Laboratories Geothermal Research Dept. -** <http://www.sandia.gov/geothermal>
- ◆ **Sierra Pacific Resources, Renewables RFP -** <http://www.sierrapacificresources.com/company/renewables/>
- ◆ **Southern Methodist University Geothermal Laboratory -** <http://www.smu.edu/geothermal/>
- ◆ **Stanford Geothermal Program -** <http://ekofisk.stanford.edu/geotherm.html>
- ◆ **U.S. Department of Agriculture, Rural Development -** <http://www.rurdev.usda.gov>
- ◆ **U.S. Geological Survey, USGS Open-file Report 99-425 online version 1.0, “Geothermal Industry Temperature Profiles from the Great Basin” -** <http://geopubs.wr.usgs.gov/open-file/of99-425/webmaps/home.html>

Information compiled by the Nevada Division of Minerals with assistance from:

EHNI ENTERPRISES, INC.
P.O. Box 4228
Carson City, NV 89702-4228

Under USDOE Cooperative Agreement: SEP/CA/03/006 supporting GeoPowering the West.

For further information regarding GeoPowering Nevada or Nevada’s Geothermal Program contact John Snow, Geothermal Program Manager, Nevada Division of Minerals at 775-684-7045, Fax: 775-684-7052, or e-mail jsnow@govmail.state.nv.us