

# WILLIAM E. NORK, Inc.

1026 W. First Street • Reno, Nevada 89503

CONSULTING SERVICES IN HYDROLOGY AND GEOLOGY  
Phone (702) 322-2604

February 4, 1994  
94-422-01

Russell A. Fields  
Director  
STATE OF NEVADA  
DEPARTMENT OF MINERALS  
400 West King St., Suite 106  
Carson City, NV 89710

**RECEIVED**

FEB 07 1994

**Div. of Minerals**

RE: PEPPERMILL HOTEL AND CASINO - QUARTERLY REPORT.

Dear Mr. Fields:

A copy of the Quarterly Report of Subsurface Injection for the injection well (Well No. 4) at the Peppermill Hotel and Casino is provided for your records. The report covers the period from November 1, 1993 through January 31, 1994, inclusive. Please do not hesitate to contact me if you have any questions.

Sincerely,  
WILLIAM E. NORK, INC.



William E. Nork, President

attachments

cc: Division of Water Resources  
Division of Environmental Protection  
Nevada Bureau of Mines



STATE OF NEVADA  
 DEPARTMENT OF MINERALS  
 400 W. King Street, Suite 106  
 Carson City, Nevada 89710  
 (702) 885-5050

Orig - NDM  
 Dup - NDM&G  
 Trip - DWR  
 Quad - DEP

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FEB 07 1994

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Div. of Minerals

Producer Peppermill Hotel and Casino Month of December, 1993  
 Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	145.9	4085.8	137.5	Alta (?)	~2800-3000'

Remarks: November 29 - December 27, 1993

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature William Swank

Position Agent

Date 2-4-94

STATE OF NEVADA  
 DEPARTMENT OF MINERALS  
 400 W. King Street, Suite 106  
 Carson City, Nevada 89710  
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Div. of Minerals

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of November, 1993

Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	140.0	4059.0	132.6	Alta (?)	~2800-3000'

Remarks: November 1-29, 1993

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature William Swank

Position Agent

Date 2-4-94

STATE OF NEVADA  
 DEPARTMENT OF MINERALS

400 W. King Street, Suite 106  
 Carson City, Nevada 89710  
 (702) 885-5050

Orig - HDOM  
 Dup - HBM&G  
 Trip - DVR  
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of October, 19 93

Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	133.1	3,726.0	124.8	Alta (?)	~2800-3000'

Remarks: Data collected between 10/4/93 to 11/1/93  
 Leak in annular seal stopped by welding steel plate in the annulus.

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Dale C. B...  
 Position Hydrogeologist  
 Date 12/14/93

STATE OF NEVADA  
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 400 W. King Street, Suite 106  
 Carson City, Nevada 89710  
 (702) 885-5050

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 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of September, 1993

Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	118.3	4,141.2	104.0	Alta (?)	~2800-3000'

Remarks: Data collected between 8/30/93 to 10/4/93

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Dale L. B. [Signature]  
 Position Hydrogeologist  
 Date 12/14/93

STATE OF NEVADA  
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 700 W. King Street, Suite 106  
 Carson City, Nevada 89710  
 (702) 885-5050

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 Trip - DWR  
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of August, 19 93  
 Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	126.4	3,540.4	103.4	Alta (?)	~2800-3000'

Remarks: Data collected between 8/2/93 to 8/30/93

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Dale G. B...  
 Position Hydrogeologist  
 Date 12/14/93

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JUN 28 1993

Dept. of Minerals

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of July, 19 93

Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	124.1	4,343.5	101.8	Alta (?)	~2800-3000'

Remarks: June 28 - August 2, 1993

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Rale Bugenig by dm  
 Position Hydrogeologist  
 Date 9-22-93

STATE OF NEVADA  
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SEP 28 1993

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REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of June, 19 93  
 Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	142.0	3,976.0	120.5	Alta (?)	~2800-3000'

Remarks: May 31 - June 28, 1993

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Dale Bugenig by dm  
 Position Hydrogeologist  
 Date 9-22-93



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MAY 29 1993

Dept. of Minerals

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of May, 1993

Address 2707 S. Virginia Street, Reno, Nevada 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	144.3	4,040.7	120.4	Alta (?)	~2800-3000'

Remarks:

May 5 - 31, 1993

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature Dale Bigelow by dm  
 Position Hydrogeologist  
 Date 9-22-93

STATE OF NEVADA  
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**REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS**

Producer Peppermill Hotel & Casino Month of April, 19 93

Address 2707 South Virginia St., Reno, NV 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day	Gallons per month			
Moana Commercial well on private property	4	178.0	7,474.2	140	Alta(?)	~2800-3000

**Remarks:** Measurements of injectate volume from meter in transmission line for 3/29/93 - 5/10/93. Note that 4/26/93 and 5/3/93 measurements were in error.

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature *Dale C. B...*

Position Hydrogeologist

Date 5/10/93

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**REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS**

Producer Peppermill Hotel & Casino Month of March, 1993

Address 2707 South Virginia St., Reno, NV 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day	Gallons per month			
Moana Commercial well on private property	4	190	5,319.0	136	Alta (?)	~2800-3000

Remarks: Measurements of injectate volume from meter in transmission line for 3/1/93 - 3/29/93

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature *Dell C. B.*

Position Hydrogeologist

Date 1-19-1993

STATE OF NEVADA  
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 Carson City, Nevada 89710  
 (702) 885-5050

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**REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS**

Producer Peppermill Hotel & Casino Month of February, 1993

Address 2707 South Virginia St., Reno, NV 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day	Gallons per month			
Moana Commercial well on private property	4	189.4	5,303.7	140	Alta(?)	~2800-3000

Remarks: Measurements of injectate volume from meter in transmission line for 2/1/93 - 3/1/93

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature *Dale A. B...*

Position Hydrogeologist

Date 2/1/93

# WILLIAM E. NORK, Inc.

1026 W. First Street • Reno, Nevada 89503

CONSULTING SERVICES IN HYDROLOGY AND GEOLOGY

Phone (702) 322-2604

February 24, 1993  
93-422-01

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FEB 25 1993

Dept. of Minerals

Russell A. Fields  
Director  
STATE OF NEVADA  
DEPARTMENT OF MINERALS  
400 West King St., Suite 106  
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RE: PEPPERMILL HOTEL AND CASINO - QUARTERLY REPORT.

Dear Mr. Fields:

A copy of the Quarterly Report of Subsurface Injection for the injection well (Well No. 4) at the Peppermill Hotel and Casino is provided for your records. The report covers the period from November 2, 1992 through February 1, 1993, inclusive. Please do not hesitate to contact Bill Nork or me if you have any questions.

Sincerely,  
WILLIAM E. NORK, INC.

*Dale C. Bugenig*  
Dale C. Bugenig  
Hydrogeologist

attachments

cc: Division of Water Resources  
Division of Environmental Protection  
Nevada Bureau of Mines.



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**REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS**

Producer Peppermill Hotel & Casino Month of January, 19 93

Address 2707 South Virginia St., Reno, NV 89502

Show each injection well separately. File not later than the last day of the month for the preceding month.

Field and lease name	Well No.	Geothermal Fluids Injected		Injection pressure	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Moana Commercial well on private property	4	195.6	6,651.2	140	Alta (?)	~2800-3000

Remarks: Measurements of injectate volume from meter in transmission line for 12/28/92 - 2/1/93

I certify this information to be true, correct, and complete and that no pertinent matter inquired about in this report has been omitted.

Signature *Dale B. [Signature]*  
 Position Hydrogeologist  
 Date 2/24/93