

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

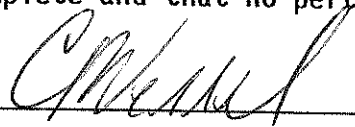
Producer Peppermill Hotel and Casino Month of December, 19 91
 Address 2707 S. Virginia Street, Reno, Nevada 89502

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	181.6	5084.3	136	Alta (?)	~2800-3000'

Remarks: Data are for the 4-week period of December 2, 1991 through January 6, 1992.

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

Signature 
 Position Hydrogeologist
 Date 3-20-92

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

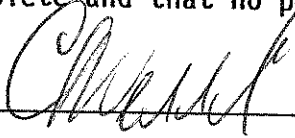
Producer Peppermill Hotel and Casino Month of November, 19 91
 Address 2707 S. Virginia Street, Reno, Nevada 89502

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	182.0	5095.7	137.4	Alta (?)	~2800-3000'

Remarks: Data are for the 4-week period of November 4, 1991 through December 2, 1991.

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

Signature 
 Position Hydrogeologist
 Date 3-20-92

WILLIAM E. NORK, Inc.

1026 W. First Street • Reno, Nevada 89503

CONSULTING SERVICES IN HYDROLOGY AND GEOLOGY

Phone (702) 322-2604

January 16, 1992

92-422-01

RECEIVED

JAN 17 1992

Marcia Graybeck
Division of Environmental Protection
123 W. Nye Lane, Rm. #241
Carson City, Nevada 89710

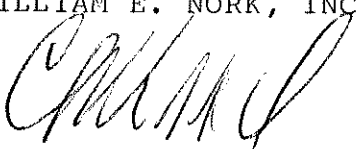
Dept. of Minerals

RE: UIC PERMIT NV 70064 - PEPPERMILL HOTEL AND CASINO.

Dear Marcia:

Attached is the updated version of the annual report for the Peppermill Injection Well #4 which contains the complete water chemistry data. Please do not hesitate to contact us if you have any questions.

Sincerely,
WILLIAM E. NORK, INC.


Chris Wessel
Hydrogeologist

attachments

cc: Department of Minerals
Division of Water Resources
Becky Perkey - NBOM&G



PEPPERMILL HOTEL CASINO INJECTION WELL #4

PERMIT NEV 70064

ANNUAL REPORT SUPPLEMENT

January 16, 1992

Submitted to:

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

Prepared by:
WILLIAM E. NORK, INC.

William E. Nork

William E. Nork, President



WILLIAM E. NORK, Inc.

You will notice that the injection meter reading starts at zero. This is due to the installation of a new meter directly following the last semi-annual report.

During the week of 8/12-19//91 the water meter failed and had to be replaced.



WILLIAM E. NORK, Inc.

Reno, Nevada 89503

WATER CHEMISTRY DATA



WILLIAM E. NORK, Inc.

Reno, Nevada 89503

e. Analytical Method used:			
pH	<u>150.1</u>	HCO ₃	<u>310.1</u>
Ca	<u>215.1</u>	F	<u>340.2</u>
Mg	<u>242.1</u>	B	<u>212.3</u>
Na	<u>273.1</u>	As	<u>206.3</u>
K	<u>258.1</u>	SiO ₂	<u>370.1</u>
Cl	<u>sm 4500CL.B</u>	TDS ²	<u>160.1</u>
SO ₄	<u>375.4</u>	E.C.	<u>120.1</u>

4. Injection Rate

- a. Average = 104 gal/day x 1000
- b. Lowest Flow = 80 gal/day x 1000
- c. Highest Flow = 130 gal/day x 1000

5. Injection Pressure

- a. Average = 115 psig
- b. Lowest = 90 psig
- c. Highest = 145 psig

* (Analyses as per 40 CFR Part 136)

6. Totallizing Meter Reading : 13,016,500 ending

Period 91 / 05 / 06 to 91 / 11 / 04 ; 00,000,000 initial
 yr. mo. day yr. mo. day

13,016,500 total
 (for report period)

7. Instantaneous Readings**:

- a. Injection Rate, gpm (weekly)
- b. Injection Pressure, psig (weekly)
- c. Injection Volume gallons (weekly)

** Summary Tabulation to be attached to this report.

SUMMARY OF INJECTION RATES



WILLIAM E. NORK, Inc.

Peppermill Injection Well #4

Weekly Injection Summary*
Permit No. 70064

Date (yr./mo/day)	Meter Reading (gallons)	Weekly Total (gallons)
91/05/06	00000000 **	0,000,000
91/05/13	00651000	651,000
91/05/20	01590900	939,900
91/05/27	02424400	833,500
91/06/03	03280700	856,300
91/06/10	03970600	689,900
91/06/18	04583800	613,200
91/06/24	05284000	700,200
91/07/01	05993500	709,500
91/07/08	06720700	727,200
91/07/15	07290700	570,000
91/07/22	08079600	788,900
91/07/29	08644800	565,200
91/08/05	09297600	652,800
91/08/12	---	***
91/08/19	00618000 ***	***
91/08/26	01350100	732,100
91/09/02	02070800	720,700
91/09/09	03099600	1,028,800
91/09/16	04337400	1,237,800
91/09/23	05567800	1,230,400
91/09/30	06792400	1,224,600
91/10/07	08013200	1,220,800
91/10/14	09238700	1,225,500
91/10/21	10463100	1,224,400
91/10/28	11789300	1,326,200
91/11/04	13016500	1,230,700

* Must be submitted with semi-annual report; meter to be read on same day of the week and time of day for each entry submitted; weekly total to equal meter reading minus meter reading for previous week.

** New meter installed at discharge to measure injectate.

*** No reading attainable.

**** New meter installed.

SEMI-ANNUAL SUMMARY
Permit No. NV 70064

INSTANTANEOUS READINGS
INJECTION WELL #4

Date (yr./mo./day)	Rate (gpm)	Pressure (psig)	Meter Reading (gallons)
91 / 05 / 06	80	118	0000000
91 / 05 / 13	80	107	00651000
91 / 05 / 20	100	110	01590900
91 / 05 / 27	100	90	02427400
91 / 06 / 03	80	100	03280700
91 / 06 / 10	100	95	03970600
91 / 06 / 18	98	95	04583800
91 / 06 / 24	100	100	05284000
91 / 07 / 01	100	100	05993500
91 / 07 / 08	100	100	06720700
91 / 07 / 15	100	100	07290700
91 / 07 / 22	100	100	08079600
91 / 07 / 29	100	95	08644800
91 / 08 / 05	100	100	09297600
91 / 08 / 12	*	95	-- ***
91 / 08 / 19	95	92	00618000 ***
91 / 08 / 26	80	92	01350100
91 / 09 / 02	75	145	02070800
91 / 09 / 09	130	145	03099600
91 / 09 / 16	120	142	04337400
91 / 09 / 23	120	145	05567800
91 / 09 / 30	120	140	06792400
91 / 10 / 07	120	140	08013200
91 / 10 / 14	120	140	09238700
91 / 10 / 21	130	140	10463100
91 / 10 / 28	130	142	11789300
91 / 11 / 04	120	140	13016500

*** No reading attainable.

**** New meter installed.

GRAPHICAL SUMMARY OF INJECTION
RATES AND PRESSURES



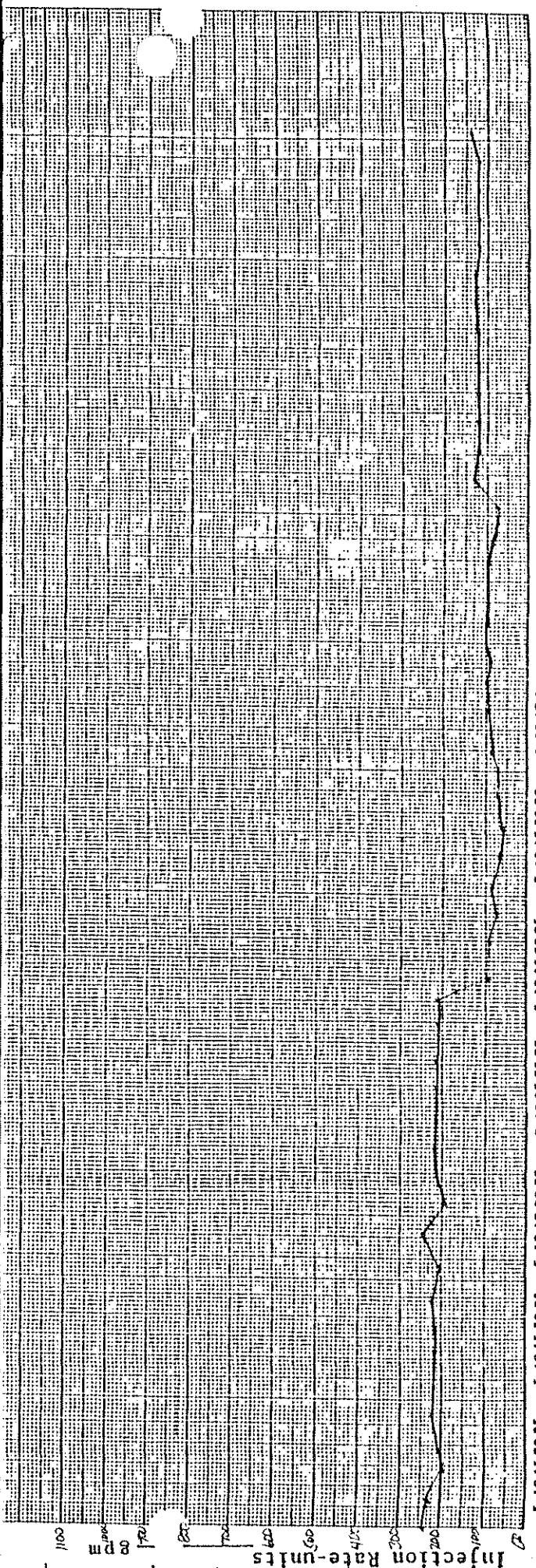
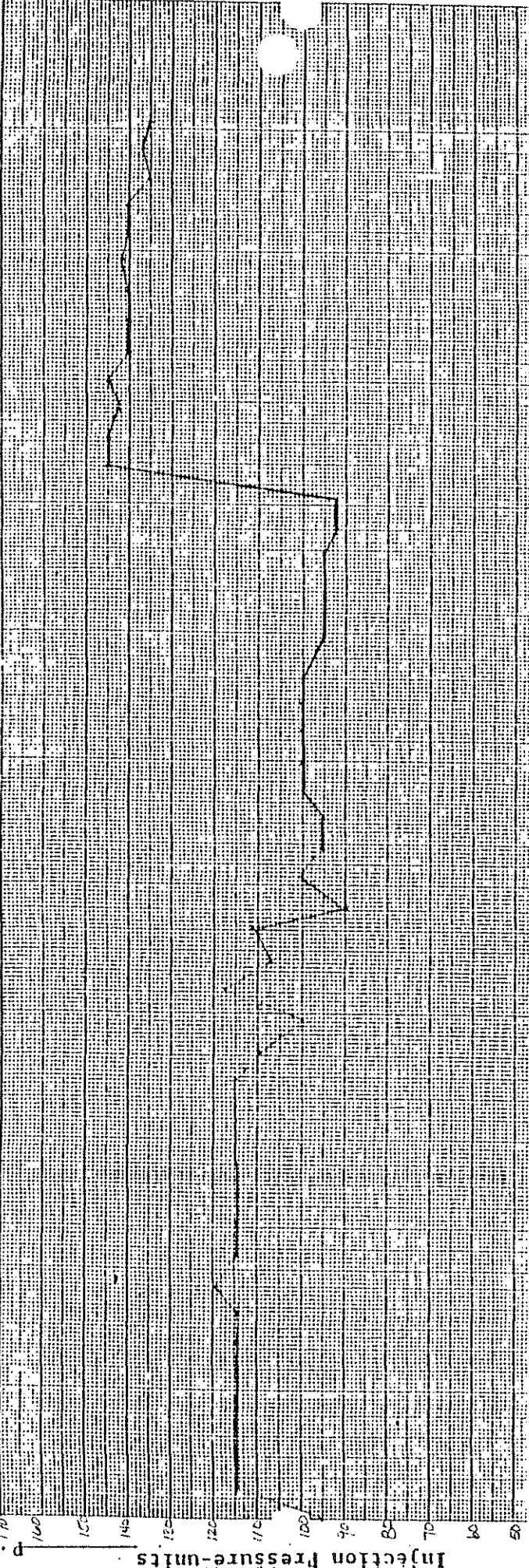
WILLIAM E. NORK, Inc.

Reno, Nevada 89503

1771

ATTACHMENT 1

JANUARY 5 10 15 20 25 FEBRUARY 5 10 15 20 25 MARCH 5 10 15 20 25 APRIL 5 10 15 20 25 MAY 5 10 15 20 25 JUNE 5 10 15 20 25 JULY 5 10 15 20 25 AUGUST 5 10 15 20 25 SEPTEMBER 5 10 15 20 25 OCTOBER 5 10 15 20 25 NOVEMBER 5 10 15 20 25 DECEMBER 5 10 15 20 25



JANUARY 5 10 15 20 25 FEBRUARY 5 10 15 20 25 MARCH 5 10 15 20 25 APRIL 5 10 15 20 25 MAY 5 10 15 20 25 JUNE 5 10 15 20 25 JULY 5 10 15 20 25 AUGUST 5 10 15 20 25 SEPTEMBER 5 10 15 20 25 OCTOBER 5 10 15 20 25 NOVEMBER 5 10 15 20 25 DECEMBER 5 10 15 20 25

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

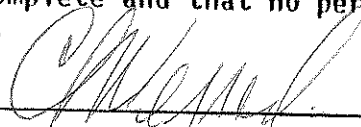
Producer Peppermill Hotel and Casino Month of November, 19 91
 Address 2707 S. Virginia Street, Reno, Nevada 89502

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	1031.9	35083	138.2	Alta (?)	~2800-3000'

Remarks: Results determined from data collected between 10/28/91 to 12/02/91.

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

Signature 
 Position Hydrogeologist
 Date 12-09-91

DEPARTMENT OF MINERALS

400 W. King Street, Suite 106

Carson City, Nevada 89710

(702) 885-5050

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

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of October, 19 91


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	178.475	4,997.300	140.5 psig	Alta (?)	~2800-3000'

Remarks: Results were determined from data collected between 9/30/91 and 10/28/91.

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

Signature 

Position Hydrogeologist

Date 11-8-91

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

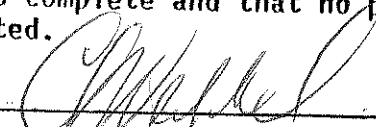
Producer Peppermill Hotel and Casino Month of September, 19 91
 Address 2707 S. Virginia Street, Reno, Nevada 89502

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	168.6	4721.6	144.25	Alta (?)	~2800-3000'

Remarks: Monthly and daily averages were taken over the period of 9/2/91 to 9/30/91.

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

Signature 
 Position Hydrogeologist
 Date 10-4-91

DEPARTMENT OF MINERALS

400 W. King Street, Suite 106

Carson City, Nevada 89710

(702) 885-5050

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

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of AUGUST, 1991

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	103.7	2,905.6	93 psig	Alta (?)	~2800-3000'

Remarks: The injection well meter was replaced. The amount of geothermal fluids injected daily represent the period 8/19 - 9/02/91. The amount of fluids injected monthly was advanced from the daily rate and is for the period 8/05 - 9/02/91.

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

Signature 

Position Hydrogeologist

Date 9-12-91

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

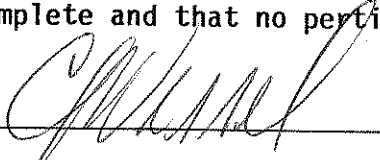
Producer PEPPERMILL HOTEL AND CASINO **Month of** July, 19 91
Address 2707 S. Virginia Street, Reno, Nevada 89502

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	94.4	3304.1	99 psig	Alta (?)	~2800-3000

Remarks: Data are for the five (5) week period of July 1 through August 5, 1991.

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

Signature 
Position Hydrogeologist
Date 8/6/91

DEPARTMENT OF MINERALS

400 W. King Street, Suite 106

Carson City, Nevada 89710

(702) 885-5050

City - RDM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of June, 19 99

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	96.9	2,712.8	97.5	Alta (?)	~2800-3000'

Remarks:

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 7/5/91

DEPARTMENT OF MINERALS

400 W. King Street, Suite 106

Carson City, Nevada 89710

(702) 885-5050

Orig - RDMH
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of May, 19 91

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	126.5	3,541.1	105	Alta (?)	~2800-3000'

Remarks: NEW METER INSTALLED IN INJECTION LINE 1201 HRS 5/8/91.

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 6/5/91

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer PEPPERMILL HOTEL AND CASINO Month of April, 19 91
 Address 2707 S. Virginia Street, Reno, Nevada 89502

RECEIVED
 MAY 10 1991

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	310.7	8699.9	112	Alta (?)	2300-3000'

Remarks:

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 5/9/91

DEPARTMENT OF MINERALS

400 W. King Street, Suite 106

Carson City, Nevada 89710

(702) 885-5050

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

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of March, 19 91

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 (are)	Reservoir formation	Reservoir depth
		Gallons per day x 1000	Gallons per month x 1000			
Commercial well on private property	4	317.2	8881.0	116	Aita (?)	~2800-3000'

Remarks:

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

Signature Norman W. Melvin

Position Hydrogeologist

Date 4/09/91

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of February, 19 91
 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	319.41	8943.6	116	Alta (?)	2300-3000'

Remarks:

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

Signature _____
 Position _____
 Date _____

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

Orig - NDOM
 Dup - NBM&G
 Trip - DWR
 Quad - DEP

REPORT OF GEOTHERMAL SUBSURFACE INJECTIONS

Producer Peppermill Hotel and Casino Month of January, 19 91

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	294.03	9114.9	115	Alta(?)	2300-3000'

Remarks:

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

Signature _____

Position _____

Date _____