

# WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

(Statutes 1939, chapter 178, section 7. See page 2 of this form)

FILED  
MAR 3 1945

STATE ENGINEER'S OFFICE

PERMIT TO APPROPRIATE WATER, SERIAL NUMBER 11227

Log #  
51935

Permittee H. Mack; N. Mack; & M. Wollman Driller O. G. Hairgrove

Address Las Vegas, Nevada Address Las Vegas, Nevada

Location of well SW $\frac{1}{4}$ ; SE $\frac{1}{4}$ ; Sec. 9 T 21S, R 61 E MDB & M  
(Describe in legal subdivisions.)

Water will be used for Irrigation and domestic Total depth of well 600 ft.

Size of drilled hole 10" and 8" Thickness of casing 1/4"

Weight of casing per linear foot 36 lbs. & 28 lbs. Quality of casing New

Diameter and length of casing 92 Ft. 10" I.D. - 505 ft. 8" I.D. - 92 ft. 6" liner  
(Casing 12" in diameter and under give inside diameter; casing over 12" in diameter give outside diameter.)

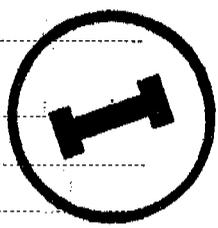
If flowing well give flow in c.f.s. and pressure 10.0 ft. Top 10" casing - Flow 50 G.P.M.

If nonflowing well give depth of standing water from surface

If flowing well describe control works 4" Gate Valve  
(Type and size of valve, etc.)

Date of commencement of well Nov. 13, 1944 Date of completion of well Feb. 15, 1945

Type of well rig Armstrong 50



Screens, seals, plugs, grouts, etc.	Well diagram	Formations. State if dry or water bearing	Kind of casing, liner, shoe, etc.
92 ft. cemented with 2 1/2 yds. of ready-mix cement	<p style="text-align: center;">DIAMETER OF PIPE AND WELL IN INCHES</p> <p style="text-align: center;">8' 6' 4' 2' 0' 2' 4' 6' 8'</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">DEPTH OF PIPE AND WELL IN FEET</p>	<p>1-2 Soil</p> <p>2-18 Hard Lime Rock</p> <p>18-22 Clay</p> <p>22- Surface water</p> <p>22-180 Lime Rock with small clay streaks</p> <p>180-310 Red clay with small layers of gravel.</p> <p>210 - water raised to surface</p> <p>310-437 Lime Rock and gravel</p> <p>410 - Small flow</p> <p>437 - 445 Blue clay</p> <p>445 - 480 Blue &amp; Red Clay mixed</p> <p>480 - 500 Red Clay</p> <p>500 - 540 Red clay and Sand</p> <p>540 - 545 Gravel (water)</p> <p>545 - 580 Sand &amp; Clay (Water)</p> <p>580 - 600 Clay</p>	<p>92 ft. 10" - I.D.</p> <p>505 ft. 8" - I.D.</p> <p>92 ft. 6 in. - Lime</p> <p>Chief aquifer (water-bearing formation) from 540 to 545 ft.</p> <p>Other aquifers 310-315</p> <p>545-580</p>
			<p>Casing perforated from 545 to 585 ft. and 470-505</p>
			<p>Size of perforations 1/4" by 4"</p>

is affirmative. The state engineer at any time may hold a hearing on his own motion, on a petition signed by a representative body of users of underground water in an area or subarea, to determine whether the water supply within such area or subarea is adequate for the needs of all permittees and all vested-right claimants, and if the determination is negative the state engineer shall order that withdrawals be restricted to conform to priority rights during the period of shortage.

SEC. 11. The state engineer, his assistants or authorized agents and the artesian well supervisor, or his assistants, shall have the right to enter the premises of any owner or proprietor where any well mentioned in this act is situated at any reasonable hour of the day for the purpose of investigating and carrying out his or their duties in the administration of this act.

SEC. 12. Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum of not less than ten (\$10) dollars nor more than two hundred fifty (\$250) dollars, or by imprisonment in the county jail not exceeding three months, or by both such fine and imprisonment.

SEC. 13. Each section of this act and every part of each section is hereby declared to be an independent section, or a part of a section, and the holding of any section or part thereof to be void or ineffective from any cause shall not be deemed to affect any other section or any part thereof.

SEC. 14. All acts and parts of acts in conflict herewith, and that certain act entitled "An act to provide a law for the casing and capping of artesian wells, defining the underground waters which are governed by the laws relating to the appropriation of the public waters of the state, providing a penalty for the violation of the provisions of this act, and prescribing the duties of the district attorneys in relation thereto," approved March 24, 1915, being sections 7987 to 7993, both inclusive, N. C. L. 1929, and as amended, approved April 1, 1935, as amended, approved March 24, 1937, be and the same are hereby repealed.

SEC. 15. This act shall be effective upon its passage and approval.

Remarks.....  
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I hereby certify that I have read the answers to the foregoing questions and that same are true to the best of my knowledge and belief.

Harry Mack  
Nate Mack  
Murray Wollman

Permittee.

by Murray Wollman

Subscribed and sworn to before me this 27th day of Feb., 1945

M. M. Sweeney  
Notary Public in and for the County of Clark, State of Nevada

(SEAL)

My commission expires Dec. 19, 1946 M. M. Sweeney  
Notary Public

THIS SPACE TO BE USED FOR FUTURE INFORMATION CONCERNING FLOW AND OTHER DATA

## INSTRUCTIONS TO PERMITTEES

Pursuant to Statutes 1939, chapter 178 of an Act relating to the conservation and control of underground water, any person desiring to appropriate water from a proven artesian water basin in Nevada must first make application and receive a permit from the State Engineer to appropriate the water.

The procedure in making application to the State Engineer for permission to appropriate water and the subsequent steps leading up to the granting of a permit or the denial of said application is set forth in section 59 to 65, inclusive, of the Water Law of Nevada, as amended.

Following the granting of a permit to appropriate water in a proven artesian basin and within thirty days following the completion of the well, whether a flowing or nonflowing well, the permittee is required by law to submit to the State Engineer the answers to the questions set forth in this form and same must be verified under oath.

The cross-sectional diagram in the second column is for the convenience of the permittee or his agent in showing in a diagrammatical way the diameter and depth of the drilled well, size of casing and manner in which it is placed in said well. Each space in a horizontal direction on the diagram represents one inch and each space in a vertical direction represents ten feet. For example, a twelve-inch diameter well three hundred feet deep would be indicated on the diagram by inking in the vertical lines six spaces each side of the center line for a distance of thirty spaces in a vertical direction.

Most of the information required in this form is obtained by the well driller who drills the well, and said driller should be given a copy of this form and requested to place the required data thereon.

## NEVADA UNDERGROUND WATER LAW

(Approved March 25, 1939)

*An Act to provide for the conservation and distribution of underground waters, providing for the designation of artesian well basins and defining such wells and providing the method of appropriating the waters thereof; defining the powers and duties of the state engineer in the administration hereof; providing for the casing and capping of artesian wells and for the prevention of waste of water therefrom; prescribing penalties for the violation of the provisions of this act, and repealing certain acts and parts of acts in conflict herewith.*

SECTION 1. All underground waters within the boundaries of the state belong to the public, and subject to all existing rights to the use thereof, are subject to appropriation for beneficial use only under the laws of the state relating to the appropriation and use of water and not otherwise, therefore it is the intention of the legislature, by this act, to prevent the waste of underground waters and pollution and contamination thereof and provide for the administration of the provisions hereof by the state engineer, who is hereby empowered to make such rules and regulations within the terms of this act as may be necessary for the proper execution of the provisions of this act.

SEC. 2. The word "person" as used herein shall be interpreted to mean any firm, partnership, association, company, or corporation, municipal corporation, power district, political subdivision of this or any state or government agency. The word "aquifer" as used herein means a geological formation or structure that transmits water. The words "artesian well" as used herein mean a well tapping an aquifer underlying an impervious material in which the static water level in said well stands above where it is first encountered in said aquifer. The word "waste" as used herein is defined as causing, suffering or permitting any artesian water to reach any previous stratum above the confining strata before coming to the surface of the ground, or suffering or permitting any artesian well to discharge water unnecessarily upon the surface of the ground so that the waters thereof are lost for beneficial use or in any canal or ditch conveying water from a well where the loss of water in transit is more than 20% of the amount of water discharged from said well, or in any event where over 20% of the water discharging from a well is lost from beneficial use.

SEC. 3. This act shall not apply to the developing and use of underground water for domestic purposes where the draught does not exceed two gallons per minute and where the water developed is not from an artesian well.

SEC. 4. Upon receipt by the state engineer of a petition requesting him to administer the provisions of this act, signed by not less than ten percent of the owners of wells, in any particular basin, having a legal right to appropriate underground water therefrom, as evidenced by the records in the state engineer's office, he shall designate such area by basin, or by sub-basin, or by townships, and proceed with the administration of this act on all wells that were drilled subsequent to March 22, 1913, save and excepting those wells coming under the provisions of section 2 of this act. On wells drilled prior to March 22, 1913, no supervision over the distribution of waters therefrom as against rights acquired subsequent to March 22, 1913, can be maintained by the state engineer until the existing rights thereof are determined by a court decree in appropriate adjudication proceedings, save and except where water therefrom is being flagrantly wasted.

SEC. 5. Upon the initiation of the administration of this act in any particular artesian basin, and where the investigations of the state engineer have shown the necessity for the supervision over the waters in such basin, and upon recommendation of the state engineer, the county commissioners of the county within which such artesian basin is situated may employ, with the consent and approval of the state engineer, an artesian well supervisor and whatever other assistants deemed necessary, who shall execute the duties as provided in this act under the direction of the state engineer. The salary of such artesian well supervisor and his assistants shall be fixed by the board of county commissioners, who shall levy a special tax upon all taxable property situated within the confines of the area designated by the state engineer to come under the provisions of this act; provided, however, that at no time shall such tax levy produce a revenue in any one year of more than two thousand dollars (\$2,000). It shall be the duty of the proper officers of the county to levy and collect such special tax as other special taxes are levied and collected, and such tax shall be a lien upon the said property. The tax herein provided for, when collected, shall be deposited with the state treasurer of Nevada in a fund in the state treasury which shall be designated as the.....basin.....county artesian well fund. All claims against said fund in the state treasury shall be certified by the state engineer and approved by the state board of examiners; the state controller is authorized to draw his warrant therefor against such artesian well fund and the state treasurer shall pay the same.

SEC. 6. Every person desiring to sink or bore a well in any proven artesian basin, or any basin or sub-basin in the state designated by the state engineer, shall first make application to the state engineer in accordance with the provisions of the general water law of this state for a permit to appropriate such water before performing any work in connection with the boring or sinking of said well. In other basins or sub-basins which have not been designated by the state engineer as aforesaid where the water sought to be appropriated is underground water existing in unconfined aquifers and not being under any hydrostatic (artesian) pressure, no application or permit to appropriate such water is necessary until after the well is sunk or bored and water developed. Before any legal diversion of water can be made from said well the appropriator must make application to the state engineer in accordance with the provisions of the general water law of this state for a permit to appropriate such water.

SEC. 7. During the sinking or boring of a well in any proven artesian basin the permittee shall cause to be placed in such well proper and sufficient casing, approved by the state engineer, so arranged as to prevent the caving in of such well and to prevent the escape of water therefrom through any intervening sand or gravel stratum, and must be of sufficient length to reach the deepest aquifer encountered during the sinking or boring of said well. The number, size, type, and distribution of perforations is optional with the permittee, excepting that no perforations must be made in a pipe tapping confined (artesian) water above the confining impervious materials. The permittee shall provide the necessary valves, plugs or other appliances to prevent or control the flow of water from such well and prevent the loss of underground water above or below the ground surface. Said permittee shall cause to be kept a log of the depth, thickness and character of the different strata penetrated, together with the data pertaining to the work, when begun, when finished, the length, size and weight of casing, and how placed, size of drilled hole, where sealed and the type of seal, the name of the well driller and the type of machine used, the number of cubic feet per second or gallons per minute of flow from such well when finished and the pressure in pounds per square inch if same be a flowing well, and if nonflowing, the static water level. If the well is tested by pumping immediately following the completion thereof, the report must include the drawdown in respect to the amount of water pumped and such other information required by the state engineer, all of which shall be verified under oath on forms prescribed by the state engineer, and must be furnished to the state engineer within thirty days following the completion of said well; such record and data shall be filed in and become a permanent record in the state engineer's office.

SEC. 8. No person controlling an artesian well shall suffer the waters therefrom to flow to waste, unless, and as far as reasonably necessary in the judgment of the state engineer, to prevent the obstruction thereof, or to flow or be taken therefrom any water except for beneficial purposes. The owner of any artesian well from which water is being unnecessarily wasted shall be deemed guilty of a misdemeanor, and, if upon fifteen days written notice by registered mail, return receipt requested, the owner fails to abate or refuses to abate such waste, the state engineer or his assistants or authorized agents, may, without further notice, take such steps as may be necessary to abate such waste, such as fitting the well with the proper valves or other necessary devices to the end that such waste is prevented. The cost thereof, including labor and material, shall be a lien on the land on which said well is located and also any other land owned by him to which the water from said well is appurtenant; provided, that the state engineer, his assistants or authorized agents, as the case may be, shall file an itemized and sworn statement, setting forth the date when such work was done and the nature of the labor so performed, with the county recorder of the county wherein said well is situated, within thirty days from the time of completion of such work, and when so filed it shall constitute a valid lien against the interest of such owner or owners in default, and which said lien may be enforced in the same manner as provided by law for the enforcement of mechanics' liens. The county recorder shall make no charge for filing the claim of lien, and no costs shall be taxed against the state engineer, his assistants or authorized agents, in any suit or proceeding on account of such lien.

SEC. 9. A legal right to appropriate underground water for beneficial use by means of a well, tunnel or otherwise that was drilled, bored or otherwise constructed subsequent to March 22, 1913, can only be acquired by complying with the provisions of the general water law of this state pertaining to the appropriation of water. In an area within which the state engineer is supervising distribution of waters from an underground source as in this act provided, the state engineer may, upon written notice sent by registered mail, return receipt requested, advise the owner of a well who is using water therefrom without a lawful permit to cease using such water until he has complied with the laws pertaining to the appropriation of water. If said owner fails to initiate proceedings to secure such permit within thirty days from the date of such notice he shall be deemed guilty of a misdemeanor. The date of priority of all appropriations of water from an underground source, mentioned in this section, is the date when application is made in proper form and filed in the office of the state engineer pursuant to the general water laws of this state.

SEC. 10. The state engineer shall administer this act and shall prescribe all necessary rules and regulations within the terms of this act for such administration. The state engineer may require periodical statements of water elevations, water used and acreage on which water was used from all holders of permits and claimants of vested rights; may upon his own initiation conduct pumping tests to determine if over-pumping is indicated, to determine the specific capacity of the aquifers and to determine permeability characteristics; he shall determine if there is appropriated water in the area affected and shall issue permits only if such determination

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WELL LOG AND REPORT  
TO STATE ENGINEER  
OF NEVADA

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Under  
Permit to Appropriate Water

Serial No. 11227

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STATE OF NEVADA  
ENGINEER'S OFFICE

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Filed.....

Permittee Harry & Nate Mack,  
& Murray Wollman

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Las Vegas, Nevada.

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