STATE OF OREGON

DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

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Bulletin No. 41

GROUND-WATER STUDIES in UMATILLA AND MORROW COUNTIES

by Norman'S. Wagner Field Geologist

1949



STATE GOVERNING BOARD

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The Department undertook this investigation requested by the Umatilla County Court after determining that the agencies officially concerned with ground-water supplies in the State - the Ground-Water Division of the U.S. Geological Survey and the State Engineer - could not take on a project of this kind in the near future.

The study as set forth in the text is only a beginning of the work that should be done in a survey of ground-water resources of the two counties, and it is a truism to state that ground-water surveys are greatly needed in this and many other places in the State particularly in eastern Oregon.

The importance of water to our civilization may not be overstressed. It is well known that many things at one time considered luxuries, by increasing use and expanding application, become necessities. Water is an outstanding example, especially in the per capita amount now consumed in cities, in industries, and on farms. Consumption of water is a measure of our so-called progress; abundance of water supplies may be used as a measure of potential growth in all human activities.

In the United States we have been prodigal with our natural resources and some of them are only ghosts of their original abundance. In some arid sections of the country, ground water has been exploited with little or no regard for the principles governing supply. An example that has assumed serious proportions is set forth in a paper titled <u>Water as an Industrial Mineral</u>, by Julian Hinds, General Manager and Chief Engineer, Metropolitan Water District, Los Angeles.* The story of the early depletion of ground-water supplies is related by Mr. Hinds as follows:

* * * * * *

"Many water supply systems have grown more or less piecemeal, starting with a few families and expanding by various expedients with the growing population. In fact, most systems started that way, systematic planning being introduced at some later date to avoid an impending disaster. In this way the great modern water developments of the world have grown.

"A most interesting example is found in the development of water in Southern California. The white man found this an arid region, an excellent place for a few people to live, but subject to severe and prolonged droughts. During wet periods there were lush pastures, springs, and flowing streams, encouraging increased development, expansion of herds, and the introduction of irrigation. Then came the drought. Irrigation ditches ran dry, cattle died, and people moved away. But in spite of these periods of discouragement, there was some permanent development. The climate was good, soil fertile, and all kinds of fruits and crops flourished wherever and whenever there was water.

^{*}Presented at a meeting of the Industrial Minerals Division of the American Institute of Mining and Metallurgical Engineers at Los Angeles in 1947.

"Ground water as a source of irrigation supply was not at first taken seriously, but wells were of course resorted to for domestic supplies, and at times of drought for watering livestock and perhaps for home gardens. The early dug wells merely tapped shallow surface sources, but finally, with the introduction of the drilled well, someone pierced the clay cap and struck a gusher - a bountiful artesian flow. The boom was on! Here were vast expanses of wonderfully fertile lands, with a bountiful water supply just a few hundred dollars beneath the surface. Development went forward at a stupendous rate. Nobody asked where the water came from, how much there was, or how long it would last. There was no organization to ask such questions and the individual farmer was too busy to ask anything. The supply was looked upon as inexhaustible, and wells multiplied.

"Soon outflow began to exceed replenishment. Pressures dropped and wells ceased to flow. But the farmers, now grown wealthy, were loath to walk off and leave their homesteads. Furthermore, they could now afford to pay for water - they could afford to pump it. And so pumps went down as fast as artesian flows stopped. And more pumping wells were drilled, still with the feeling that there were great underground oceans of fresh water, to all intents and purposes inexhaustible. And thus began one of the most stupendous mining operations of all time.

"As geologists later explained, there actually was a vast though not inexhaustible - underground storehouse of water. Practically the entire coastal basin is deeply underlain with porous detrital fills, covered with a blanket of top soil and clay of varying thickness. Each year a small portion of the sparse rainfall and meager mountain runoff around the upper perimeter of the basin sinks into the ground. During prehistoric ages these small percolations completely filled the underlying strata and welled up against the clay cap covering the lower portions, creating an artesian pressure. It was thus revealed that the early settler's herds had died of thirst on the roof of an enormous lake of good water.

"But it was only a lake and not an inexhaustible sea of fresh water, as many wishfully believed. With increased pumping, water levels sank and many wells went dry or lowered levels permitted sea water to flow landward, contaminating the source of supply. Ultimate exhaustion became obvious, but abandonment was by now out of the question. Experts were employed and the problem was studied from all its angles. Steps were taken looking toward complete conservation of all flood waters formerly wasting into the ocean. Spreading works were constructed to encourage percolation into the underground basin, and surface storage was created where possible.

"But these measures were inadequate. An annual rainfall of 15 inches cannot support a semitropical civilization, no matter how thoroughly it is conserved. Importation of water was obviously essential. There is no long river bringing water in naturally from distant sources, and nearby surrounding territory is true desort, producing no worth-while runoff.

"Early in the present century it became evident that an artificial waterway to some distant point must be constructed."

* * * * * * *

The paper goes on to describe the steps taken by the authorities to bring in outside water, but the quotation serves to illustrate what will happen to vital ground-water supplies if they are used in ignorance of the essential facts relating to source, possible extent, and economical production rate. Geological and engineering surveys are essential if knowledge is to be gained of how ground-water supplies may be used beneficially and not "mined." Mr. Hinds goes on to state:

* * * * * *

"The production of water by mining operations is of course not limited to Southern California. Well waters are used throughout the world for individual supplies, municipal supplies, and irrigation. In many cases production is deliberately undertaken on a pure mining basis - with no hope or expectation of replenishment. Many examples of this have occurred during the past few years. Desert lands underlain by nonreplenishing water bodies have been hurriedly put into cotton or other temporarily high-priced crops, with the hope of a quick return, and with the expectations of abandonment after a few years. Such operations are likely to be detrimental to adjacent lands depending on a perennial underground water crop."

* * * * * *

Most people are conservation minded and will practice conservation if they realize the need and have the "know how." Conservation of ground-water resources can be practiced intelligently only after information is gained from geological and engineering surveys.

F. W. Libbey Director

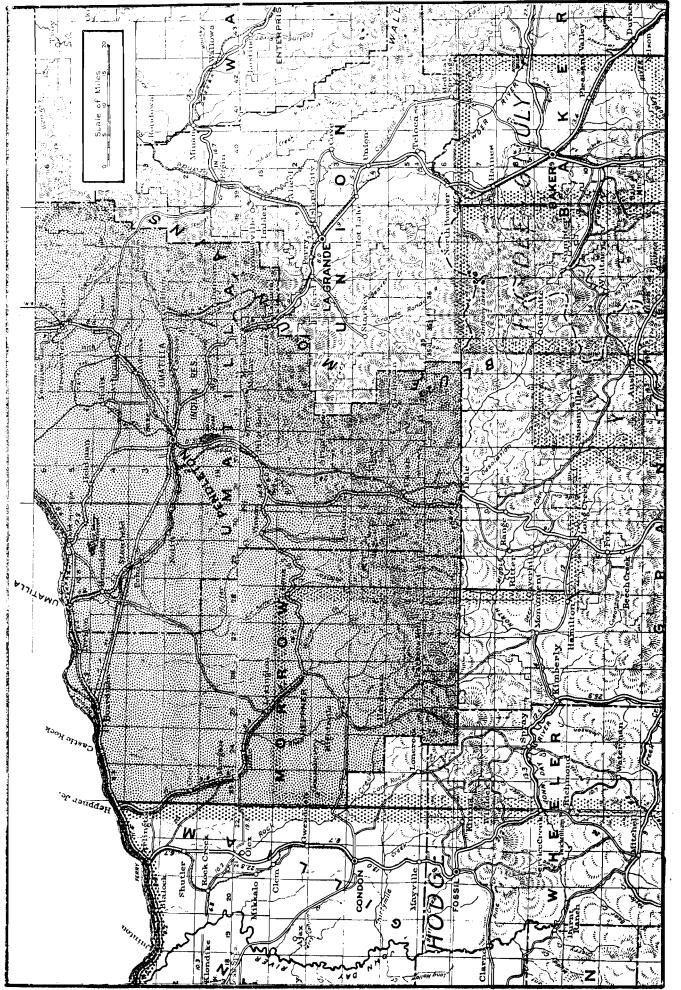
December 15, 1948

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Introduction

This report is the result of a request by the Umatilla County Court that the Department make a preliminary geologic survey in Umatilla County to determine the possibilities of developing ground water in areas of marginal but potentially valuable, agricultural land. The first studies showed a lack of available technologic data in the areas in question, thus necessitating examination of adjacent areas. The field work at the outset included both making geological observations and collecting log and yield records of water wells. The last phase of the work required conferences with many people including drillers, public officials, and scores of land owners. A widespread and active interest in the subject of ground-water development was found to exist. Reports of occurrences of wells, requests for information, and suggestions in connection with individual water problems obtained from these contacts led to an expansion of the field work. There was a great diversity of information thus obtained. On the one hand the increased importance of ground-water resources and ground-water development to the area was indicated; on the other hand, a lack of understanding of the prevailing conditions from a geological standpoint and a lack of orderly practice of groundwater development were indicated. As the picture took shape, it became clear that the original plan was of far greater scope than could be satisfactorily handled with the time and personnel available. In the absence of geologic mapping, only generalized conclusions could be drawn, usually by way of reports of examination of isolated local areas. Accordingly, all idea of first-hand geologic mapping was given up. Instead, efforts were concentrated solely on what appeared to be the greater problem; that is, the assembling of data from which an overall appraisal could be drawn of ground-water resources and problems in the subject counties. This report presents the assembled data together with such comments and interpretations as seem pertinent. The area covered was expanded to include Morrow County because both Morrow and Umatilla counties lie within the bounds of the same geologic province. In its final form, therefore, this report is offered not as a presentation of geological conclusions, but rather, as an appraisal of the ground-water problems encountered.



Index map showing published geologic maps of the Morrow-Umatilla county area of north central Oregon. (See bibliography at end of bulletin.) -1 Fig.

Geology of the Area

Introduction

A sequence of volcanic lava flows with sedimentary interbeds covers most of Umatilla and Morrow counties. Although the older sedimentary and intrusive formations which are found in the Blue Mountains occur along the southern boundary of Morrow County and the southern and eastern boundaries of Umatilla County, it is the lava platau that characterizes the area generally.

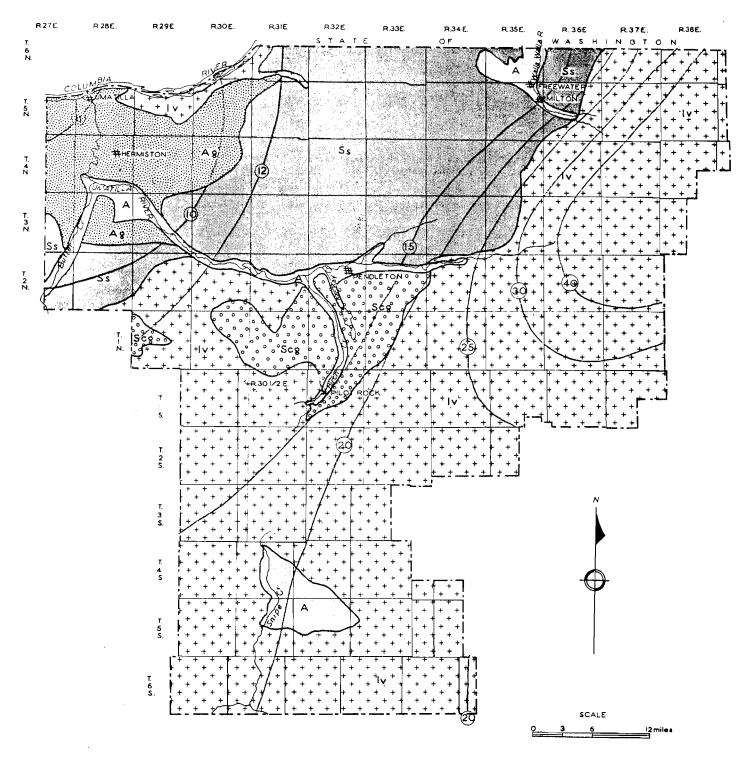
Available reports and maps

Of significance in terms of ground-water geology, bearing on prediction and orderly development, are such details as knowledge of identity and underground extent of porous interbeds; the ability to recognize individual beds, whether aquifers or solid lava flows, for correlation purposes in geologic mapping; and an understanding of the attitude of these beds from the standpoint of geologic structure. Only incomplete knowledge of these factors is at present available.

No single, comprehensive geological report has ever been published covering the whole of the area under discussion here. The geological reports that have been published for this part of north central Oregon are shown on figure 1 on the opposite page. References to these publications may be found in the bibliography. As may be seen from figure 1, mapping done by Collier (1914) includes a portion of Morrow County. Unfortunately, this report has but little direct bearing on the problem at hand in that it is of reconnaissance nature and deals primarily with some of the mineral resources of the Blue Mountains.

Allen (1948), Gilluly (1937), Pardee (1914, 1941), and Thayer (1940) deal with geologic problems entirely foreign to those prevailing in the lava plateau area of Umatilla and Morrow counties. Hodge (1942) describes an area which borders Morrow County on the west and deals with the geology of the lava series as it occurs in that area.

The U.S. Geological Survey Water-Supply Paper series entitled "Water Levels and Artesian Pressure in Observation Wells in the United States" record periodic measurements of water levels, artesian pressure, and other statistical data. Such records are of the utmost importance in the final interpretation of ground-water geology problems, and are fundamental to a sound water-development program from an engineering standpoint. The value of this type of data, however, is usually limited in range, by geologic factors, to a small area surrounding the region in which the observation wells are located. The observation wells referred to in the above papers pertinent to this report are all situated within a small area around Milton-Freewater, which is geologically part of the Walla Walla Basin. Thus, while the data obtained from these wells are of importance to that special area, they are of little importance in terms of the ground-water problems to be faced elsewhere in the wide expanses of Umatilla and Morrow counties.



LEGEND

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UNDIFFERENTIATED COLUMBIA RIVER LAVAS AND CONSOLIDATED TUFFS. INCLUDES SMALL EXPOSURES OF GRANITIC AND SEDIMENTARY ROCKS.



AVERAGE ANNUAL PRECIPITATION IN INCHES.

GEOLOGIC MAP and PRECIPITATION BELTS

UMATILLA COUNTY, OREGON

INFORMATION SECURED FROM LAND-WATER INVENTORY OF UMATILLA COUNTY BY THE U.S. SOIL CONSERVATION SERVICE. Unpublished reports are known to exist. Some of these have to do with specific problems of a very localized nature such as the geologic factors bearing on dam sites investigated by the U.S. Bureau of Reclamation. Other reports of a more generalized nature have been made by the U.S. Corps of Engineers in connection with studies of the McNary dam site. However, these reports are not available for general distribution.

Figure 2, on the opposite page, is a hitherto unpublished geologic map of Umatilla County prepared by geologists of the U.S. Soil Conservation Service. As this map was made primarily for the use of that bureau's staff in studies of their own special problems, it features only geologic data bearing directly on those problems. In other words, in so far as a relation exists between soils which are in place and the underlying rock formation from which they have been derived, this map portrays the surface distribution of distinctive bedrock formations.

A report containing information on water resources, both surface and subsurface, was prepared by A. M. Piper of the U.S. Geological Survey in connection with a suit on water rights between the states of Washington and Oregon. This report was published only in the form of a court record. It is entitled: Transcript of Record, Supreme Court of the United States, October Term, 1935; The State of Washington, Complainant, vs The State of Oregon; Stipulations and Exhibits; Filed October 14, 1935. The bulk of the area covered by this report is situated in the State of Washington. The part of Oregon to which attention is given consists of a narrow strip paralleling the state line in the vicinity of Milton-Freewater, Milton being the southernmost point.

Allen (1939, unpublished report) describes the geology and ground-water conditions of the Pendleton area, and is referred to later in this paper.

Currently in preparation by the U.S. Geological Survey, Ground-Water Division, is a ground-water survey of the Walla Walla Basin. Although most of the area being mapped lies in the State of Washington, the natural bounds of the Walla Walla Basin extend into Oregon. As in the case of the Piper report, the area covered in Oregon parallels the state line in the vicinity of Milton. This project has been in progress several years. It represents the type of investigation needed in the area under discussion in order to appraise properly the prevailing ground-water resources.

From the foregoing, it is apparent that a major project of field investigation will be necessary before any comprehensive geologic description can be made. It is thought, however, that the following is warranted from the information that is available.

Geological formations

The lava flows in the two counties are but a small part of the lava area in Washington, Oregon, and Idaho. The flows began to pour out in early to middle Tertiary time and continued throughout the later Tertiary.

Columbia River lava was the name given to these flows by the earlier geologists. Some workers since have used this term loosely, applying the name to any and all lava flows of the region; consequently, a certain amount of confusion has arisen from this designation. Increased knowledge of the regional geology has shown that there are individual flows or assemblages of flows that are distinct; this is especially true of lavas of the late Tertiary (Plicene time).

Hodge (1942), in reporting his investigation of the area of north central Oregon bordering on Morrow County to the west, employed the name "Coriba" (derived from the words Columbia River basalt) for the principle basalt group there. The name as so employed refers to the extensive and massive portion of the basalt flood which poured out in Miccene time. Coriba constitutes the largest single formation shown in the entire area mapped by Hodge; it is widespread in the northern half of his area, and this portion of his map lies west of Morrow County as shown on fig. 1 opposite p. 3.

Coriba is known to extend eastward into Morrow and Umatilla counties. It outcrops over large areas and is believed to form the bedrock underlying the whole of the northern portions of these counties. It is not a single lava flow but is a succession of several individual flows of generally dense basalt. Sedimentary interbeds are few and are believed to be of restricted lenticular extent. The sedimentary interbeds, together with porcus or fractured horizons in the lavas, are the principal potential aquifers in the formation.

Concurrent with the decrease in magnitude of the basalt outpourings during later Tertiary time there was an increase of sedimentary deposits. Sands, gravels, and clays, together with volcanic ash and other clastic volcanic material, and occasional diatomic and lignitic beds combine to make up these formations. As with the lavas, an overall similarity exists between these sedimentary assemblages. Characteristic and distinctive differences, however, do exist between the sediments accumulated at different places. Thus such names as Shutler, The Dalles, Ellensburg, Payette, Mascall, and Rattlesnake have been given to individual beds or to assemblages of beds. Some of these formations are undoubtedly equivalent in geologic age but geologically distinctive because of the limit and locale of the geologic mapping, distribution, or because of their lithologic make-up.

Hodge (1942) maps the formations overlying the Coriba in the following chronological order: the Mascall, Rattlesnake, Shutler, Ochoco, Cascan, and the Intracanyon lavas. Noted also with the Pleistocene to Recent alluvial material are areas of ice-rafted debris. Of hese formations, what Hodge maps as the Shutler is the most widespread of the overlying

formations in that portion of the area bordering on Morrow County. As this formation is known to extend eastward into Morrow and Umatilla counties, Hodge's description of the formation is summarized here. It is characterized by a basal conglomerate consisting of lime caliche-coated water-rounded pebbles. Overlying this basal conglomerate are bedded sands, silts, and diatomaceous-ash members. The conglomerate is of variable thickness, increasing from essentially nothing on the west side of the area to thicknesses of between 10 and 50 feet in the vicinity of Willow Creek. The overlying series of sands and silts show a maximum thickness of 100 feet.

Beyond the fact that the Shutler formation extends eastward into Morrow and Umatilla counties, little else is known about it. The map of Umatilla County by the U.S. Soil Conservation Service represents the first known attempt to indicate the identity and distribution of this or of any other formations in the area. No such map is known to have been made for Morrow County. That the Shutler occupies large areas in Morrow County is certain, but to obtain information on the nature of the Shutler section would require detailed study. The description by Hodge (1942) shows that the basal conglomerate increases in thickness as the formation progresses to the eastward. Some well logs (the Ordnance Housing Depot well, index and map no. 90-U, for an example) show a surprising thickness of clays and gravels. This indicates either that the entire formation undergoes substantial changes in thickness, or that other similar sedimentary formations may be present.

The ice-rafted debris described by Hodge (1942) was noted by the writer at several places in Morrow County. The characteristic granite boulders are especially conspicuous at several places in the irrigation district southwest of Boardman. Of interest in this connection is the log of the Wilkinson well, index and map no. 158-M. The driller reported encountering a $6\frac{1}{2}$ -foot "granite" boulder underlying weathered basalt at a depth of $37\frac{1}{2}$ feet, and another 5-foot "granite" boulder at a depth of 68 feet. He described the cuttings from these boulders as white. He further reports that the boulders were exceptionally hard and that it was necessary to re-sharpen the bit after every 6 inches of drilling. It is to be regretted that cuttings of these boulders were not available for laboratory examination, for if these boulders are granite, comparable to the erratics typical of the ice-rafted debris, the fact would be of great interest.

Geological structures

On the subject of geologic structure it is again necessary to draw from knowledge of regional scope. From the mapping done of Tertiary to Recent formations in Oregon and elsewhere in the Northwest, it is known that faulting is common and is often expressed as regional or block tilting. Folding is perhaps less conspicuously developed, but is none-theless important. The general pattern of these structural features, found elsewhere in the region, prevails also in Morrow and Umatilla counties.

The information now available allows the following comments on structural conditions prevailing in the lava-field portions of Morrow and Umatilla counties. There is a regional dip to the north and away from the Blue Mountains. Locally, this dip varies in both direction and magnitude. The formations are cut by a series of faults, some of which parallel the trend of the Blue Mountain foothills. Folding is present. From their work in the vicinity of the McNary dam site, geologists of the Corps of Engineers* have recognized a broad northeast-southwest-trending trough as the major feature relating to artesian water found in the area. The center of this basin cuts diagonally across the Columbia River in the vicinity of Irrigon. A narrow, shallow, secondary downwarping occurs near the eastern margin of the major basin. Allen (1939) maps another downwarp or syncline between Pendleton and the Blue Mountains to the east. He named this the Agency syncline as the Umatilla Indian Agency is located approximately on the axis. This fold trends north-northeast from a point about midway between Pilot Rock and the McKay reservoir, through the Indian Agency, and across the Umatilla River nearly to Wildhorse Creek.

Ground-water geology

It is apparent from well-production records (see well logs) that some apparently large, strong aquifers (ground-water horizons) exist in the area under discussion. Also, it is apparent that many seemingly less-important aquifers occur, as would be expected when aquifer existence is dependent upon sedimentary interbeds of restricted extent and upon fractured and permeable horizons in otherwise massive lavas. However, what may seem to be a large-capacity aquifer at first, because a high permeability allows delivery of a large yield, may in reality be of small capacity or may possess a low replenishment rate, so that it can not support additional large-capacity wells. Conversely, what may seem now to be a less important aquifer, due to a relatively low rate of yield, may have sufficient capacity and replenishment to support many moderate-yield wells for years. Until production records can be correlated with such other data as aquifer capacity and permeability, water replenishment and loss (both natural and artificial), water-table and artesian static water levels, chemical analyses and temperatures, etc., no definite appraisal of the aquifers can be made in the absence of both detailed geologic mapping and comprehensive, systematically taken hydrologic information.

The effect on groundwater of the earthquake of July 15, 1936, is of general interest. Damage was most serious around Freewater and Umapine. Springs and deep wells were affected. One deep well which had quit flowing several years before the earthquake was reported by Brown (1937) to have regained a strong flow. The Pendleton airport well (index no. 58-U) quit flowing after the earthquake although previously it had been a small, but consistent producer. This well was originally in excess of 700 feet deep and it was necessary to deepen *Unpublished report, Corps of Engineers, Portland District, Department of the Army, 1948.

it by 250 feet before water was again obtained. However, the water then obtained was reportedly contaminated and the well was abandoned. Reports of springs drying up or being rejuvenated are common in the vicinity of Milton-Freewater and east of Athena. The flow of one spring was reported* as affected at Ukiah in sec. 14, T. 5 S., R. 31 E., a distance of 45 miles from the place of greatest intensity. Here a terrace containing many seepages, some of which had flowed consistently for many years, experienced the usual pattern of change, that is, the flow of some seepages decreased while that of others increased.

Discussion of Well Records

The study of 209 wells forms the basis of this report. A summarized statement of the information obtained for each of these wells is included in the appendix. These well summaries are segregated into groups by county with an individual index number by the well name for each county. Preceding the county groups there is a master index in which all wells are listed by well name regardless of county, and also by the index numbers employed to designate the wells on the map. Following the county groups of well summaries, there are various statistical tabulations.

The information comprising these well summaries was secured from many sources. Oftentimes the data for one well came from three or four different informants - present owners, former owners, drillers, State and Federal agencies, with perhaps the formation log being derived from one, recent production records from another, original test data from another. Principal informants are named on the summary sheets.

Included in this well coverage is the bulk of the municipal and industrial wells in the area. The total for these classes is 58 including 8 wells in Union County. Of these 58 listings 28 are municipal and 30 are industrial wells. Lists of these are included in the appendix. Except for a few wells, whose status is not designated, the remaining wells are domestic or irrigation wells. Domestic wells as classified here are for the most part wells serving ranch dwellings; included also in this category are wells drilled primarily for stock-watering purposes. Fourteen are classed as irrigation wells. It is possible that a few irrigation wells are included in the group classified as domestic.

Evaluation of the well summaries may best be made by first setting forth some statistics. A formation log or production statement was obtained for 174 of the 209 wells. Drillers' logs, or statements pertaining to the formations encountered, were secured for only 128 of the 209. Production records, including in some instances comprehensive test data, were secured for 46 wells for which no formation logs could be obtained. Several important, recently drilled wells are in the group for which the formation logs are lacking. For 35 wells no pertinent information may be offered other than their location and semetimes their depth.

*Personal communication, R. A. Fletcher.

Although additional data are known to exist for some of the wells listed here and for many not listed, the present assemblage probably represents the bulk of the information available for wells in the area.

A large number of existing domestic wells is not included in this coverage because logs or production records could not be obtained. Many of the domestic wells are quite old and in some instances ownership has changed several times since the well was drilled. Almost never does the present owner have a copy of a driller's log. Occasionally present owners do not even know with certainty the depth of the well or identity of the driller. Some of the earlier drillers are deceased, and but few of them ever made or kept logs on the wells they drilled - a practice regrettably followed by some drillers even today. Some drillers maintain a file of their drilling records, but for reasons of their own, refrain from giving the logs to the well owners, and likewise refused to make them available for this investigation. The fact that logs were secured for as many wells as there were is to be credited to the cooperation of other drillers who keep systematic progress records for the wells they drill.

Drillers and geologists each value well logs for different reasons. To the driller (and also the well owner) a well log is primarily of value in connection with casing and pump installation, and future cleaning, reaming, and servicing problems. For these problems, knowledge concerning the number and location of hole reductions, of water horizons, of zones of loosely indurated formation or blocky fractured rock, is important. Furthermore, knowledge of the drilling properties of formations penetrated in a given vicinity may assist a driller in estimating his costs for drilling a new well. A detailed geological classification of the formations penetrated has, generally speaking, little of immediate practical value to him. To the geologist, however, recognition of the formations penetrated by a well is of prime importance in the working out of ground-water problems of regional scope. The formation logs assembled here all rate as drillers' logs. That is, they were made by the driller with the formation classifications based on the driller's experience and judgment. Many of the logs are quite descriptive and comprehensive. Some are vague and generalized. The former record invaluable material of a sort especially helpful to the driller. From a geological standpoint however, these logs have little significance.

Accurate logging of a well is never a simple matter if it is to be of value for subsurface geological correlation. A reasonably good and reliable log featuring formation classification can be made without laboratory study only when the formations are truly distinctive and a substantial backlog of control data from previous studies exists. Even if the geology of the area under discussion has been studied intensively in the past and the results of the investigations are available, the lack of distinctiveness between

individual flows of the Coriba, for example, and between the less abundant interbeds, sometimes renders logs made without laboratory study of the cuttings of little value for geological correlation.

The production data phase of the well summary records includes the results of a few first-class engineering tests such as were made for some of the more important municipal and industrial wells. Otherwise the records usually reflect bail tests or incomplete pump tests. This is understandable when it is considered that many owners, especially those who have wells drilled for domestic or stock-watering use, demand but a small yield. As long as the well produces sufficiently to meet this demand, they are satisfied. The driller has only to demonstrate to the owner's satisfaction that the well delivers the desired production. Thus it is that many wells have never been tested to ascertain their potential yield. It is regrettable that incomplete and slipshod tests are sometimes given to expensive and important municipal and industrial wells, and that filing systems of well records are often maintained with carelessness and indifference. Sometimes no attempt is made to follow a well's progress by maintaining a file of daily operational statistics. For ranch wells this is not surprising or necessarily of great importance, but in the case of municipal and industrial wells where a steady large-volume output is critical, such records are important to future production.

The six dry and six abandoned wells listed here probably represent a disproportionately low percentage of such wells. Owners, when questioned about their wells, naturally think primarily in terms of active producers, and drillers are sometimes reticent about discussing dry holes they may have drilled. The six wells listed as dry holes were definitely dry. Some of those listed as abandoned may have been abandoned because they were dry or because an insufficient amount of water was developed for the owner's requirements. Actually several of them were known producers. At one a pump was lost in the hole under conditions which did not warrant attempting to retrieve it. Reportedly, the Union Pacific Munley no. 1 well was abandoned after years of service because the company's Munley no. 2 well yielded a sufficient amount of water for all the company's requirements. The Elgin City no. I well might be properly classed as abandoned. It was a substantial producer in its day, but it is now capped because it is drained to the point of drying by the normal pumping operations of the nearby no. 2 well. When no. 2 well is not pumped, both reportedly recover and the no. 1 well when not capped will resume flowing as usual. A crooked or otherwise unsatisfactory hole, and not the lack of water, is reported as the direct cause of abandenment of another well.

The subject of dry holes is further complicated by the fact that some of the technically satisfactory, producing wells might, for all practical purposes, be rated as dry holes. Reference has already been made to the fact that some potentially large producers may exist in the ranks of the untested domestic wells. The reverse is also true. It is known that some of the "satisfactory" producers are incapable of yielding more than the necessary gallon or two a minute needed to rate them as satisfactory producers for stock-watering purposes. Had such wells been drilled for municipal, industrial, or irrigation purposes they would rate as "dry holes" in the eyes of the owners and drillers. It is worthy of note that many wells drilled expressly for domestic or stock-watering purposes have been sunk to depths of several hundreds of feet, representing a major drilling operation comparable, except for the smaller diameter of the holes, to those conducted on some of the municipal and industrial wells.

Of the 209 wells covered during this investigation, there are 53 which flow, or which did flow at one time. A list of these wells giving their depths and a brief descriptive statement of their flow characteristics has been prepared and is included in the appendix. Eight of these wells are situated in Union County. They are included in the list for the sake of completeness, but the ensuing comments are based/on the 45 wells which occur in Umatilla and Morrow counties.

The well belonging to the city of Pilot Rock yields the largest natural flow. This well was sunk to the comparatively shallow depth of 309 feet. When completed in February 1946 the flow was measured at 1420 gallons per minute. The next-largest flowing well is the Rugg no. 1 well. This well is only 161 feet deep. Flow is reported at 465 gallons per minute. The remaining wells all yield much smaller flows including several that have a very low gallon-per-minute rate. Some of the wells placed in the latter category are claimed to have had larger flows originally. The Rice well (sec. 29, T. 1 N., R. 26 E.) is reported to have had an initial flow of around 600 gallons per minute before the well was lost in an attempt to ream the hole. Flow of unmeasured but reportedly similar proportions is claimed to have been re-established by a new well drilled 5 feet from the original. The latter well was drilled about 1915 and it is understood that this well still flows but at an estimated rate of 40 gallons per minute. The city of Heppner's no. 1 well for many years had a low static water level and a progressively decreasing yield on pumping so that recently it was necessary to drill a second well. No records of measured flow exists on the no. 1 well, but from pictures taken shortly after the completion of drilling, and from various reports, it is apparent that the original flow of this well would rank it between the Rugg and Pilot Rock wells.

Plate 1 on which well locations are spotted shows that a large number of these flowing wells are concentrated in a small area southwest of Boardman. The area is an irrigation district with a family on practically every 40-acre plot in the central portion of the district. Here there are 23 flowing wells of the 32 that were recorded. This does not

include the Boardman city well which lies just outside of the district. Many of these flowing wells are 20 or more years old. All of these wells produce from shallow holes of around 80 to 95 feet in depth. All give low but reportedly dependable year-round yields sufficient for domestic and stock-watering purposes.

Information that was gathered concerning these wells required many days of intensive work. Many owners could give no more than generalized information on a well's production characteristics such as: the natural flow was ample to service a domestic water system without mechanical assistance, or that assistance was needed. Some owners did not even know the name of the original owner of the tract at the time the well was drilled because some of these tracts have changed hands so many times. The few remaining original settlers in this district often supplied information for their neighbor's well and also the identity of the driller. As the development of these flowing wells was a subject of keen local interest in the pioneer days, many of the early settlers were able to give a substantial amount of information which proved helpful in locating original owners, drillers, and others who knew something about the wells. These older people were also able to provide facts on the flow and depth of neighbors' wells. It is from questioning and cross-questioning these informants and from interviewing or corresponding with some of the drillers that the information for the wells in this district was assembled in its present form.

Some formation logs were obtained direct from the drillers. These can be accepted as reliable. By checking against these drillers' logs it can be seen that the comments on formations encountered in other wells, as supplied by various residents, appear to be reliable within reasonable limits. The over-all yield characteristics obtained from all sources are to be taken as generally reliable if the wells have records of fairly consistent flow.

A casing record has no direct bearing on the interpretation of the geological aspects of a ground-water problem. But casing records are important to both drillers and owners. Some of the otherwise complete logs from which some of the well summaries offered here were taken, contained either no casing statements or incomplete ones. Suggestions as to what should be included in an ideal log will be made later in this report.

Another set of tabulations that was drawn from the well summaries has to do with the range of depths of wells drilled. For the convenience of those who may be interested, a table is included in the appendix listing by depth all wells with depths in excess of 300 feet. The 209 wells fall into depth groups as follows:

The deepest well recorded is the Milton Nursery well which is 2000 feet in depth.

Far too much diversification exists in the nature of the production data gathered to permit the compilation of wells on a production basis. The reader is referred directly to the well summaries for such records. About all that can be said here in describing the production range is that very few wells are pumped in practice at a rate in excess of 1000 gallons per minute, and that the test data assembled indicates that very few wells have capacities of such proportions. Pumping rates for all classes of wells other than domestic appear to range most commonly from about 200 to about 600 gallons per minute.

The subject of well locations merits some comment. Generally, information regarding well location was secured from well owners, usually through personal communication, but sometimes by correspondence. Hany locations were obtained from survey records; others represent merely the owner's guess. In the absence of survey records, locations were often taken from tax receipts, or established by the owner spotting the well on a county map. The locations thus secured are sufficiently accurate for the purpose of plotting well distribution on a base map of small scale such as that which accompanies this report. Otherwise accuracy cannot be guaranteed in any legal sense of the word, particularly for wells in the domestic classification and some municipal wells. The location of most industrial and city wells, however, is based on survey records.

Discussion of Spring Data Obtained

Judging from the dry appearance of much of the country during the summer months, a surprisingly large number of springs is to be found in both Morrow and Umatilla counties. Some of these springs have a large flow, although most have a low yield. While many are dry during the peak of summer, many others are known for their reliable year-round yield. Both thermal and cold water springs occur.

Because so great a need for geologic mapping and basic study of other fundamental phases of ground-water geology was seen to exist during the early stages of this investigation, it was soon apparent that the gathering of information on springs would prove of little immediate significance. This conclusion was strengthened by the fact that at best only hearsay was to be secured on the yield characteristics of the springs visited. All attempts to make first-hand examinations of springs, or to gather data thereon, was abandoned in favor of seeking records of ground-water development.

Spring development for stock-water purposes is sponsored by the U.S. Production and Marketing Administration, and reference is made to figure 4 (opposite p. 19) which shows the location of springs developed under its direction in Umatilla County. Similar data are available for Morrow County in the files of this agency in Heppner, but no map has as yet been prepared. Information is not available concerning the yield characteristics of any of these spr. ags. The Umatilla County map is included for the purpose of recording the

location of the springs developed by the U.S. Production and Marketing Administration and the U.S. Forest Service. As natural springs and artificial ones developed by private individuals are not shown, the map probably covers only a small portion of the springs that exist in the county.

Analysis of Data Gathered

The purpose of this section is to present an analysis of the geological and groundwater information which was gathered in the investigation. Deficiencies will be pointed out, and constructive suggestions will be made. It is hoped that the recommendations made here will form a basis for future ground-water studies of the area.

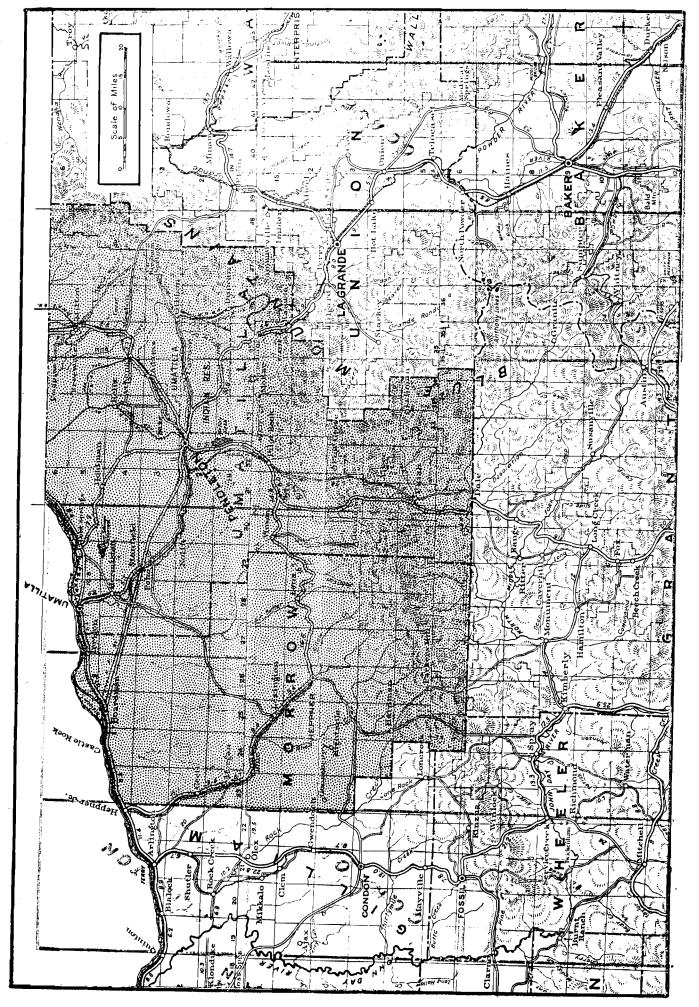
Geologic records

Good base maps are fundamental to geologic mapping, and topographic maps are highly desirable if not essential to the construction of a satisfactory geologic map. Topographic maps greatly reduce the problems and costs of geologic mapping. A topographic base map is required in mapping of structure which calls for a high degree of precision.

Although topographic coverage exists for approximately half of Umatilla County and a somewhat lesser amount of Morrow County (fig. 3, opposite p. 17), it is in the unmapped area that contour coverage would be of the most assistance. This unmapped area includes most of the foothill country where precipitation is the heaviest (fig. 2, opposite p. 5) and where the major zones of intake for confined waters probably occur. While the Coriba is known to dip away (in general northerly) from the Blue Mountains, complex structures, especially faults paralleling the mountains, probably exist in this area. Accurate mapping of such faults may be of critical importance in determining the continuity of such aquifers as occur in the Coriba flows of the northern plateau area.

If any project of geologic mapping should be undertaken for the area where topographic control is lacking, attempts should be made to secure large scale composites of aerial photographs. Even though these photographs lack topographic control, such photographic base maps have distinctive attributes and show topographic details which sometimes render them superior to topographic maps in geologic mapping.

The most important wells in the area produce water originating from aquifers within the Coriba. It is from this source that the development of large-yield producers is to be anticipated in the future. It might be added that most of the large, producing wells situated out of the area also produce from Coriba sources, especially in Washington where many large-yield, irrigation wells have been developed within a few miles of the Oregon boundary. This illustrates the importance of knowledge of the Coriba, its possible aquifers, and its geologic structure.



ΟÏ the Morrow-Umatilla county area Geological Survey topographic maps of Index map showing U. S. north central Oregon. m Fig.

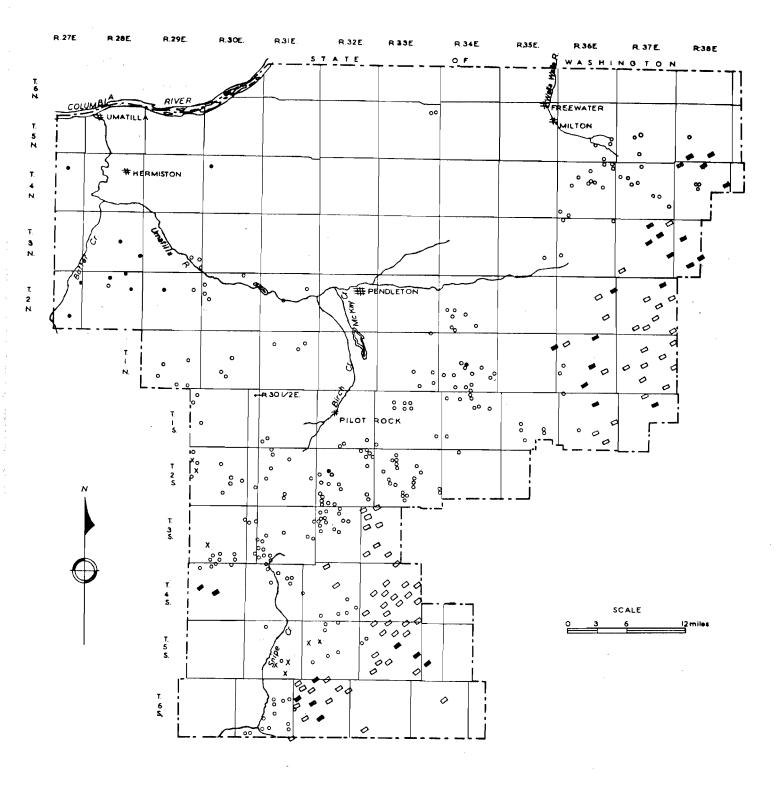
From studies of the Coriba elsewhere, and from what little is known regarding it from reconnaissance study and drill records from within the area, sedimentary interbeds (and hence sedimentary aquifers) appear to be lacking except for small lenses of local extent. Because of this, porous zones between flows and fractured flows probably constitute the chief channels of migration and mediums of storage for water. Many different aquifers, involving both the restricted, sedimentary type and the fractured and porous lava types, are probably represented by the wells in the area. Evidence of this is shown by the difference often noted among the logs of closely spaced wells. That the porous lava types are undoubtedly of restricted extent also, will be shown later. While they may support notably substantial wells, some of these aquifers may be of relatively limited capacity. Recognition of the identity, capacity, and other hydrologic characteristics of these individual aquifers, and of the sources of their water, is the major objective in any project of geologic ground-water mapping in the area.

the setting up of a service through which drillers could obtain semi-technically prepared formation logs by submitting cutting samples from their wells to an established agency. The samples could be taken at arbitrarily fixed intervals, or whenever the formation changed. Service like this has been conducted by other states in order to promote the development of their ground-water resources. Self-addressed sample bags would be furnished the drillers and samples would be submitted to the agency by the driller together with appropriate notations as to the depths from which the samples were obtained. These samples are then studied with the aid of a microscope by a qualified technician and a formation log is furnished the driller upon completion of the hole. Such a system could be expected to standardize formational descriptions even if it only reduced them to a comparative basis locally.

Although a lack of visible distinction between flows of the Coriba limits the degree of refinement and precision attainable in the geologic mapping of Morrow and Umatilla counties, many important structural and correlative data can, nevertheless, be gathered. Such work must be done before any practical understanding of the ground-water resources in the area can be realized.

Hydrologic records

Hydrologic records gathered in connection with the well logs are very incomplete. For instance, water-level figures were given on only 138 of the 209 wells for which logs were obtained. In none of these 138 wells is a water-level reference point given. Presumably, the top of the casing is the reference point, but such is not specified. In relatively few cases is the water level specified as "static" and there is reason to suspect that some of the unspecified water levels are, in reality, operational levels and not true



LEGEND

STOCK WATER DEVELOPMENT

- X STOCK WATER RESERVOIR CONSTRUCTED UNDER U.S. PAMA, PROGRAM.
- STOCK WATER WELL DEVELOPED UNDER U.S. P.& M.A. PROGRAM.
- DEVELOPED SPRING, PRIVATE LAND, DEVELOPED UNDER U.S. P.&M.A. PROGRAM.
- DEVELOPED SPRING, BY U.S. FOREST SERVICE.
 - PROPOSED SPRING DEVELOPMENT BY U.S. FOREST SERVICE.

UMATILLA COUNTY, OREGON

INFORMATION SECURED FROM LAND- WATER INVENTORY OF UMATILLA COUNTY BY THE U.S. SOIL CONSERVATION SERVICE.

represent the level at the time the driller completed the well. Therefore the levels given may reflect the natural and normal high or low water levels prevailing during the year at the time the well was completed, or abnormal levels due to periodic cycles of excessive precipitation or drought. The log records cover a span of over 25 years. In only two wells (the Pendleton city well and the McNary damsite well) were elevations of the collar reported. For the preparation of water-table maps, whether of free or confined waters, the elevations of the well collars must be known so that the water-level measurements may be referred to a common datum. Water levels must be read simultaneously (that is, within seasonal bounds) to eliminate discrepancies due to natural fluctuations. Records needed for preparation of water-level maps, especially the location of wells by township, range, section, and quarter section, can be best obtained by the driller directly from the well owner at the time the well is being drilled rather than by some field man at a later date after the property may have changed ownership.

Only a few of the logs of flowing wells record measurements of pressure and volume of flow; these measurements are required in order to make hydrologic calculations. Such information must not only be obtained for individual wells before specific conclusions can be drawn concerning them, but before more generalized conclusions regarding aquifers and capacities can be drawn on an area-wide scale. The lack of knowledge as to what the pressure readings may have been for any unreported flowing well at the time it was first drilled, and at progressive intervals thereafter, constitutes a permanent loss of very important data. It should be made mandatory for the best interest of the public at large that all flowing wells be at least capped and their production thus controlled.

Test data of one sort or another are given on 85 of the logs listed here (total 209). This figure is somewhat arbitrary and the only wells counted, in arriving at this figure, were those for which some test was mentioned or indicated by the records. Entries of the gallons-per-minute production and drawdown were not counted as test data unless so specified by the informant, as in the other instances the gallons-per-minute production commonly refers to the normal operational rate at which the well is pumped in practice rather than to an official test figure. Likewise none of the flowing wells in the Boardman irrigation district were considered by the author to have data of test status. The figure does include bail tests or incomplete pump tests which merely indicate that the well produces sufficient water for the owner's requirements instead of the optimum production.

Results from the few wells given more thorough tests, as summarized in the logs, are often so abbreviated that critical data are omitted. For example, logs of several wells known to have been given careful, engineering tests record drawdowns at different pumping rates but fail to give the static water level. Most major pump-test reports do not lend

themselves readily to summary on prepared log forms like those used in this report. Pumptest reports may be many pages in length, and their data shown graphically on charts and tables. Every effort should be made, however, to prepare some kind of an accurate summary for purposes of general recording.

Experience has shown that invaluable test records of far too many of the important municipal and industrial wells have been mislaid or lost. Information of this type commonly changes hands many times between consulting engineers, water superintendents, and equipment-company technicians and thus is often lost.

Development

Several conclusions can be drawn regarding the presence of aquifers in the Coriba. Available geologic evidence points to the fact that no single widespread sedimentary interbed, or even a series of moderately extensive ones, exists within the Coriba in the area considered. It is also probable that no extensive porous or fractured lava horizon exists. Faulting and folding are known to be present even though the geologic structure has not been mapped or studied in detail. On the basis of general geologic knowledge, a vertical succession of porous horizons of restricted lateral extent is to be expected in a thick accumulation of lava flows like the Coriba. The log records gathered substantiate this in showing aquifers in vertical succession. They exhibit sometimes a wide variation in depth and hydrologic characteristics from well to well. Thus, the available geologic information indicates that subsurface fracture zones constitute the access channels and storage reservoirs for most of the confined waters and that the pattern (distribution, depth, and hydrologic characteristics) of migration and storage zones is governed largely by structure and by the size of the porous interbed horizons.

Structural attitudes of the Coriba (and hence of the permeable horizons within it) must be studied and mapped before conclusions may be drawn concerning the development potentialities of local areas, but the information available allows the generalization that undeveloped water resources of substantial proportions may exist in Morrow and Umatilla counties.

The well-location map (pl. 1, Tast page) shows that drilling has been concentrated in and around richer agricultural portions of the counties. It is in these areas that many of the larger industrial and municipal wells are situated and the greatest concentrations of population are contained. It should be remembered that the wells shown on the map fall far short of representing the complete coverage. No attempt was made to gather information on shallow domestic wells in urban areas such as Milton-Freewater, and a considerable amount of shallow-well data for this area was disregarded because of the abundance of deep-well records available. The concentration of wells in this area is therefore much greater than is indicated on the map.

Sparsely populated land predominates in both counties. For the most part this land occupies the higher elevations, is short of surface water, and rates as dry agricultural or grazing land. Improvement of such land that is suitable for irrigation or can be rendered suitable by leveling is the concern of those in authority and prompted this investigation. Ground-water possibilities of land of this type have received very little attention except for the drilling of domestic and stock wells. These wells are for the most part widely separated and usually of small diameter. In only a few places have attempts been made to develop large-yield wells. The Cutsforth no. 1 and the Tucker wells, both in Morrow County, were each drilled for irrigation purposes, and are fairly successful. Unexpectedly large-yield wells have been developed occasionally as exemplified by the Rugg no. 1 well which yields an artesian flow of an estimated 465 gallons per minute. The city of Pendleton well and the Smith Canning Company well, also in Pendleton, and various other selected industrial and municipal wells situated at various points in the more central portions of the counties (Umatilla County mostly), are examples of substantial producers drilled to appraciable depths in the Coriba for public or industrial purposes. As these wells demonstrate that substantial, and sometimes artesian production has been developed in the Coriba, similar yields in the relatively untested portions of the area may be considered as possible. The conclusion is warranted that the ground-water resources of Morrow and Umatilla counties are only partially developed.

The available geologic information does not permit detailed classification of the areas which are either potentially possible or probably unlikely for the development of large volumes of ground water. In general, conditions can be considered as favorable in an east-west belt extending through the central portions of the counties. This conclusion is based upon the supposed prevalence of a regional structural dip from the Blue Mountains and is subject to locally adverse conditions caused by faulting, folding, and other unmapped structural conditions. Whether or not large capacity aquifers exist in the Coriba in this area is unknown at the present time. Until their presence is established and structural conditions are worked out in as much detail as is possible, no predictions can be made as to the depths at which the occurrence of ground water may be anticipated. The available log data show large-capacity wells at shallow depth and low-yield wells at great depth occurring at random throughout both counties.

Another subject which merits discussion is the danger of over-production from already developed aquifers. Hodge (1942) in his report on the area comments on the Coriba as follows:

"The flows comprising the formation appear as of such indefinite length that the entire mass has frequently been called a 'basalt flood.' Actually the individual flows are only a few miles long, less wide, and from 10 to 200 feet thick. If these flows came from fissures, there must have been thousands of slits that changed their position rapidly from one place to another."

This description shows the limitations in size of aquifers to be expected. Add faulting to the picture and the result is a small areal extent for potential aquifers of sedimentary, or of the porous or fractured interflow, types. From a production standpoint this situation is doubtless relieved by vertical fracturing which may permit replenishment of a given interbed aquifer from both lateral and deeper sources.

Evidence of well interference (adverse effects upon other wells) is to be noted in the logs here assembled. Also, the history of progressively decreasing water level in some of the former flowing wells is suggestive of overproduction. It is possible that over-development may already exist in some of the areas where wells occur in great numbers.

Overdevelopment means extraction at a rate faster than replenishment. Whether the lack of replenishment is due to the inability of replenishment water to migrate through feeder channels to the storage aquifer at a rate commensurate with extraction, or whether the lack of replenishment is due to a lack of reserves of water for replenishment purposes, are questions to be faced in the study of ground-water problems anywhere. The area under discussion is by no means an exception.

There can be no doubt that water precipitated in the Blue Mountains gains access to subterranean levels and works its way northward through fractured zones in very considerable quantities. Nor can there be any doubt that much ground-water replenishment originates from absorption from the plateau surface itself. Here again the factors controlling the extent and disposition of aquifers must be reckoned with. Faults may assist flow of water by shattering or they may oreate dams and barriers. Considering these facts and the limited size of the Coriba flows (and hence limited original size of porous interbed aquifers) individual aquifers may exist completely independent of, or only partially connected with, feeder channels draining from the mountains. This condition could be expected in the central to northern portions of Morrow and Umatilla counties.

The significance of such a condition is that a well producing from an aquifer supplied and replenished almost wholly by water from the plateau is producing from a source dependent upon a low yearly precipitation for replenishment (fig. 2, opposite p. 5). Such a well may be a large-yield producer, but if it is producing at a rate faster than replenishment, it is producing water which represents the accumulation of centuries. The development of one good well cannot be taken as evidence that the development of other successful wells - at least long-lived ones - can be expected close to the first one.

Conclusion

To those engaged in farming, or to those acquainted with civic or industrial water problems, the value of water to Morrow or Umatilla counties is well known. To those not acquainted with the counties, it can be said that the potential value of water is tremendous. Evidence of this is to be found in the increased amount of deep drilling done in recent years, not only by municipalities and industries, but also by farm owners. Many substantial, large-yield wells have been developed. These demonstrate that the Coriba may be regarded as a real, although a somewhat unpredictable source of confined ground water. This considered, together with the fact that very large areas of the counties remain relatively untested by exploratory drilling, suggests that the counties' ground-water resources remain largely undeveloped.

Just where, or to what depths, future drilling might be done successfully is a question — which cannot be answered because of the lack of basic geologic information. About all than can be said now is that in general the development of large-capacity wells should not be anticipated at shallow depths. How great the undeveloped reserves may be is a question that does not warrant a guess. Both basic geologic information plus specialized ground-water data will need to be gathered before even an approximation can be made on an area-wide basis.

Certain limiting observations, however, can be drawn from existing geologic knowledge and the case histories of some wells. The short lateral extent of individual interbed aquifers plus the dependency upon fractures for interconnection with other aquifers and feeder channels is the reason for occasional, individual aquifers replenished largely by absorption from the plateau surface. Safe rate of production from such aquifers is limited and is probably more critical compared to that from aquifers replenished from the mountain sources where precipitation is greater. Even in the case of mountain-fed aquifers, marked variations in capacity among individual aquifers probably prevail. Conservation practice therefore dictates that care should be taken to guard against overdevelopment by either the development of an excessive number of wells or overproduction from one well. Therefore, well-test and production records are the most diagnostic and the most readily available data to be obtained.

All considerations point to the desirability and the practicability of expending effort and funds for a thorough, scientific investigation of the ground-water resources in the counties. The scope of such an undertaking, however, would be beyond the means of the counties to finance, or of the State Department of Geology and Mineral Industries to conduct under the present set-up. Therefore, if the counties wish to promote the development of their ground-water resources, Federal assistance should be sought.

At the present time the most important step that Morrow and Umatilla counties could take would be to build up a file of well data in anticipation of eventual ground-water investigation. A backlog of such data, if of sound technical quality, would be of material assistance in any eventual ground-water investigation, and would doubtless prove of assistance to the many local problems bound to arise during the time preceding the start of a mapping project. Standards should be set up for the preparation of well logs and of well-test and production summaries, and steps should be taken to provide for the recording of such data by both drillers and well owners.

Acknowledgements

The number of people who have contributed their time and effort in connection with the assembling of the material compiled have is so great that it is not practicable to give individual recognition to all of them. To the many not listed the writer wishes to express his gratitude. Messrs. M. E. Cotter, Ione, Oregon; A. A. Durand and Son, Walla Walla, Washington; A. M. Edwards, Lexington, Oregon, and Fred J. Nichoson, Ione, are drillers to whom especial credit is due for the assistance they rendered. The author wishes to express appreciation for furnishing well records to Charles E. Stricklin, State Engineer; Curtiss M. Everts, Jr., State Sanitary Engineer; R. A. Fletcher, Umatilla County office of the U.S. Production and Marketing Administration; A. M. Piper, Staff Scientist, Pacific Northwest, U.S. Geological Survey; and R. C. Newcomb, Ground-water Division of the U.S. Geological Survey. To Messrs. W. A. Rockie and Thos. H. Hite of the U.S. Soil Conservation Service, thanks is extended for permission to reproduce Soil Conservation Service maps. For their assistance throughout the course of this project and in the editing of this report, the writer is especially indebted to the members of the staff of the State Department of Geology and Mineral Industries.

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Water-well Logs

The following pages contain 209 driller's logs of water wells drilled in Umatilla and Morrow counties. Abbreviations used in the logs include:

g.p.m. - gallons per minute

SWL - statio water level

F. - Fahrenheit

temp. - temperature

O.D. - outside diameter

I.D. - inside diameter

D	С	В	A
E	F	G	Н
М	L	K	J
N	Р	ď	R

Dot in section grid shows well location. If no dot is used, exact location is not known.

Adams City Well name	_		Index number 35-U 3K-34E-4-3 File number
			(Code: Tp., R., Sec., Sec
LOCATION:			D C B A
Pendiston Quadra			E 7 C H
			M I K J
Tp. Range Section Fraction	al section		N P Q R
STATISTICS:			
Well type-Dug Elevation Orilled T face) Driven above	(land sur	- tise	status- Well status-
		. no	mestic* Wastriel abendoned
Final depth 163		mu *inclu	rigation dry hole micipal x producer x des stock wells
City of Adams	Va.	Ruther	
Owners hams Address	- Or	iginal ir	illers name Walla Walla, Weshington
		Date of d	rilling_about 1938
This record compiled by B.S.V. data secured from the following s	from	Deopened	
Driller and Sity Water Waster		cleaned	by
•			
Date compiled January 1948		Date	
Top soil and sand - about	(feet) faet)	Remarks
		35	16" hole to bottom 35" of 16" casing to bedrock
Sort perous water horizon	58	133	
Black hard basalt about	30	163	
		J	Dottom of hole,
	_		Well began flowing at 931.
· · · · · · · · · · · · · · · · · · ·			Still flows in winter when depend is not great. During the season when demand is
	- 1		
			great, this well is pumped at the rate of 100 g.p.m.
			for periods of 12 to 15 hour
pirecc			at the rate of 100 g.p.s. for periods of 12 to 15 hour per day. The water level th drops to 40 to 45. Index number 160.4
sirec	-		at the rate of 100 g.p.s. for periods of 12 to 15 hour per day. The water level th drops to 40 to 45. Index number 160-M MR-252-7 Filo number
ell name			at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 160-M MW-252-7 Filo number (Code: Ty., R., Sec., ; Sec.)
OCATION:	ty		at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 46. Index number 160-M 437-552-7 File number (Code: Tp., R., Sec., Sec.)
ocation: orrov Coun lalock Jelend Quedrang			at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 160-M MW-252-7 Filo number (Code: Ty., R., Sec., ; Sec.)
ocation: ocation: countries co	10		at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 160-M MX-252-7 Filo number [Code: Ty., R., Sec., Sec.] D C B A E 7 0 B
OCATION:	10		at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 166-M WW-252-7 Filo number [Code: Tp., R., Sec., 1 Sec.] D C B A E 7 O E M L K J
ocation: orrov	Bection	Use et	at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 166.M
ocation: orrov	Bection	Use et dome	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160 K
OCATION:	Bection	irri,	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160 k.s. Index number 160 k.s. D C B A E 7 O K M L K J N P Q R atue- stic* z Kell statue- strick Eventual Eve
OCATION:	section	irri muni finclude	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160-M
### OCATION: ### OCATION: ### OFFICE OF TO PROVIDE TO	section land surft. Oriff	irri munic finclude:	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160-M
### OCATION: ### OCATION: ### OFFICE	section section ft. orliff original	irri munic "include: in inal drill iress	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level tr drops to 40 to 45. Index number 160 k 45.252-7 Filo number (Code: Tp., R., Sec.; Sec.) D C B A E F O H M L K J N P Q R atue- stio 2 atua- dry hole cipal a stock wells Lets name Bermistoc, Oregon
OCATION: OFFICE COUNTIES COUNT	section land surft. Griff Origi	irri, muni. "includs: in lnal drill ress e of dril	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level ti drops to 40 to 45. Index number 160-K 457-252-7 Filo number (Code: Tp., R., Sec., ; Sec.) D C B A E F G B M L K J N P Q R Attue- stic strial attue- stic attue- stic strial gation dry hole cipal producer E stock wells Bernistoc, Oregon
OCATION: OCATION: OTTOV COUN Lalock Jslend Quedrang N 252 7 SW2 D. Range Section Fractional TATISTICS: slil type-Dig Klevation (1 face) Drilven above below inal depth 81' A. Addregs There a name Address Boardman, Oregon is record compiled by M.S.V. te secured from the following sou	section land surft. Griff Origi Det	irri, muni. "includs: in lnal drill ress e of dril	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160 H
OCATION: OCATION: OTTOV COUN Lalock Jslend Quedrang N 252 7 SW2 D. Range Section Fractional TATISTICS: slil type-Dig Klevation (1 face) Drilven above below inal depth 81' A. Addregs There a name Address Boardman, Oregon is record compiled by M.S.V. te secured from the following sou	section land surft. Griff Origi Det	irri, muni "include In Inal dril irese e of dril espened	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160
OCATION: OFFICE COUPTING AND ADDRESS OF THE PROPERTY OF THE PR	land surft. Orlff Orlg Add	irri, muni "includs" lin linal drill ress e of dril espened -casad eaned	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160
OCATION: OFFICE OFFI	land sur- rt. Orlff Orig: Add Add from Detroes: reces: reces:	irri, muni "includs" lin linal drill ress e of dril espened -casad eaned	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level ti droma to 40 to 45. Index number 160-M MN-252-7 Filo number (Code: Tp., R., Sec. ; Sec.) D C B A E F G E M L K J N P Q R Attustical abandoned dry hole cipal a stock wells lers name Bermistoc, Oregou. Iling 1944
OCATION: OFFICE COUNTY COUNTY DELOCK Julend Quadrang N 25E 7 SW4 P. Range Section Fractional PATISTICS: Politype-Dig Driven Selow S	land surft. Orlff Orlg Add	irri, muni "includs" lin linal drill ress e of dril espened -casad eaned	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160-M
OCATION: OFFICE COUNTY DESCRIPTION COUNTY DESCRIPT	land surft. Orlff Orig: Add Detree: re	irri muni. *include in inal dril: irese e of dril espened eaned Depth feet)	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops to 40 to 45. Index number 160-M
OCATION: OFFICE COUNTY COUNTY DE TOTOW COUNTY DE TOTOW QUESTION AND ZSE 7 SW DE TOTOW Fractional PARISTICS: ONLY TO THE TOTOWN DRIVEN FRACE A Andregs BOARDAMA, Oregon A. Andregs BOARDAMA, Oregon A. Andregs BOARDAMA, Oregon Lis record coupting by M.S.W. The secured from the following sounter the compiled March 1948 Neterial Foliog made	land surft. Orlff Orig: Add Detree: re	irri muni minal drill iress e of dril e of dril e of dril e of dril fest Depth fest 30 81	at the rate of 100 g.p.s., for periods of 12 to 15 hour per day. The water level the drops in 40 to 45. Index number 160
OCATION: OFFICE COUNTY DESCRIPTION COUNTY DESCRIPT	land surft. Griff Orig: Add Detroes: recipies recipies (feet)	irii munii rincludei in inal drillines con d	at the rate of 100 g.p.s., for periods of 12 to 15 how per day. The water level ti drops to 40 to 45. Index number 160-K
A Andregg Boardman, Oregon	land surft. Griff Orig: Add Detroes: recipies recipies (feet)	irri muni "include: in in inal drill ress e of dril oppened -cesed eaned Depth gest 81 30 81	at the rate of 100 g.p.s., for periods of 12 to 15 how per day. The water level the drops to 40 to 45. Index number 160 K K K K K K K K K K K K K K K K K K K
OCATION: OFFICE COUNTY DESCRIPTION COUNTY DESCRIPT	land surft. Griff Orig: Add Detroes: recipies recipies (feet)	irri muni "include: in in inal drill ress e of dril oppened -cesed eaned Depth gest 81 30 81	at the rate of 100 g.p.m. for periods of 12 to 15 hour per day. The water level the drapa to 40 to 45. Index number 166-K 4X-252-7 Filo number (Code: Ty., R., Soc., Sec.) D C B A E 7 C B M L K J N P Q R Attue- stic* strial abandonod gation cipal arranae Beruistoc, Oregou Hing 1744 by Ramarke SVL was 16' when drilling Was completed SVL hoy- ever, rose slowly san occa-

Aiton Well name			
			file number (Code: Tp., R., Sec., 2 Sec.
LOCATION:			D C B A
Horrow	County		D C B A
	adrangle		M I K J
Tp. Range Section Frac	tions) section		N P Q P
STATISTICS:			
Well type-bug Kleve prilled x face)	tion (land sur-	. Dec	status- Well status-
Driven above	,	in	.uatrial shandoned
Final depth 86'			rigation dry bole micipal producer x des stock wells
Arthur Alten			
Owners name Address c/o Hugh Brown	Ori	ginal or:	le Drilling Company
Roardman, Orego	^		Portland, Oregon
		Deepened_	rilling Spring, 1947
This record complied by H. lata secured from the Pollow		re-cesed cleaned	
ingh Brown, Boardman,		-10000	
Mate compiled Harch 1	948	Dete	
Material	Thickne	ss Depth	Remarks
	(feet)	(root)	
No 100 made		86	6" hole cased 40'. Tiret water encountered 36'.
		+	Second water near bottom of well. SWL 12.
		 _	<u></u>
		_	
Atheno City #1			Index number 27-U 417-35E-19-K
ell name			File number (Code: Tp., R., Sec., Sec.)
OCATION:			
Umatilla_	County		D C B A
	_		E F G H
Inmapped Qua	drangle		E F G H
Inmapped Qua	drangle		E F G H
Inmapped Qua	drangle		E F G H
	of SE2 ional section	Uso st	E F G M M L K 7 N P Q 9
	drangle of SE	done	E F G M M L K J N P Q R
Tamesped Qua	of SE2 ional section	dome into irri muni	E F G H M L K 7 N P Q B Well status- strica abendosed dry bole (cipel x producer X
Tamesped Que	of SE2 ional section	dome into irri muni	E F G H M L K 7 S P Q B intus- ssic* ssic* ssic* ssic* ssic* sbendosed
Tamesped Que	drangle of SEA ional section ion (land aur- ft.	dome inre irri muni Tinclude	E F G H M L K 7 N P Q 9 Intus- satic* satich sation dry hole producer x a Son
Tamasped Qua	drangle if SEA ional section ion (land surft. A. A. Orig	dome into irri muni finclude Durand inal iril	E F G H M L K J N P Q B Well status- stice obendomed dry bole clipal x producer x
Tamesped Que	drangle if SE tonal section ion (land aurft. A. A	dome into irri muni finclude Durand inal iril iress	Total statua- intua- strica strica nhendosed dry hole cipal X producer X series a Son.
Jamesped Que NX 35E 19 INt o D. Range Section Frect MATISTICS: 111 type-Dug Elevat Driven above below mal depth 680' 111 of Athena mere name Address 12 record comit d by E.S.	drangle of SEA ional section ion (land surft. A. A. A. Orig. A. D. D.	dome into irri muni "include Durand inal iril iress When the of dri	E F G H M L K 7 N P Q B The strict strict shendomed dry bole clipal x producer x section about the
Tamesped Qua	drangle if SEA ional section ion (land aurft. A. A. A. Orig. Add f. from D. Dag Sources: re-	dome into irri muni "include Durand inal iril iress When the of dri	Total Status- Strick S
	drangle if SEA ional section ion (land surft. A. A. A. Orig. Ad. A. Cross Da. G. from Da. G. from C.	domeinate in a control of the contro	Total Status- Strick S
	drangle of SEA ional section ion (land aur- ft. A. A. A. Orig Ad Da V. from D ag Sources: c.	domain and in a control of the contr	Total Status- Strick S
	drangle if SEA ional section ion (land surft. A. A. A. Orig. Ad. A. Cross Da. G. from Da. G. from C.	dome in a construction of the construction of	Total Status- Strick S
	drangle of SEA ional section ion (land aur— ft. A. A. A. A. Grig A. A. A. A. A. A. A. A. Grig A. A	dome in a construction of the construction of	E F G H M L K J N P Q B Well status- ssic* sprial dry bole close producer X a stock wells 4 Son lers name alla Walls, Washington 11ing 1535
Jamapped Que NX 15E 19 INt o D. Range Section Frect Politype-Dug Elevation Driven below mai depth 6801 Lity of Athena mere name Address is record compiled by N.S. to secured from the collowing riller and City Water Master ts compiled January 194 Neterial	drangle of SEA ional section ion (land surfit. A. A. A. A. Orig. A. A. A. A. Orig. A. A. A. A. Cris. A. Cr	downing downing to the control of th	E F G H M L K 7 F P Q B Intus- stric* strial obendosed dry bole ciplal x producer x a stock wells A Son lers name alla Walls. Washington Remarks
Jamapped Que NX 15E 19 INt o D. Range Section Frect Politype-Dug Elevation Driven below mai depth 6801 Lity of Athena mere name Address is record compiled by N.S. to secured from the collowing filler and City Water Master ts compiled January 194 Neterial Soil	A. A. A. A. A. Cristanda A.	domain and in a constant and i	E F G H M L K J N P Q B Intus- satic* corrial dry bols clepal L producer L a stock wells 4 Son lers name alla Valls, Washington Remarks Casing
Jamasped Que Lity of Athena mere name Address Jamasped Que Meterial Soil Broken rack	A. A	domain and	E F G H M L K J N P Q B Intus- satic* corrial dry bols clepal L producer L a stock wells 4 Son lers name alla Valls, Washington Remarks Casing
Jamesped Que	A. A	domeination in a control of the cont	E F G H M L K J N P Q R Well status- satic* shrind dry bole school wells A Son lers name alla Walls, Washington 11ing 1935 Remarks Casing 82' of 12' pipe
Jamasped Que Lity 155 19 114 of Frect Drilled X face) above below mal depth 6801 Lity of Athena mere name Address is record compiled by E.S. to secured from the collowing filler and City Water Master ts compiled Jamasry 194 Meterial Soil Broken rock Gray basalt Gray basalt Conglomerate	A. A	downinate of the control of the cont	E F G H M L K 7 F P Q B Intus- stic* nbendomed dry hole clothal x stock wells A Son lers name alla Walls. Washington lling 1935 by Remarks Casing 52' of 12" pipe Flowed 15 g.p.m.
Jamapped Que Jamapped Que Jamapped Que Jamapped Que Range Section Frect Prilad X face) Driven above below mal depth 6801 City of Athena mere name Address is record compiled by 2.5.4 ta secured from the collowing from the compiled Americal Soil Jamaery 194 Meterial Soil Broken rock Oray basalt Gray basalt	A. A	dometric dom	E F G H M L K 7 F P Q B Intus- stic* nbendomed dry hole clothal x stock wells A Son lers name alla Walls. Washington lling 1935 by Remarks Casing 52' of 12" pipe Flowed 15 g.p.m.
Jamasped Que Lity 155 19 114 of Frect Drilled X face) above below mal depth 6801 Lity of Athena mere name Address is record compiled by E.S. to secured from the collowing filler and City Water Master ts compiled Jamasry 194 Meterial Soil Broken rock Gray basalt Gray basalt Conglomerate	A. A	domdination in the control of the co	E F G H M L K J N P Q B Well status- nestic* nhendomed dry bols producer X a stock wells A Son lers name alla Valla, Washington lling 1935 by Remarks Casing E2' of 10' pipe Flowed 15 g.p.s. Fumped 250 g.p.m.
Jamasped Que Lity 15 Athena mere name Address Jamasped George Jamasped Que Meterial Soil Broken rock Jamasped Que Meterial Soil Broken rock Jamasped Que Jam	A. A	domination in the control of the con	E F G H M L K J N P Q R Well status- satic* nhendomed dry bis gettion dry bis leipal X producer X as stock wells A Son lers name alla Walls. Washington 11ing 1935 by Remarks Casing B2' of 12" pipe Flowed 15 g.p.s. Fumped 25c g.p.s. Stopped flowing according
Jamasped Que Ja	A. A	domination in a control of the contr	E F G H M L K J N P Q B Woll status- satic* nhendomed dry bole gettion dry bole producer X as stock wells A Son lers name alla Valle. Washington 11ing 1935 by Remarks Casing E2' of 12" pipe Flowed 15 g.p.s. Fumped 25c g.p.s. Stopped flowing according to city water supt., after
Jamapped Que Jamapped Que Jamapped Que Jamapped Section Frect Prilad X facel Drilad X facel Driven balow and depth 6801 City of Athena mere name Address is record compiled by 20.5, it as secured from the collaboration of the compiled Ambier of the compiled Section of the compiled Secti	A. A	domination in a control of the contr	E F G H M L K 7 F P Q B Intus- stice
Jamapped Que Jamapped Que Jamapped Que Jamapped Section Frect Prilad X facel Driven show Include Section Frect Still type-Dag Elevat Driven show Address is record compiled by 20.5, it as secured from the collection of t	A. A	domedia:	E F G H M L K 7 F P Q B Intus- stice
Jamesped Que James Jose 19 IIV of Range Section Frect Prilled X fore) Driven above below mal depth 6601 City of Athena mere name Address is record compiled by M.S. it a secured from the collaboration for the compiled January 194 Naterial Section January 194 Naterial Section Gray basalt Conglomerate Gray basalt Black basalt Black basalt Slock basalt Corey becalt	A. A	domesting dome	E F G H M L K J N P Q B Well status- satic* nhendoned dry bole gettion dry bole producer X a stock wells A Son lers name alla Walls, Washington lling 1935 by Remarks Casing B2' of 12' pipe Flowed 15 g.p.s. Fumped 250 g.p.s. Stopped flowing according to city water supt., after pumping operations were commenced on the \$2 well.
Jamapped Que Jamapped Que Jamapped Que Jamapped Section Frect Privation Frect Still type-Dag Frect Drillad X face) Driven Section Store Driven Section Frect Still type-Dag Frect Drillad X face) Broken Compiled X face) Broken rack Gray basalt Black basalt Gray basalt Broken rack Store Section Frect Store Section Frect Section Frect	A. A	domedinate	Remarks Casing E y G H M L K 7 F P Q B Well status- stice nhendomed dry hole clipal x producer x stock wells manage producer x store name producer x store name producer x store name producer x store wells producer x store wells manage producer x store of the store were store of the store pumped store of the store of the store pumped store of the store of the store pumped store of the store of t
Jamapped Que Jamapped Que Jamapped Que Jamapped Section Frect Privation Frect Still type-Dag Frect Drillad X face) Driven Section Store Driven Section Frect Still type-Dag Frect Drillad X face) Broken Compiled X face) Broken rack Gray basalt Black basalt Gray basalt Broken rack Store Section Frect Store Section Frect Section Frect	A. A	domedinate	Remarks Casing B2' of 12" pipe Flowed 15 g.p.s. Pumped 250 g.p.s. Stopped flowing according to city water supt., after pumping operations were commenced on the \$2 well. In practice has been pumped 75 g.p.s. 24 bours per day

Athena City #2			Index number 28-U 48-35Σ-19-Q	Baker #1	_		nder number 161-H 48-258-18-H
ell name	_		File number (Code: Tp., R., Sec., Sec.)	Well came			File number (Code: Tp., R., Sec., } Sec.)
OCATION:				LOCATION:			D C B A
Umatilla Cour	nty		D C B A E F G H	Horrow Count	· y		E F C H
Unmapped Quadran			M L K J	Blalock leland Quadrang			N° L K J
Ly 352 19 SW1 of SE p. Range Section Frections			N P Q R	Tp. Hange Section Fractional	section		N P Q R
TATISTICS:				STATISTICS:			
ell type-Dug Elevation		Use sta		Well type-Dug Elevation (Usa sta domes	tie* X
Drillad x face) Driven above	ft.	domes in .us	trial shandoned	Drilled X face) Driven above below		intes irrig	trialebandoned
final depth 12061 below		irrig munic *includes	ation dry hole producer x stock wells	Final depth 321	 .	munic	ipsl producer r stock wells
City of Athena	Orlei	Durand &	ers name	Willord A. Baker Owners name Reardman Greens	Ate Har	el 3-111	ers name bliendale, Washington
Address	Add	reas_W	lla Walle, Washington	Address Boardman, Grecon	-	of dril	_
		e of drl	ling 1997	This record complicaby 3.5.V.	-	pened	
This record compiled by H.S.V. late secured from the Jollowing a	from De	epened	- by	data ascured from the obliving so	1rces: re-		by
Driller and City Water Master	61	beneel	. "1	Mrs. Willord A. Baker and scot.			
Date compiled January 1948	De	sto		Date compiled March 1941	Dat	9	<u> </u>
Material	Thicknes	a Depth	Remarks	Linterial	Tnickness (feet)		Remarks
	(feet)	1206	Flowed est. 40 to 50 g.p.m.	No log available	(2000)	36	Flows - Pressure street
No log available	_	1.00	According to City water	NO 108 1/82/1001			Considered better than
		1	Superintendent, this well was not cumped till the				Baker #2 well.
-			year after it was drilled, but that after it was pumped				f" hole.
			it ouit flowing. SWL is now 15' (1945). In practice		 		
			the well is pumped at the rate of 500 g.p.m. with a drawnown to 2301 during the				
			drawcown to 230' during the summer season when the well is used hard.		-		
			2. 400 140		+		
		1		-			
		<u> </u>					
Baker #2 Well name LOCATION:			(Code: Tp., R., Sec., Sec.)	LOCATION:			(Code: Tp., R., Sec., ¿ Sec.
Korrov Cou	unty		E F G H	Morrow Cour			E F G H
Blalock Island Quadran			M L K J	Finlock Island Quadrang			M L K J
4# 25E 18 #W1 of SV	Wi al aectlon		N P Q R	Tp. Range Section Fractional	section		N P Q R
Tp, Hange Section Fractions				STATISTICS;			
_				Well type-Dug Elevation (
STATISTICS: Rell type-Dig Elevation	(land sur-	Use st dome	stic* _x	Drilled x face)	land sur- ft.	Ose st	stic* x
STATISTICS: Rell type-Dug		dome invu irri	stic* sherdoned	Drilled x face) Driven above balow	land sur- ft.	nome: in.u: irri	strlsl abandoned ary hole
STATISTICS: Rell type-Dug		dome invu irri muni	stic* x	Drilled x face) Driven above	ft.	in uni	stic* I strlal abandonod_
STATISTICS: Well type-Dig Elevation Drilled I fece) Driven above below Final depth 86	ft.	dome invo irri muni *include	et:c* I strial shandoned getion dry hole cipal producer I s stock wells	Drilled x face Driven	ft.	dome: in:u: irri; muni: include:	strist abandonod gration dry hole cipal producer x s stock wells
STATISTICS: Hell type-Dug Elevation priven above above	ft.	dome invo irri muni *include . Edwards pinal dril	stric* x strial abandoned gation dry hole itpal producer x	Drilled x fane) Driven above baloe Final depth 70'	Origin Add	nome in au irri muni include include includes	stic* x stribl abendence pation dry hole spation producer x spation producer x spation producer x
STATISTICS: Well type-Dig Elevation Drilled x feee) Driven above below Final depth 861 Kr. Baker Owners name	A. H. Orig	dome invo irri muni *include . Edwards final dril dress	stic* x trial shandoned gation dry hole cipal producer x s stock wells	Drilled x fane) Driven above below Final depth 70' Boy E. Ball Owners name Address Bonrdman, Oregon	Origin Add:	dome: in au irri muni: include: include: au of dri ess	strist abandonod gration dry hole cipal producer x s stock wells
BEATISTICS: Well type-Dig Elevation feee) Drilled T feee) Driven above below Final depth 86' Kr. Baker Owners name Address Soardman, Oregon	A. H. Orig Ad De	dome invo irri muni *include . Edwards rinal dril dress te of dri eepened	stic* x trial shandoned gation dry hole tipal producer x s stock wells lers name Lexington, Oregon	Drilled x face) Driven above below Final depth 70' Heg Y. Ball Owners name	Origin Add: Date from Decources: re	nome: in:u: irri muni: include: ress e of dri epened	stic* x stripi abandonod stripi dry hole cipal producer x s stock wells lers name
STATISTICS: Well type-big Elevation Drilled I face) Driven above below Final depth 86' Nr. Baker Owners name Address Boardman, Oregon This record complied by S.S.V. data secured from the collowing were left the collowing works left the collowing works log expert by the driller	A. M. Oris Ad Aros De fros D eources: r	dome invo irri muni finclude Edwards final dril dress te of dri	ntic x strial shandoned strial dry hole sipal producer x s stock wells lers name Lexington, Oregon lling 1942	Drilled x fane) Driven above below Final depth 70' Hoy E. Ball Owners name Address boardman, Orenon This record complied by U.S.V. data secured from the collowing so	Origin Add: Date from Decources: re	nome: in au irri muni: vinclude: nal drii ress e of dri	stic* x absidence x absidence x artisi absidence x artisipal producer x section about 1920
STATISTICS: Well type-big Elevation Drilled I face) Driven above below Final depth 86' Nr. Baker Owners name Address Boardman, Oregon This record complied by S.S.V. data secured from the collowing were left the collowing works left the collowing works log expert by the driller	A. M. Oris Ad Aros De fros D eources: r	dome invo irri muni *include Edwards final dril dress te of dri eepened e-caaed	ntic x strial shandoned strial dry hole sipal producer x s stock wells lers name Lexinates, Oregon	Drilled x face) Driven above below Final depth 70' Hoy Y. Ball Owners name Address Enordman, Orenon This record compiled by U.S.Y. data secured from the collowing st	origii Add: Date from Decources: re	nome: in.u irri mui finclude: and dril ress e of dri spendd -cased eened	stic* x stripi abandonod stripi dry hole cipal producer x s stock wells lers name
STATISTICS: Hell type-Dig Elevation Drilled I feed) Driven above below Final depth 86 Kr. Baker Owners name Address Boardman, Oregon This record compiled by E.S.W. data secured from the collowing of the driller Production comments and location	A. H. Original Additional Position of the Control o	dome innu irri muni Finclude Edvards final dril ddress te of dri meepened e-cased leaned	ntic x strial shandoned strial dry hole sipal producer x s stock wells lers name Lexinates, Oregon	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Engrana, Oregon This record compiled by U.S.Y. dets secured from the collowing so	origii Add: Date from Decorres: re- cle	nome in us in it i	stic* x strini abandonod gation dry hole producer x estock wells lers name lling about 1920
STATISTICS: Hell type-Dig Elevation Drilled I feed) Driven above below Final depth 86 Kr. Baker Owners name Address Boardman, Oregon This record compiled by E.S.W. data secured from the collowing of the driller Production comments and location	A. M. Orig Ad De from D oources: r ources: r D Thicknot	dome innu irri muni Finclude Edvards final dril ddress te of dri meepened e-cased leaned	ntic x strial shandoned strial dry hole sipal producer x s stock wells lers name Lexinates, Oregon	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x standard strini absadanad strini dry hole tripal producer x stock wells stock well stock wells stock well stock wells stock well s
STATISTICS: Well type-Dig	A. H. Orig Ad Ad Pros D Ources: r Outper D Thicknet (feet)	dome in a control of the control of	et.c* I strial abandoned ggtion dry hole cipal producer I s stock wells lere name Lexington, Oregon liting 1942 by	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Engrana, Oregon This record compiled by U.S.Y. dets secured from the collowing so	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in a control of the control of	stic* x standard absoluted arrival absoluted arrival a
BEALTSTIGS: Well type-Dig	A. H. Orig Ad Ad Pros D Ources: r Outper D Thicknet (feet)	dome innami irri muni irri	stics abandoned strial abandoned strial action dry hole clpal producer I stock wells by Remarks	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome in a dome i	stic 1 strial abendoned gation dry hole cipal producer I stock wells lers name Lexington, Oregon ling 1942 by Remarke Flow - estimated at 20 g.p.E.	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	ste' x ste' x abandonod stripi about not producer x stock wells lers name ling about 1920 by Remarks Well flows. Flows continuously year
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome innami irri muni irri	stics abandoned strial abandoned strial action dry hole clpal producer I stock wells by Remarks	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome innami irri muni irri	rice I string abendoned gation dry hole cipal producer I stock wells stock well stock wells stock wells stock wells stock wells stock well sto	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome innami irri muni irri	Remarks Flow - estimated at 20 g.p.m. Sottom of hole	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Det urcee: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome innami irri muni irri	rice I string abendoned gation dry hole cipal producer I stock wells stock wells lere name Lexinated, Oregon ling 1942 by Penarke Flow - estimated at 20 g.p.E. Sottom of hole	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Desurces: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer
STATISTICS: Well type-Dig	A. H. Original Property of the Control of the Contr	dome innami irri muni irri	Remarks Flow - estimated at 20 g.p.E. Sottom of hole	Drilled x face) Driven above below Final depth 70' Boy Y. Ball Owners name Address Enerdman, Orenon This record compiled by 3,5.4, deta secured from the collowing so Owner Date compiled Narch 19-2 Naterial	Origin Addi from Det from Desurces: re cl. Da Thickness (feet)	nome in we in we in the interval of the interv	stic* x stribi absadonod gation dry hole jipal producer x stock wells lers name lling about 1920 by Remarks Well flows. Flows continuously year arouna, but less in winer

Code: Ty.	R., Sec. Sec. D C B A E F C H N L K J N P Q R Well statue— abandoned dry bole producer X
LOCATION: Unexpeed Quidrangle JH 352 19 5W4 of SE4 Tp. Bangs Section Fractional section STATISTICS: Well type-Dug Elevation (land eur— Use status— Drilled Tace) ft. domestic* Driven Serve Innustrial inrigingtion municipal section Final depth 9681 includes stock well Enrold Barnett A. A. Durand & Son Ormers name Address Wella Wall Fendleton, Oregon Date of drilling 19 This record compti-d by E.S.W. from Despensed	D C B A E 7 C H M L K J N P Q B Well statue- abandoned dry bole producer X
Unatilia	E F C H M L K J N P Q R Well statue— abandoned dry bole— producer X
Disapped Quadrangle 38 35 19 374 of SE} 79	M L K J N P Q B Well statue- abandoned dry hole producer x
18	N P Q B Fell statue- abandoned dry hole producer x
TP. Renge Section Frectional section STATISTICS:	Fell statue- abandoned dry hole producer x
	abandoned dry hole producer x
	abandoneddry holeproducer x
Driven above insustrial insustria	dry hole
Final depth 9681	producer x
Orners name Address 105 S. E. Filis Original drillers name Address Walla Wall Fendleton, Oregon Date of drilling 19 This record compti-d by N.S.W. from Despensed	
Pendleton, Oregon Date of drilling 19 This record comptid by N.S.V. from Deepened	
This record complied by M.S.W. from Deepened	
inis record compiled by Mis. Irom Deepened	44 6
data secured from the collowing sources: re-cased	
U. S. G. S. Ground-Water Division cleaned by	
Date compiled December 1947 Date	· · · · · · · · · · · · · · · · · · ·
Metastal Thickness Depth	lemarke
(feet) (feet)	
	inch set to 22 ft.
Boulders, baselt, gray 12 40 depth.	- 10 22 IT
Basalt, gray, hard 2 42	
Banalt, percus 26 68	
Basalt, gray 8 76	
Basalt, black, porous 24 100	
Basalt, black 14 114	
Basalt, gray 88 202	
Bailer test 45 g.p.s. for 7 misutes drawlown from 16 ft. (st	atic) to 80 ft.
Recovered in 3 hours	
Baselt, gray, hard 16 218	
Basalt, black creviced and	
porous with scapstone 34 312	
Basalt, black 87 425	
Rock, coft, red	
Bassit, black	
Bock, decomposed, hard, caving 11 518	
Basalt, and clay 20 538	
Basalt, gray, hard 18 556	<u> </u>
Passalt and clay 6 562	
Besalt, gray, hard 9 573	
Basalt and some clay 28 601	
Bussit, hard 24 625	
Basalt, decomposed 15 640	
Hot reported (dropped from 16 to 13 653	
Basalt 9 662	
I CWT dwame.	
SWL dropped Baselt, decomposed (to 272' 10 672	
SWL dropped	
Baselt, decomposed (to 2721 10 672	
Baselt, decomposed (to 2721 10 672	
Baselt, decomposed (to 2721 10 672	
Baselt, decomposed (to 272' 10 672 Baselt, hard 6 678 Baselt, gray 24 702 Baselt and red clay 28 730 Baselt, black 14 744 Baselt, broken 39 783	
Baselt, decomposed (to 272' 10 672 Baselt, hard 6 678 Baselt, gray 24 702 Baselt and red clay 28 730 Baselt, black 14 744 Baselt, broken 39 783 Baselt, black, hard 58 841	
Baselt, decomposed (to 272' 10 672	
Baselt, decomposed (to 272' 10 672	
Baselt, decomposed (to 272' 10 672	
Baselt, decomposed (to 272' 10 672	
Baselt, decomposed (to 272' 10 672	
Baselt, decomposed (to 272' 10 672 Baselt, hard 6 678 Baselt, prey 24 702 Baselt and red clay 28 730 Baselt hard 14 744 Baselt, black 14 744 Baselt, black, hard 58 841 Baselt, acft, brown 5 846 Baselt, porcus 33 279 Baselt, black with scapatone 21 900	

Bartley Well mame			File number (Code: To. R. Sec Sec.
			(Code: Tp., R., Sec., ≟ Sec.
Umatille Cour			D G B A
Umatilla Cour			E F G H
			иги
Tp. Range Section Fractional	section		N P Q R
STATISTICS:			
Well type-Dug Elevation (Drilled x face) Driven above	land eur-	Use st	ntus- Well status-
Drilled x face) Driven above		1nuu 11	sticesbandoned_
Final depth 158' below		irri muni	igetion dry hole
		*inclua-	es stook wells
Cunningham Sheep Company Owners name	Orig:	inal dril	lers mame
Address Pendleton, Oregon		iress	
		e of dri	lling
This record compiled by R.S.V. data secured from the collowing so	iroz urces: re	epened -cased leaned	pà
Company officials	•	.6811	_ p2
Date compiled July 1947	De	10	
Naterial	Thickness	s Depth	Remarks
	(feet)	(feet)	
Ho log made	+	1,58	Pumped for stock use only
	+	+	1
-	+	+	
	+		
	+	 	
	+	<u> </u>	
	 _ _	_	
	_	_	
		'	
			Index number 70-U 23-30x-32
bockmer foll name	-		Index number — 70-U 28-308-32 File number (Code: Tp., R., Sec., 2 Sec.)
Well name	-		23-308-32 File number (Code: Tp., R., Sec., 2 Sec.)
Mell name LOCATION: Destille Count			23-308-32 File number (Code: Tp., R., Sec., 2 Sec.)
Mell name LOCATION: Dmatille Count Dmatilla Quedrang			23-308-32 File number (Code: Tp., R., Sec., Sec.)
	10		28-308-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H
COCATION: Deatille Count Dustilla Quedrang: 2N 30B 32 Pp. Range Section Fractional	10		28-308-32 File number [Code: Tp., R., Sec., 2 Sec.] D C B A B F G H H L K 7
COATION: Deatille Count Duatilla Quedrang 2N 30B 32 Pp. Range Section Fractional	Section		23-308-32 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H H L K J N P Q R
	Section	Use sto	23-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R
Countries Countries	Section	Use ste domes in:us	23-308-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K 7 N P Q R Students A B B B B B B B B B B B B B B B B B B
Countries Countries	section	Use ste domes in:us irrig	23-308-32 File number [Code: Tp., R., Sec., 2 Sec.] D C B A E 7 G H H L L X 7 N F Q R Sec. 2 Sec. 3 Se
DESCRIPTION: Count	section	Use ste domes inus irrig munic *includes	ZN-30E-J2 File number [Code: Tp., R., Sec., & Sec.] D C B A E 7 G H H L X J N P Q R Stue- Stue- Stries x Well status- stries abandoned dry hole status- stries as abandoned dry hole producer x stock wells
DESCRIPTION: Count	section	Use ste domes in-us irrig munic fincludes	ZN-30E-J2 File number [Code: Tp., R., Sec., & Sec.] D C B A E 7 G H H L X J N P Q R Stue- Stue- Stries x Well status- stries abandoned dry hole status- stries as abandoned dry hole producer x stock wells
Counting Counting	section section ft. Origin Addr	Use ste domes in-us irrig munic fincludes	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Witte- NITE STATES Sec., Sec., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Witte- States States Sec., Sec.
Mell name LOCATION: DEstille Count DEstille Quedrang: 2N 30E 32 TP. Range Section Fractional SMATISTICS: Well type-Dug Elevation (1 Driven above Driven below Final depth 1751 Cunningham Sheep Company SMATER name Address Pendieton, Oragon	section lend surft. Origin Add	Use ste domes inius irrig munic fincludes and drill rees	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun- tite x ttriel abandomed priton dry hole ipsl gtock wells ers mane
Counting Deatille Deatille Counting Deatille Counting Deatille Deatil	section land surft. Origin Addr Addr fron Deterrices: re-	Use ste domes inius irrig munic fincludes and drill rees	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun- tite x ttriel abandomed priton dry hole ipsl gtock wells ers mane
CONTION: Deatille Count Deatille Quedrang 23 30E 32 The Range Section Fractional STATISTICS: Fell type-Dug face) Driven above below Final depth 175! Commingham Sheep Company What's name Address Pendieton, Oragon This record compiled by N.S.V. eta secured from the collowing soul	section land surft. Origin Addr Addr fron Deterrices: re-	Use ste domes inclus irrig munic fincludes cal drill res s of dril	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Well status- title x title y titl
Mell name LOCATION: DESATIBLE COUNT Countilla Quedrang: 2N 30E 32 The Range Section Fractional STATISTICS: Well type-Dug face) Driven above below Final depth 175! Countingham Sheep Company What's name Address Pendieton, Oragon This record compiled by N.S.V. leta secured from the collowing soul Company officials	section section ft. Original Addr Addr fron Detection cla	Use ste domes in the state of t	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Well status- title x title y titl
Mell name LOCATION: DESATIBLE COUNT Countilla Quedrang: 2N 30E 32 The Range Section Fractional STATISTICS: Well type-Dug face) Driven above below Final depth 175! Countingham Sheep Company What's name Address Pendieton, Oragon This record compiled by N.S.V. leta secured from the collowing soul Company officials	land sur- ft. Original Addr Addr fron Determines: re- cle	Use ste domes in any irrig munit fincludes and drill ees of dril eppened cased aned	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Well status- title x title y titl
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 The Range Section Fractional STATISTICS: Well type-Dug Elevation (1 face) Driven above below Final depth 175! Cunninghas Sheep Company Whate name Address Pendicton, Oragon This record compiled by M.S.V. lata secured from the collowing soul Company officials	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes in any irrig munit of the standard standard cased ca	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Well status- title x triel abandoned dry hole producer x stock wells by
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta secured from the collowing sou Company officials Outs of the county of the secured from the collowing sou Company officials	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Unatilla Quedrang 28 30E 32 Tp. Range Section Fractional SYATISTICS: Nell type-Dag Flevation (1 Driven above below Final depth 1751 Cunningham Sheep Company Whater name Address Fendleton, Oragon This record compiled by N.S.V. leta esoured from the following sou Company officials Date compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-
Mell name LOCATION: Umatille Count Umatille Quedrang: 2N 30E 32 Fp. Range Section Fractional STATISTICS: Well type-Dug Elevation (1 Driven above below Pinal depth 175' Cunningham Sheep Company Wmars name Address Fendleton, Oragon This record compiled by N.S.V. Leta esoured from the collowing sour Company officials Outs of the compiled Survey Market compiled July 1947 Katerial	section section ft. Origin Add pate fron Des cle pet Thickness	Use ste domes innus irrida munic fincludes sel drill res act drill res cased aned cased aned feet)	ZS-30E-32 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K J N P Q R Stun-

								Index masher 96-N
			Index number 79-U 5N-29E-13	Boardman City				4H-25E-8-F
Birchman Woll name		3	lle number	Well name			1	File number (Code: Tp., R., Sec., Sec.)
			Code: Tp., R., Sec., Sec.)					r
LOCATION:			D C B A	LOCATION:				D C B A
Umatilla County			E F G H	Morrow	County			E F G H
Umatilla Quadrangle			K T X 1	Blalock Island				M T X 1
5H 29E 13			N P Q R	4H 25F 8	SEt of HVt	ation		N P Q R
Tp. Range Section Fractional Se	ection			Tp. Range Section	on fractional se			
STATISTICS:				STATISTICS:				
	nd sur-	Tee stn	tus- Well Status-	Well type-Dug	Elevetion (las		Use sta domes	tus- Well status-
Drilled x face)	ft.	domes insus	10°x_	Drilled x Driven		rt.		
Driven above below		irri6	ation dry hole	Final depth 1781	below		irrig gunic	ipal x producer x
Final depth 5051		nunic includes	stock wells			•	includes	stock wells
u s Markata	A. A.	Durent &	Son	Boardman City		- T-1-1-	Dorand &	
Valso Erchmen Owners name	Ortein	oul drill	era name lla Valla, Washington	Owners name Address		Addr	e 33	alla Walla, Washington
Address Cold Springs, Oregon			ling Aug. 1947 to Feb. 1948			Deto	of dril	ling May and June, 1946
			11118	This record compil d	by 3.S.¥.	from Dee	pened	
This record complied by H.S.V. data secured from the following sour	from Dee ces: re-	релед		data secured from the	Following sour		cased	by
Drl ller	ole	aned	р.	Driller				
5111101	_			_	101.0			
Date compiled March 1948	Det	•		Date compiled Jam		Det Thickness		
Haterial	Thickness (feet)	Depth freet)	Remarks	Nateri	al	(feet)	(feet)	Remarks
	75	15		Gravel		0	3	gaieao
Sand		20		Nigger heads, g	ravel and send	3	22	10° cemented in rock at 41°
Boulders and sand	5			Running sand		22	24	10" hole to bottom
Eard basalt	14	34		Ninger heads on	d sand	24	30	
Broken basalt	4	38				30	40	Well flows 11; g.p.m.
Froken brown basalt	4	42		Nigger heads no	d Punning sand		68	
Basalt, very hard	8	50		Solid rock		40		
Black basalt, very hard	26	76		Bard black basa		- 68	71	
Eoneycomb basalt	14	90	A little weter at 90'	Gray basalt (ha	rd)	71	104	Crevices at 100 to 164
Clay and scapstone	4	94		Rard black base	lt	104	106	
Basalt	109	203		Honeycomb basal	t	106	110	
				Blue clay		110	164	
Gray baselt, hard		208		Honeycomb basal	t	164	175	Water - basalt broken badly
Dark basalt with hard streaks	46	254				175	178	Vater
Black baselt	244	278		Shale			_	Bottom of hole
Gray basalt	62	340				-		
Black basslt	20	360						
Busalt	130	490						
Very hard basait	5	495						lndex number - 136-U
	10	505		Boylen #1				2N-27E-25-√ File number
		T	Bottom of hole	101. 101.				(Code: Tp., R., Sec., & Sec.)
Water encountered between 1851	and 195	and test	ed as follows:	LOCATION:				D C B A
Haver encountered between	1		SVL 361. At 190 g.p.m.	Umatilla	County	y		E F G H
	—		drawdown to 132' with rapid	Ugatilla	Quadrangle	9		MIXJ
		-	100	276 2772 25	EE of SE			N P Q R
Final pump test at 5051 as fol		-	SVL 39'. Water temp. 63°F.	Tp. Range Secti	on Fractional	section		
		+	Drawdown 76' at 869 g.p.m.	STATISTICS:				
	 	+	Drawdown 108' at 1089 g.p.s.		Elevetion (1	and sur-	Dae at	stus- Well status-
		-		Wall type-Dug Drilled x	face)	ft.	dome	stic* abandoned
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Thomas Boylen, Jr.		_				Thomas Boylen, Jr.				39 druum	110
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Final depth	mun	igation dry bole class producer x es stock wells	Final depth		nunic includes	ipal producer_1 stock wells
Thomas Boylen, Jr.	Original dri	llers name	Marvin Cargill Owners name Address Route 1	0.1-1-1	C. E. Le al irille ess Pe	ewis ere name endleton, Oregon
Adiress	Address		Address Route 1 Pendiston, Oragon		of dril	
		1111ing 1930				
This record compiled by N.S.W. data secured from the following S U. S. Production and Marketing Ad	from Decioned_ sources: ro-cased_ cleaned_ dministration	<u>=</u>	This record compti dby M.S.V. data secured from the Jallowing Mr. J. R. Hanna, Pendleton, Orego	C 100	cased	by
v 1.3068	Date		Date compiled January 1948	Date	B	
	Thickness Depth	Remarks	Naterial	Thickness (feet)		Remarks
Naterial	(feet) (feet)	- · · · · · · · · · · · · · · · · · · ·	No log made	(-030]	165	SWL 1151
No data available	+		-v vie ware			Low g.p.m. yield and purps
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		Index number 164-M 48-255-18-2 File number (Code: Tp., R., Sec., Sec.)	Causidy Well name			
	ounty angle	AB-255-18-2 Fila number (Code: Tp., R., Sec., Sec.) D C B A E 7 C H	Well name LOCATION: MOFFOR C	County		File number
Well name	angla SE l	48-255-18-2 File number (Code: Tp., R., Sec., 2 Sec.)	Moli name LOCATION: MOJIOU C	rangle SE‡		#R-25E-7-B File number (Code: Tp., R., Sec., Sec.) D C B E 7 C
	angla SE l	AH-255-18-Q File number (Goder Tp., R., Sec., Sec.) D C B A E 7 C H M L K J	Moll name LOCATION: Morrov C Plaigek Island Quadr 48 25E 7 SEt of	rangle SE‡		#R-252-7-B File number (Code: Tp., R., Sec., Sec.) D C B E 7 G M L K
Tell name	angle SE ¹ mal section n (land sur- Use	##-255-18-2 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q R	MOII name LOCATION: MOFFOV C Plaiger Island Quadr AN 25E 7 SEt of Tp. Range Section Fractic STATISTICS:	SE tonal section	Use st dome	#R-252-7-B File number [Code: Tp., R., Sec., Sec.] D C B E 7 G M L K N P Q tatus-
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Tell Dame	n (land sur- Use ft. do ir in me in circles in the	Status- mistrial while status- mistrial while status- mistrial des stock wells	Well name LOCATION: Morrov C Plaigek Island Quadr WH 25E 7 SEt of Tp. Range Section Fractic STATISTICS: Well type-Dig Elevatic Drilled x Drivon Acore Final dapth 85'	SE‡ CORAL SECTION On (land surft. Original Section	dome intu irri muni *include . Edwards inal dril	#R-252-7-B File number File number [Code: Tp., R., Sec.,
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Well type-Dag Driven bove blow Boardman, Oregon Address Boardman, Oregon B	angle SE4 oal section I than fur. Use ft. do ir in in inclu Beck Original di Addrese Dete of c	##-255-18-2 Tile number (Code: Tp., R., Sec., Sec.)	LOCATION: Horrow Compared to the property of the propert	on (land surft. A. M. Oriei And Add for from Date f. from Carlei General From Carle	dome in au irri muni include . Edwardi inel dril dress te of dri eccasad_leaned	## 252-7-8 File number [Code: Tp., R., Sec., Se
Morrow Co Statock Island Quedra AS 25Z 18 SW1 of S TP. Range Section Fraction STATISTICS: Well type-Dig Elevation Drives Sovre below Final depth 95 E. E. Briggs Owners name Address Boardman, Oregon This record compiled by E.S.V. data secured from the collowing	n (land sur- Use ft. do	## 255-18-2 Tile number (Code: Tp., R., Sec., Sec.)	Well name LOCATION: Morrow Plaigek Island Quadr Th. Range Section Fractic STATISTICS: Well type-Dug Drivon Drivon Final dapth 85' Mike Cassidy Omera name Address Boaruman, Oreg Thie record compiled by M.S. Well at escured from the Inlied to Inlie	on (land surft. A. M. Original Add Date (, from Date of the original Add	dome in au irri muni include . Edwards inal dril dress te of dri espened e-casad leaned	Tile number File number [Code: Tp., R., Sec.,
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Cockburn Well name	_		Index numb	681-34E-35-E
Mell Delle			LIII II	R., Sec., Sec.
LOCATION:				
Umatilla Cour	nty			D C B A
Pendleton Quedran				E F G H
(= A) =				M L K J
Tp. Range Section Fractional	section			N P Q R
STATISTICS:				
Well type-Dug Elevation (land sur-	Use	status-	Well status-
Well type-Dug Elevation (Drilled x face) Driven above	ft.	đo In	status- mestic* mestrial risation X	benobnede
Final depth still drllling.		30	nicipal	dry hole
		*inclu	des stock wells	
Marina Cockburn Owners name	0-14	inal ir	lllara name	
Address Umaplue, Oregon	_ 40	dress	Valla Valle,	Vashington
	D:	te of di	illing Sept.	1947 to
This record comptied by N.S.Y. data secured from the following so	_from I	beneçası besso-e		
Driller	o	leaned_	by	
Date compiled March 1948		ate		
Material	Thickness (feet)	feet)	Re	ne rks
Soil and yellow clay	11	11		
Cement gravel	26	3?		
Brown basalt	11	48		
Gravel	3	51		
Clay and gravel	7	58		
Cement gravel	17	75		
Brown basalt (crevice in	31	106		
Honeycomb basalt	2	108		
Hard brown basalt	12	120		
Gray cement gravel	5	125		
Blue clay and pea gravel	15	140		
Brown basalt	20	160		
Oray basalt - hard	8	168		
Gray basalt	10	178	-	
Gray besalt - soft	22	200		
Broken brown basalt	20	220		
Blue basalt	35	255		
Brown honeycomb	5	260		
Blue basalt	10	270		
Gray basalt	10	280		
Honeycomb basalt	24	304		
Blue basalt	50	354		
Black basalt	17	371		
Blue basalt	7	378		
Black basalt	10	388		
Blue basalt	6	374		
Basalt	39	440		
Sandy basalt	3	443		
Basalt	132	575		
Brown shale	5	580		
Basalt	56	636	Drilling stil	l in progress.
Well flowing:		<u> </u>		
Driller's flow record as a	pcopnt===		Temp. 58°T. H	V16 14".
At 31'	SVL	15'		
P 1401	SVL	111		
3021		Fump to at 576	st here gave I	77' drawdown
3941	SWL	01	a:t	
4031			- no rates at	
■ 4901			te noted at 15	
5801				
300		*10X 1	crease noted -	105 K.D.D.

Corres #1 Well name			The second rough Manager	Sec.
LOCATION:			[Code: Tp., R.	
	County		⊢	D C B A
Umatilla Quad	-		├	E F G H
35 28E 25 MZ+ Tp. Range Section Frection			-	M L K J
	DEAL SHOLLE		L	<u></u>
STATISTICS:				
Well type-Dug Elevation Drilled x feee) Driven shows	on (land sur-	Une en		Well status-
pelom		irri	igation	abandoned dry hole
Final depth		ສ ນກ :	icipal ss stock wells	producer 1
Frank Correa			-	
Owners name Address	Uris. Adi	inal iril	llers name	
			illing 19	238
This record compiled by N.S.W. deta escurad from the collowing	from De	eepened e-cased	_	
deta escurad from the following U. S. Production and Marketing	c	leaned	by	
	_			
Date compiled March 1948		of Donth		
Naterial	Thickness (feat)	(feet)	Remen	'ks
No data avallable		Ī		
		1		
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	-	-		
OCATION:			Index number — 2N-20E File number (Code: Tp., R.,	-2
	ngle		ZN-28E File number (Code: Tp., R.,	Sec., Sec.)
OCATION: Entilla Co Entilla Quadra 2Z 2EE 2 FM F. Range Section Fraction TATISTICS:	al section	Use ste	2M-29E File number (Code: Tp., R., D E	Sec., : Sec.) C B A F G N L K J
	al section	Use stal	ZN-29E File number (Code: Tp., R., D E N N	Sec., i Sec.) C B A F C B L K J P Q B
	al section (land surft.	Use stai domesi injust irriga annici	ZN-29E File number (Gode: Tp., R., D E N N N tua- tic* z trial attion tpial	C B A F G B L K J P Q R
	al section (land surft.	Use stai domesi injust irriga annici	ZN-29E File number (Code: Tp., R., D E N N	Sec., i Sec.) C B A F C B L K J P Q B
	al section (land surft.	Use stai domeei inussi irrigu aunici includes	ZN-29E File number (Gode: Tp., R., D E N N tua- tic* z trial stook welle	Sec., i Sec.) C B A F C B L K J P Q B
	al section (land surft. Origin Addr	Use staidomeet incust irrigg suniciticaludes all drillees of drillees of drillees.	ZN-29E File number (Gode: Tp., R., D E N N tua- tic* z trial stook welle	Sec., Sec.) C B A F C H L K J P Q R 11 Status- ebandoned dry hole producer X
	al section (land surft. Origin Addr	Use staidomeet incust irrigg suniciticaludes all drillees of drillees of drillees.	THE NUMBER OF BRIDGE STREET ST	Sec., Sec.) C B A F C H L K J P Q R 11 Status- ebendoned dry hole producer X
	al section (land surft. Criginal Addre pate from Desponders: re-	Use staidomeet incust irrigg suniciticaludes all drillees of drillees of drillees.	THE NUMBER OF BRIDGE STREET ST	Sec., Sec.) C B A F C H L K J P Q R 11 Status- ebendoned dry hole producer X
DOCATION: BRATILLE BRATILLE BRATILLE BRATICS FINANCE Section Fraction TATISTICS: FILTYPE-Dug Driven Driven balos Sent Correa THE Correa THE CORRESS OF THE COR	al section (land surft. Criginal Addre pate from Desponders: re-	Uso stai domest invisci aunici includes al drille eas of drill	THE NUMBER (Code: Tp., R., D E E M N N THE LIBERT STATES AND THE	Sec., Sec.) C B A F C H L K J P Q R 11 Status- ebendoned dry hole producer X
DOCATION: BACTILLE BACTI	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E E M N N THE LIBERT STATES AND THE	Sec., Sec.) C B A F C H L K J P Q B 11 Status- ebendoned dry hole producer X
DOCATION: BACTILLE BACTI	origin Origin Addr Date from Despources: re-classiministration	Use standoment in use i	THE NUMBER (Code: Tp., R., D E E M N N THE LIBERT STATES AND THE	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
DOLATION: BACTION: BACTION: BACTION: BACTION: BACTION: BACTION: PRANCE Section Fraction TATISTICS: BI type-Dug Elevation Driven shore below Inal depth PRANCE Section Fraction Address Address S. Froduction and Marketing Address Address S. Froduction and Marketing Address	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
DOLATION: BACTILLA COMMITTEE COMMIT	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
COATION: BATILLA COMMITTEE COMMITTE	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
matilla Quadra 227 28E 2 5V4 p. Range Section Fraction TATISTICS: ell typs-Dug Elevation Drilled E face) Driven below inal depth rank Corree where mane Address 11s record compiled by E.S.V. tata sacured from the Following S S. Froduction and Marketing Address Naterial	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
COATION: BATILLA COMMITTEE COMMITTE	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X
COATION: BATILLA COMMITTEE COMMITTE	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE NUMBER (Code: Tp., R., D E M N N tua tia tic tic tic ton tipal attor tipal attor tipal attor tipal by 192	Sec., Sec.) C B A F C H L K J P Q R 11 status— ebandaned dry hole producer X
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COATION: BATILLA COMMITTEE COMMITTE	al section (land surft. Origin Addr Date from Despoures: re-	Use standoment in use i	THE Number (Code: Tp., R., D E M N N N N N N N N N N N N N N N N N N	Sec., Sec.) C B A F C B L K J P Q B 11 status— ebandoned dry hole producer X

Carrier			Index master 94-M 2N-272-6	Index number 120-M 35-231-14-F
Corrigal Well name	-		File number (Code: Tp., R., Sec., Sec.)	Gotter Well name File number (Code: Tp., R., Sec., Sec
LOCATION:				TOCARTORIA
			D C B A	D C B A
Unatilla Quadrang			E F G H	
23 273 6			N L K J	35 235 14 SR of SW 2
Tp. Range Section Fractional	section		R P Q R	Tp. Range Section Fractional section
STATISTICS:				STARISTICS:
Well type-Dug Elevation (Usa at		Well type-Dug Elevation (land sur- Use status- Well status- Drilled x face) ft. domestic x
Drilled x face)	ft.	ina	stic* x shandoned shandoned	Drilled x face) ft. domestic x Driven shove in dustrial shandoned below irrigation dry hole
Final depth 447'		aun!	gation dry hole cipal producer x stock wells	Final depth 6904 municipal producer x *includes stock wells
Corrigal Ranch		Edwards	lere name	Clarence Warren N. E. Cotter Owners name Original drillers name
Owners name Address	_ Add	rese	Lexington, Oregon	Address Ione, Oregon Address lone, Oregon Started Aug. 24, 1915
	Det	e of dr	11ing 1938	Date of drilling Finished Oct. 7, 1920
This record compiled by 8.5.V.		epened_	_	This record complied by N.S.W. from Deepened data secured from the Collowing sources: re-cased
data secured from the collowing most	0]	eaned_	by	Nr. Cutter, original owner and driller
Driller	_			Ar, divisi, direimi centi nua divista
Date compiled October 1947	_ De	to		Date compiled November 1947 Date
Material	Thicknes (feet)	s Depth (feet)	Remerks	Naterial Thickness Depth Remarks (feet)
Top soil and sandy soil	40	40		This well was first drilled to a depth of 456' and then deepened at a later date. The composite log follows:
	60	100		Soil 12 12 6 hole
Coment gravel	20	120		Blue basalt 73 85
Clay - yellow	50	200		Honsycomb with some shale rock 60 145
Coment gravel	10	210		Blue basalt 80 225 A little water at 225
Clay - red Blue - clay	7	217		
	67	284		Rock with yellow and white sha s 39 320
Cement gravei	67	289	· -	Hard blue and gray rock 70 390
Broken and seamy brown rock	62	+		Cracked rock and caving 66 456
Solid brown rock	-	350		
Blue basalt rock	42	392		
Gray basalt rock	21	413		Cracked and seamy rock 690 Bottom of hole
Black basalt rock	14	427	Vater course	Plenty of water at 690%.
Hard basalt rock - grey	20	447		180' of water in hole.
<u> </u>			vel - 280 Ft. Bailer test,	
			Index number 66-U	Index number 53-U
Cox	_		1N-JOE-11-E Filo number	LOCATION:
Toll name			(Code: Tp., R., Sec., Sec.)	Unatilla County Z 7 G H
LOCATION:			D C B A	Pendleton Quedrangle M L E 3
Unatilla Coun	; y		Z T G H	2N 3ZE 32 SEA of HEAT TP. Renge Section Fractional section
Unatilla Quadrung	10		N I X J	The united processes and an analysis of the contract and
12 302 11 52 corner Tp. Range Section Fractional	of IE		N P Q R	STATISTICS:
Tp. Range Section Fractional	→#6 £10B			Well type-Dug
STATISTICS:				Drilled X Face) 11. downstriel shandoned below irrigation dry hole
Well type-Dug Elevation ()		Uee at		Final depth 240 municipal producer :
Drilled X face) Driven above	ft.	inau	stic* X strisl shandoned Arr bole	
Final depth 3001 below		auni	gation dry hole cipal producer a stock wells	John Crow C. E. Lewis Original drillers name Original drillers name Pandleton Oregon
		· Tuctnge	s stock morrs	Address Boute 1 Address Pendleton, Oregon
Cunningham Sheep Company Owners name			lers name	Pendleton, Oregon Date of drilling
Address Pendleton, Oregon	-	1.000		This record compiled by J.S.V. from Deepened data secured from the Jollowing sources: re-cased
	-	e of dri	lling	Mr. J. R. Hanna, Pendleton, Oregon
This record compiled by 3.5.V. data secured from the following so	from De	epened_ -cased_	<u>-</u>	1000
Company officials	61	eaned_		Date compiled January 1948 Date
	_			Material Thickness Depth Remarks (rest) [feet]
Date compiled July 1947		150		No log made 240 8 hole, SYL 35', pusped
Material	Thicknes (feet)	(feet)	Remarks	for domestic use only
Wo log available		300	Pumped for stack use only	
_				
		1		
***	1 -	 		
<u> </u>		1		

Crowder Well mame		Index number 166-W LN-26E-24-D File number (Code: Tp., R., Sec., 2 Sec.)	Cutsfo Well n	orth #1	_		Index number 110-K 15-25E-14 File number {Code: Tp., R., Sec., ; Sec.}
LOCATION: Korrew County Blalock Island Quadrangle ug 20g 20 MW1 of MW1 Tp. Bange Section Fractional sect	lon.	D C B A E F C H M L K 7 F P Q R	LOCATION Unmapped 15	Coun	il•		D C B A E 7 G H H L K 7 N P Q R
Driven above below Final depth 85'	_ft. dom inco irr: mun	tatus- setic* x cutrial chandoned try hole citylel producor x set set set wells	Final	ype-Dug Drilled x face) Brivon above below	land sur- ft,	inu irr min	tatus- spilo* sp
C. M. Crowder Cemers ness Address Feardman, Oregon	Original dri		Owners Addr	Lexington, Oregon	Origi Add	e of dr	& Son Hars mane Walla Wella, Vasnington Hiling Spring 1947
This record complied by E.S.V. from data secured from the Following sources Owner	: re-cased	by	data &	ecord compiled by N.S.Y. course from the following sou r and owner	Arces: re	e-cesed_ leaned_	by
Date compiled March 1948	Date		Date or	ompiled September 1947	_ De	te	
Haterial Tai	ckness Depth set] Keet}	Romarks		Material	Thickness (feet)		Somerks
Ho log avmilable about	85	Well flows. No rate or	5	oil mantle	Included entry be	lith.	Hole, IC"
		pressure test figures avail- able. Tield reported to be		ard rock basalt	268	268	SWL 2001
		good and consistently so, but a machanical pressure	В	esait and green clay	8	276	265 g.p.w. yield stabilized
		domestic water system.	P	en gravel and some clay	3	279	on test pump.
			Ţ	ellow clay	8	287	
			Ъ	asolt	1	288	
							Owner reports subsequent
							sustained pump rum of 24 hrs, per day for 5 days at
							400 g.p.m.
		Index number 76-U 38-29E-21	Cutefori	th #2		-	Index number109-M
OCATION:		Index number 76-U 3M-29R-21 File number (Code: Tp., R., Sec., Sec.)	Cuisfort Well me	Ri:	•	_	Index number107-F 15-262-9 File number (Code: Tp., R., Sec., 2 Sec.) D C B A
COLTION: COUNTY COUNTY COUNTY COUNTY COUNTY COUNTY	<u> </u>	7M-29E-21 File number (Code: Tp., R., Sec., Sec.)	LOCATION Notroy Unnappe 15	M: Count Quadrangl. 25E 9 SV	•		IS-262-9 File number (Code: Tp., R., Sec., 2 Sec.)
Tell name LOCATION: LOCATION: County Anatilla Quadrangle SE 27E 21 Vi of EVi Dr. Range Section Fractional secti	oa.	3H-29R-21 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	LOCATION Notroy Unnappe 15	M: Count Quadrangl	•		15 - 262 - 9 File number (Code: Tp., R., See., See.) D C B A E F G H H L K 7
COLATION: COUNTY CANTILLA COUNTY CANTILLA Quadrangle BY 272 21 Vy of BVi TATISTICS: Color Fractional section CATISTICS: Color Fraction (land a face) Driven Driven Driven Driven	Tur- Use st. ft. dome intu	7H-29R-21 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q R	LOCATION Notroy Unnappe 15	M: Count Quadrangl 26E 9 SW Range Section Fractional IGS: pe-Dug Elevation (1: pe-Dug face) priven shows below	esection and sur- ft.	dome: innu: irri; muni:	15 - 262 - 9 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L X J N P Q R
Countrol Countrol	ft. dome into irri: munificulae c. E. Original fril	Tile number Tile number	Well me LOCATION HOTTOW Unnappe 15 Tp. STATIST Well ty	M: Count Quadrangl 26E 9 Svi Range Section Fractional TGS: po-hug Fraction (1stretion (1streti	e section and surft.	dome: inau: irri; muni: include:	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z F G H H L L K J N P Q R Stice x strial attention dry hole producer X sers name
County	Use at ft. dome intu irri zuni irri zuni include C.E., Original iril Addrese	Tile number Tile number	LOCATION NOTTON Unnapped 15 Tp. STATIST Well ty Final d Mr. Cut. Owners Addrs	M: Count Quadrangl 26E 9 SVi Rance Section Fractional IGS: De-Dug feee) Drilled x feee) Driven shove below spth 461 sforth name Lexington, Oregon	e section and surft. Origin Add. Date from Decrees: re-	dome input irri, muni- include: pal drill	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z F G H H L L K J N P Q R Stice x strial attention dry hole producer X sers name
COCATION: COCATION: CANADILLA Quadrangle ME 27E 21 Vi of EVi D. Range Section Fractional section TATISTICS: color briven above below color b	ur- Use at ft. done in a irri zuni include C. E. Original Aril Address Date of dri Deepand cleaned	Tile number Tile number	Well me LOCATION HOTTOW Unnapped 15 Tp. STATIST Well ty Final d Mr. Cot. Owners Addre	M: Count Quadrangl 26E 9 SVi Rance Section Fractional IGS: pe-Dug fees) Drilled x fees) Driven shove below spth 46' aforth cord compiled by N.S.V. cord compiled by N.S.V. cord compiled by N.S.V.	origin Add	domerinant interpretation of drill preseduced	13-262-9 File number (Code: Tp., R. Sec., Sec.) D C B A E 7 G H H L L K J N P Q R Attus- At
col name County County	Date of deland	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G B B M L K J N P Q R The product of the state of the	Well me LOCATION HOTTOW Unnapped 15 Tp. STATIST Well ty Final d Mr. Cot. Owners Addre	M: Count Quadrangl 26E 9 SV Range Section Fractional IGS: pe-Dug	original desired of the second	domerinant in a control in a co	15-262-9 File number (Code: Tp., R. Sec., Sec.) D C B A E 7 G H H L L K 7 N P Q R Bull Status stic* x strial dry hole producer x stock wells liral producer x ters name
contion: County County	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number (Code: Tp., R., Eec., Sec.) D C B A E y G H M L K J N P Q R The first state of the second of the sec	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	ond surft. Origin Add	dome invition invitio	15-262-9 File number (Code: Tp., R. Sec., Sec.) D C B A E 7 G H H L K 7 R P Q R Remarks Remarks
COLITION: County Countilla County Chatilla Chatilla County Chatilla Chatilla County Chatilla Chatil	Date of deland	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G B B M L K J N P Q R The product of the state of the	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 SV Range Section Fractional IGS: pe-Dug	original desired of the second	domedinate in the control of the con	15-262-9 File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L K 7 R F Q R REFERENCE Second
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R., Sec., Sec.) D C B A E 7 G H H L L I J N P Q R Trice stock stock wells REMARKS Well fleve if not pusped.
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
Quadrangle Qua	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
County C	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .
ocation: matilla	ur- Use st ft. dome inva irri zuni include C. E. Original dril Address Date of dri Despend re-cased cleaned Date Except Services of the serv	Tile number Code: Tp., R., Sec., Sec.) D	Well me LOCATION Unnapped 15 Tp. STATIST Well ty Final d Nr. Cut Owners Addra This res data see	M: Count Quadrangl 26E 9 Svi Range Section Fractional IGS: pe-Dug feee) Drilled x feee) Driven ebove ebove epth #6! aforth name as Lexington, Oregon cord complied by M.S.V. sured from the Following sour	original desired of the second	dome in a control of the control of	Tile number File number (Code: Tp., R. Sec., Sec.) D C B A Z 7 G H H L L K J N P Q R Stice x strial strial dry hole producer x ters name Ramarks Vell flows if not pumped. When pumped at 75 g.p.s. where I velve it sands at -25 .

allas	_	Tile number	Davis (Frank)			File number (Code: Tp., R., Sec., 7 Sec
		(Code: Tp., R., Sec., ; Sec.)	LOCATIUM:			
CATION:		D C B A	Morrow Count	:y		D C B A
antilla Goun	nty	z 7 G H	Blelock Island Quadrangi			H L K J
matilla Quadrana		M T K 1	4H 24E 24 HE of Wit			# P Q B
308 19 SE of SV; Dange Section Fractional		R P Q B	Tp. Range Section Fractional	section		
			STATISTICS:		_	
PATISTICS:	(land sur- Use st	atus- Well status-	Well type-Dug Klevation () Drilled x face)	land sur- _ft.	Use sta domes	stic*x
Drilled z face)	ft. dome	patic* x	Driven above below		inius	striel shendoned sation dry hole
inel depth 300'	irri	igntion dry hole	Final depth 120		min1c	
	*include	es stock wells	Hugh Brown	A, H.	Edwards	
unningham Sheep Company	Original dri)	lers name	Bugh Brown Owners name Address Boardman, Oregon	Origin	mal drill	lers name Lexington
Address Pendleton, Oregon	Address		Dominiment, Oragion	-	of dril	
	Date of dr	111108	This record compiled by N.S.V.	from Dec	npened	
his record compiled by H.S.V. ata secured from the following so	from Deepsned_ ources: re-cased_	- ,_	data secured trop the latining so	grees: F9-	-oased	by
ata secured from the Policeing St	cleaned_	by	Verbal report by the driller	 1		
	-		Date compiled November 1947	Dat		
ats sompiled July 1947	DateDateDapth		Material	Thickness	Depth	Regarks
Neterial	Thickness Depth (feet) (feet)	Remarks		(feet)	(root)	
No log available	300	Pumped for stock use only	Soil and hardpan	12	3 20	
		 	Seamy rock - oaft Blue bacalt, some bleck strea		36	
		 	Blue bacalt, some bleck strea Gray basalt, very hard	ik: 16	90	
			Gray baselt, very hard	30	120	
	-+					kater encountered at 90' at
		 				bottom of gray basalt. Funning necessary but SML
		 - 		<u> </u>		almost at surface.
	1					
					1	
YIS		Index number36-U 38-348-3-C	Dillon Well name			Index onaber 168-W WW-248-13-R File nomber
navis Sell name		Index number 36-U 31-34-3-C File number (Gode: Tp., R., Sec., 2 Sec.)	Well name			4N-24T-13-R File number (Code: Tp., R., Sec., ; Sec
fell name		3H-34E-3-C File number	Well name	ntv		4H-24F-13-R File number (Code: Tp., R., Sec., Sec.
OCATION:	unty	File number (Code: Tp., R., Sec., 2 Sec.)	LOCATION: Norrow Cour			4y_2vg-13-R Yile namber (Code: Tp., R., Sec., x Sec D C B A E F G B
iell name OCATION: (matilla	ngle	3H-3/E-3-C File number (Code: Tp., R., Sec., 2 Sec.)	LOCATION: Norrow Cour Blalock Island Quadran	gle		4 M - 2 W - 1 J - R 7 The number (Code: Tp., R., Sec., ; Sec.) D C B A R 7 G B M L R 7
	ngle	3H-34E-3-C File number (Gode: Tp., R., Sec., 2 Sec.) D C B A E F G H	LOCATION: Morrov Cour Blalock Island Quadran	gle		4 2 2 1 1 1 1 1 1 1 1
Pendleton Quadras 31 348 3 55 of M Tp. Range Section Fractions	ngle	3H-3/E-3-C File number (Code: Tp., R., Sec., 2 Sec.)	LOCATION: Course	gle		4 M - 2 W - 1 J - R 7 The number (Code: Tp., R., Sec., ; Sec.) D C B A R 7 G B M L R 7
OCATION:	ngle N∮ al section	3E-3-C	Morrov Cour	gle	Uso at	## 207-13-R File number
OCATION: matilla Cov remission Quadra: 3 348 3 184 of H D. Range Section Fractions TATISTICS: 11 type-Dug Elevation face)	ngle al section (land sur- Vse of t. do)	31-34E-3-C	LOCATION: Morrow Coursell	gle	dome	Tile number Tile
DOLATION: DOLA	ngle Nd (land sur- Use of the doring in	Tile number (Code: Tp., R., Sec., Sec.) D c B A E F G H M L K J N P Q R status- section when the status- section abendened	LOCATION: Norrow Country	gle 1 section (land surfit.	dome inuu irri muni	Tile number File number File number (Code: Tp., R., Sec., Sec. D C B A E F C B M L K J M P Q B tatus- stice status- strice dgation dry hole produced produced produced produced produced produced
DCATION:	ngle Ni al section (land sur- ft. dor in:	38-348-3-C	LOCATION: Morrov	gle 1 section (land sur- ft.	dome inuu irri muni	Tile number File number File number File number File number Code: Tp., R., Sec., Sec. D C B A E F C B H L K J H P Q B tatus stice stice abandoned dry hole
### DESTRICT PROPRIES ### AND 3	ngle With all section (land surft. domining in inclusions in inclusion	File number File number (Gode: Tp., R., Sec. : Sec.) D C B A E F C H N L K J N P Q R status statu	Norrow Course	gle l section (land surft. Beck	dome intu irri muni *include	Tile number File number File number (Code: Tp., R., Sec., Sec. D C B A E F C B M L K J M P Q B tatus- stice status- strice dgation dry hole produced produced produced produced produced produced
DOCATION: DOCA	ngle Ni (lend sur- ft. do in ir: sinclut A. A. Original dr	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q R Matrial desertion producer abandoned dry hole producer are mane tilers name	LOCATION: Norrow Country	land surft.	dome in nu irri suni *include	Tile number D
OCATION: mattilla Cov endleton Quadrat # 34E 3 EF of M p. Range Section Fractions TATISTICS: ell type-ras prilled x face)	ngle Nd al section (lend sur- ft. doi in ir mi rinclu A. A. Original dr	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q R Matrial desertion producer abandoned dry hole producer are mane tilers name	Morrov Course	(land surft.	dome in tu irri muni include include include	Tile number D
OCATION: endiston Quadrat # 348 3 EP of M D. Range Bection Fractions PATISTICS: ell type-raig Drilled X Driven bolow bolow inal depth 1501 I. A. Davis Ranch near Adam, Orego Ranch near Adam, Orego	ngle Nd al section (lend surft. door in	Status- Status	Norrow Cour	gle land surft. [land surft. Fock Original Add Dat Brown Description From Des	dome intuirri muni *include inal dril dress te of dri espensicased	Tile number D
MARTON: matilla Con maliston Quadrat matilla 3 Election matilla 3 Election partistics: matilla 3 Election partistics: matilla 4 Election matilla 4 Election matilla 5 Election matilla 6 Election matilla 7 Election matilla 6 Election matilla 7 Election matilla 6 Election matilla 7 Election matilla 7 Election matilla 7 Election matilla 6 Election matilla 7 Election matilla 8 Election		Tile number (Gode: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q R Manual Bandoned rigation dry hole nicipal producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X Les abandoned rigation dry hole producar X	Morrov Course	gle land surft. [land surft. Fock Original Add Dat Brown Description From Des	dome intuirri muni *include inal dril dress te of dri	Tile number D
CATION: Latilla Con Indiston Quadrat I 348 3 EP4 of N CATIONICS: LATINITICS:		Tile number (Code: Tp., R., Sec., Sec.) D c B A E F G H M L K J N P Q R status— section abandoned dry hole rigistion producer ricipal des stock wells Valla Valla, Washington rilling Spring 1944	LOCATION: Morrow Country	land mur- ft.	dome in un i	Tile number D
DCATION: natilla Cov endlaton Quadra; # 348 3 ER of M p. Range Bection Fractions PATISTICS: ell type-Dug face) Driven below inal depth 160' A. A. Davis wears name Address Pandleton, Orego this record compiled by S.S.W. ata secured from the Collowing 1. S. O. S. Ground Water Division	ngle Ni al section (lend sur- ft. doi in ir in in in inclu An An Andrese secon Dete of d from Peepenad fources: re-cased cloaned 7 Dete	Tile number (Code: Tp., R., Sec., Sec.) D c B A E F G H M L K J N P Q R status— section abandoned dry hole rigistion producer ricipal des stock wells Unitere name Valla Valla, Washington rilling Spring 1944 by	LOCATION: Morrov	land murft.	dome in un irri muni "include "include "include drii dreaa te of dri espened e-sased leaned mate	Tile number (Code: Tp., R., Sec., Sec. D C B A E 7 C B M L K J B P Q B M L K
DCATION: natilla Cov radiaton Quadra; s yig 3 Elefof M p. Range Bection Fractions PATISTICS: all type-Dug face) Driven below inal depth 160' A. Devis where name Address Fendleton, Orego this record compiled by S.S.W. ata secured from the Collowing . S. O. S. Ground Fater Division		Tile number (Gode: Tp., R., Sec., 2 Sec.) D C B A E F G H N L K J N P Q R status— seatic x abandoned dry hole anticipal producer x des stock wells by D c B A E F G H N L K J N P Q R Remarks	LOCATION: Morrow Country	land surft.	dome in un irri muni "include "include "include drii dreaa te of dri espened e-sased leaned mate	Tile number (Code: Tp., R., Sec., Sec. D C B A E F C B M L K J N P Q R tatus status status status tatus tatus tatus tatus tatus status
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CATION: catilla Con catilla C		Tile number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L K J N P Q R Matrial abandoned dry hole ricipal producer 2 des stock wells producer 2 des stock wells. Weshington Tilling Spring 1944 by Remarks Bailed 2 hr. and lowered water 5', SWL 15' March 1944 6 5/8' casing seated at	Morrov Cour	Control Cont	dome in a unit i	Tile number (Code: Tp., R., Sec., Sec. D C B A E 7 C B M L K J B P Q B M L K
CATION: catilla Con catilla C		File number (Gode: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q R Balance abandoned rigstion dry hole nicipal producer x by Darand & Son Cliere name Valla Valla, Weshington rilling Spring 1944 by Bailed 2 hr. and lowered valle Valle, SW115 March 1944	Morrov Country	Control Cont	dome in nu irri mai mai minclude inal dril dreas te of dri espend e-sased leaned popth freet) 2	Tile number Tile number Tile number Tile number Tile number To B A E 7 G B M L K J N P Q R To State The state of
DCATION: natilla		File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R Walta sandoned rigstion dry hole producer X des stock wells Durand & Son Illers name Valla Valla, Washington rilling Spring 1944 by Bailed 2 hr. and lowered water 5', SW: 15' March 1944 6 5/8" casing essted at 25' - open bottom	Morrov Cour	Control Cont	dome in a unit i	### 2017-13-R Tite number (Code: Tp., R., Sec., Sec. D C B A R F G B M L K J H P Q R #### Benaries ###################################
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CATION: Indiston Quadrat I 348 3 Ept of M D. Range Bection Fractions PATISTICS: 11 type-Dag Elevation face) Driven below Inal depth 160: A. Davis Where and the record compiled by S.S.V. Bata secured from the Jollowing S. O. S. Ground Water Division ate compiled Daccaber 1947 Naterial Soil Boulders and hardpan* Basalt, gray SVL 20: Basalt, soft SVL 15: Basalt, hard SVL 25:		File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R Walta sandoned rigstion dry hole producer X des stock wells Durand & Son Illers name Valla Valla, Washington rilling Spring 1944 by Bailed 2 hr. and lowered water 5', SW: 15' March 1944 6 5/8" casing essted at 25' - open bottom	Morrov Cour	Cland surft. Peck	dome in a unit i	### A Para 1-18 Tite number (Code: Tp., R., Sec., Sec. D C B A R F G B M L K J B P Q B WILL K J B P Q B With a bandoned dry hole detail producer set 100 by Banarks Sirst water at 101 (surfac witor. This sealed off b casing to about 500. Next water connected at about 505. Next water connected at about 505. Next water connected at about 505. Next Fresaure tested 10 10 berseled off b casing to about 505. Next water connected at about 505. Next Fresaure tested 10 10 berseled off b casing to about 505. Next Fresaure tested 10 10 berseled off b Fresaure tested 10 10 berseled off b Fresaure tested 10 10 berseled 10
CATION: Latilla Councillation Quadrat [1 348 3 Ept of M Fractions [2 348 3 Ept of M Fractions [3 348 3 Ept of M Fractions [4 348 3 Ept of M Fractions [5 2 3 Ept of M Fractions		File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H N L K J N P Q R Will status- mentic I abandoned rigstion dry hole micipal dees stock wells Durand & Son Illers mans Valla Valla, Washington rilling Spring 1944 by Bailed 2 hr. and lowered water 5', SW: 15' March 1944 6 5/8" casing seated at 25' - open bottom	Morrov Cour	Cland surft. Peck	dome in a unit i	AN _20r_1]-R Tile number (Code: Tp., R., Sec., Sec. D C B A R T G B M L K J H P Q R WITTER WITTER Second of the second o
CATION: atilla Con mileton Quedrar 1 348 3 Epi of M 2. Range Bection Fractions ATISTICS: 11 type-Dag Elevation Drillad X face) Driven below and depth 160: A. Davis mars name Ranch cear Adam, Ore Banch cear Adam, Ore one record compiled by S.S.V. ata secured from the Jollowing 3. 0. 3. Ground Water Division ats compiled Daccaber 1947 Naterial Soil Besalt, gray SWL 20: Basalt, seft SWL 15: Basalt, seft, SYL 30:		File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R Setatus- mentic I abandoned rigstion dry hole micipal des stock wells Dorand & Son There name Wells Valle, Weshington rilling Spring 1944 by Bailed 2 hr. and lowered vater 5', SW: 15' March 1944 6 5/8" casing seated at 25' - open botton	Morrov Cour	Cland surft. Peck	dome in a unit i	Tite number Tite number Tite number Toda: Tp., R., Sec., Sec D C B A R T C B N L R J N P Q R The number of

Doherty #1			Index number 100-M				
Well name			23-25E-19-EQ File number	Dudley #2 Well name			Index number - none-U
			(Code: Tp., R., Sec., Sec.)	WOLL Hand			File number (Code: Tp., R., Sec., Sec
LOCATION:			D C B A	LOCATION:			
MorrowC			E F G H	UmntillaCc	unty		D C B A
Blalock Island Quadr.			M L K J	Quadra	ingle		
23 25E 19 Vi of S Tr. Range Section Fraction	nal section		N P Q R	Tp. Range Section Fraction	al section		N P Q R
STATISTICS:							
Nell type-Dug Elevation Drilled x face) Driven show below		lrri. muni:		STATISTICS: Well type-Dug Drilled X Driven Enver Enal depth 260'	(land sur- ft.	dom in: irr	status- sestic* strial sbendoned (gation dry hole) icipal producer
Set! Doherty		include.	a stock wells			*includ	es stock wells
Owners name Address	Origi A4d	nal drll	ers name	Dean Dudley Owners name	Orle		llers name
			Iling About 1915	Address Athena, Oregon			Mal'a Walla, Washington
This record compti doy N.S.V. data secured from the lowleng owner Once compiled July 1947	from Doc sources: re- cit	opened -cased eaned	by	This record complicate M.S.W. data escured from the collowing	from D	te of dr espened_ e-cased_ leaned	illing Sept. 4 Oct. 1945
	Thickness			Date compiled January 1945	De	1te	
Material	(feet)	freet)	Remarks	Naterial	Thicknes (feet)	S Depth (feet)	Remarks
So log nvailable	_	104	6" hole reduced to 2" at	Soil	8	8	
			bottom section of hole. Water stance at -30'. Has	Sandy clay	55	63	
			ne wer pumped dry with a windmill pumping unit.	Gravel and said	11	74	
<u> </u>				Camented gravel	- 6	80	
				Hard brown cand	10	30	
				Cemented gravel	14	104	
				Hard brown anni and rock	7	111	
				Hard breelt	39	210	
				Soft basalt	10	226	
		`				_	
				Blue clay	5	225	
				Brown clay	10	235	
		I	ndex number 101-M	Gravel	2	237	
herty #2	-		2W-25E-2C-E	Gray shale	. 23	260	SWL 2001
			Code: Tp , R., Sec., Sec.)				Balls 20 g.p.m., but also
CATION:			D C B A			ļ	balls dry.
Cour	nty		E F G H				
alock leland Quadran	gle		H T K 1				
252 20 SW corner Range Section Fractional	of 5W2		N P Q R	<u> </u>			
. name Section Fractions.	1 Section		<u>• </u>				lnder number 147-G
ATISTICS:				Hulden Well name	_		File number
	(land sur-	Dee state	is- Well status-	4			(Code: Tp., R., Sec., 2 Sec.)
	rt.	inust: lrrigat aunicij	riel abendoned	LOCATION: Gilliam Coun Arlington Quedrang	ity		D C B A
Drillad x face) Driven above below nal depth 125'	•1:	ncludes	STOOL WELLS		ele		
Drilled x face) Driven above below	_	ncludes i		2B 21E 18 Tp. Range Section Fractional			B P Q R
Drilled x face) Driven above below hal depth 125'	Origina Addre	ncludes	a name	2B 21E 18			
Drilled x face) Driven above below hal depth 125' 1 Doherty hers name Address is record compined by N.S.W. has secured from the collowing so	Origina Addre	l driller ss of drilli	a name	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (Drilled x face) Driven above	section	Use sta domea in.us	tue- tic- trial statue- standoned
Drilled x face) Driven above below nal depth 125' 1 Deherty ners name Address is record compiled by X.S.W. as assumed from the following so	Origina Addre	l driller ss of drilli	a hame	ZH ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (Drilled x face)	land aur-	domea in.us irrig munic	tue- tic* trial standonod stion dry hole x producer
Drilled x face) Driven above below nal depth 125' 1 Doberty ners name Address is record compined by N.S.W. ta secured from the following so	Origina. Addre	l driller ss of drills ened	a hame	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elsvation (face) Driven above below	esction	domea in.us irrig irrig munic eabulant	tue- tic- trial shandoned ston dry hole x
Drilled x face) Driven above below hal depth 125' 1 Deherty ners name Address is record compined by N.S.W. ta secured from the following so er te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ssed nad	a hame	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Driven below below Rulien Eanch Owners name	asction land surft. R. B. V	domea in.us irrig munic includes ilburn	tue- tic* trial shandoned dry hole x producer stock wells
Drilled x face) Driven above below nal depth 125' 1 Doberty ners name Address is record compined by N.S.W. ta secured from the following so	Origina Addre	l driller ss of drills enod enod enth eet)	ng shout 1918 by Remarks hole - Strong flow en-	ZH Z1E 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elsystion (face) Driven below Final depth 200'	and aur- ft. R. S. V	domea in.us irrig munic includes filburn al irille	tue- tic" trial shandoned artion dry hole x producer stock wells ore mane E12 E. 7th, The Delles
Drilled x face) Driven above below nal depth 125' 1 Deherty mure name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli enod ssed ned epth eet) 125 52	ng shout 1918 by Remarks hole - Strong flow enumbered with no noted const variation. Water	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (and aur- ft. R. S. v Origin Addre	domea in.us irrig munic includes filburn al irille	tue- tic" trial shandoned artion dry hole x producer stock wells ore mane E12 E. 7th, The Delles
Drilled x face) Driven above below hal depth 125' 1 Deherty ners name Address is record compined by N.S.W. ta secured from the following so er te compiled July 1947 Material	Origina Addre	l driller ss of drills enod ssed epth eet) 125 5= spe pt	Remarks hole - Strong flow enmirered with no noted eonal variation. Water ust to a height of about with well full open. In	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Driven below below Rulien Eanch Owners name	R. S. V Origina Addre Date from Deep	domea in us irrig munic includes illburn al drilli ess of drill essed	tus- tic" triel shandoned ary hole x producer pane cl2 E. 7th, The Dalles
Drilladx face) Driven above below be	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water use to a height of about with well full open. In ctice the well is kept I led hade to between 2*	ZE ZIE 18 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (H. H. S. VORIGINA Address parts of the parts	domea in.us irrig munic includes filburn al irille ees of drill	tue- tic" trial shandoned artion dry hole x producer stock wells ore mane E12 E. 7th, The Delles
Drilled x face) Driven above below nal depth 125' 11 Deherty mure name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water ust to a height of about with well full open. In	Tp. Range Section Fractional Tp. Range Section Fractional STATISTICS: Well type-Dug face) Driven show below Final depth 2001 Rulien Eanch Owners name Addreas Unatilla, Oregon This record compiled by Dole data secured from the following soul	H. H. H. Origini Address from Deep roces: re-clea	domea in us irrig munic includes includes includes of drillies of drillies and includes inclu	tus- tic" triel shandoned ary hole x producer pane cl2 E. 7th, The Dalles
Drilled x face) Driven above below nal depth 125' 11 Deherty more name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water use to a height of about with well full open. In ctice the well is kept I led hade to between 2*	Tp. Range Section Fractional Tp. Range Section Fractional STATISTICS: Well type-Dag Flowering face) Driven Selow Final depth 2001 Stiden Eanch Owners name Address Unatills, Oregon This record compiled Dole data secured from the Jollowing son letter from driller, Jan. 19, 1948 Date compiled January 1948	H. H	domea in us irrig munic includes il fill includes il fill includes of drilling ses includes i	tus- tic" triel shandoned ary hole x producer pane cl2 E. 7th, The Dalles
Drilled x face) Driven above below nal depth 125' 11 Deherty more name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water use to a height of about with well full open. In ctice the well is kept I led hade to between 2*	Tp. Range Section Fractional Tp. Range Section Fractional STATISTICS: Well type-Dug face) Driven show below Final depth 2001 Rulien Eanch Owners name Addreas Unatilla, Oregon This record compiled by Dole data secured from the following soul	H. H. H. Origini Address from Deep roces: re-clea	domea in.us irrig munic includes (ilburn al irilloss) of drill seed uned	tus- tic" triel shandoned ary hole x producer pane cl2 E. 7th, The Dalles
Drilled x face) Driven above below nal depth 125' 1 Deherty mure name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water use to a height of about with well full open. In ctice the well is kept I led hade to between 2*	Tp. Range Section Fractional Tp. Range Section Fractional STATISTICS: Well type-Dag Flowering face) Driven Selow Final depth 2001 Stiden Eanch Owners name Address Unatills, Oregon This record compiled Dole data secured from the Jollowing son letter from driller, Jan. 19, 1948 Date compiled January 1948	section It. R. S. V. Origin Addre Date from Deepirces: re-clea	domea in.us irrig munic includes munic includes filburn at irrilless of drill seas	tue- tic* standard dry hole x producer ere name 612 E. 7th, The Delles
Drilled x face) Driven above below nal depth 125' 1 Deherty mure name Address is record compined by N.S.W. ta secured from the following so ser te compiled July 1947 Material	Origina Addre	l driller ss of drilli ened ened ened 125 50 500 per pr bos	Remarks hole - Strong flow enmirered with no noted eonal variation. Water use to a height of about with well full open. In ctice the well is kept I led hade to between 2*	TP. Range Section Fractional Tp. Range Section Fractional STATISTICS: Well type-Dig Elevation (face) Driven below Final depth 200! Stiden Eanch Owners name Address Umatille, Oregon This record compiled Dole data escured from the following soul letter from driller, Jan. 19, 1948 Date compiled January 1948 Naterial	section It. R. S. V. Origin Addre Date from Deepirces: re-clea	domea in.us irrig munic includes munic includes filburn at irrilless of drill seas	tue- tue- tic* **Fell statue- tic* standoned ary hole x producer stock wells **Fell statue- **Trial standoned ary hole x producer stock wells **Fell statue- **Trial standoned ary hole x producer stock wells **Fell statue- **Trial standoned ary hole x producer stock wells **Fell statue- **Trial standoned ary hole x producer **Fell statue- **Trial statue- **Trial standoned ary hole x producer **Fell statue- **Trial statue- **Trial standoned ary hole x producer **Fell statue- **Trial statue- **Trial standoned ary hole x producer **Fell statue- **Trial statu

			Index number 144-G 3N-22E-16-2	Index number 169-W 49-24E-13-L Filo number
oll name			ile number Code: Ty., R., Sec., Sec.)	Well name (Code: Tp., R., Sec., Sec.
CATION:			[LOCATION: D C B A
CATION: Gilliam County	,		D C B A E F G H	Horrow County E F G H
irlington Quadrangle			M L K J	Flalock Island Quadrangle M L K J
3E 2ZE 16 SW of EV			N P Q R	48 24F 13 SEction Fractional section
TATISTICS:				STATISTICS:
ell type-Dug Elevation (la		Use sta	tus- Well status-	Well type-Dug Elevation (land sur- Use status- Drilled x face) ft. domestic x
Drilled I face)	ft.	in nes	trial abandoned dry hole	Driven above in ustrial abandoned dry hole trigation dry hole
inal depth 2631 bslow		irrig nunic includes		Final depth 721 auntital producer - **includes atock molls**
J. V. Krebs	Origin	i. Suller al árill	ATA DAMA	C. D. Endes A. H. Katwards Owners name Address Boardman, Oregon Address Lexington, Oregon
Address Cecil, Oregon	Addr	esa	Ontario, Gregor	Address Boardman, Oregon Address 1940
	'	of dril	11118	This record compiled by B.S.V. from Deepensd
his record complied by N.S.W. ats secured from the collowing sour	from Dec rces: re-	pened cased	by	data secured from the following sources: re-cased
Les recorded by Virgil Starr and f	urnished	aned	by	Verbal log report by the driller with production comments by E. A. Eades
by R. S. Bennett, U. S. Bureau of Management, Saker, Oregon	Land	e_		Date compiled Harch 1948 Date
ata compiled November 1947	Thickness	Depth	Remarks	Material Thickness Depth Remarks
Naterial	(feet)	(feet)	Casing 6" to -16"	Soil and hardpan 10 10 Well flows.
Top soil Moderately hard, black	16	18		Blue basalt (streaks of black) 13 23 Strong pressure no volume data.
porous besalt	14	32		Gray baselt 32 65 volume data.
Rard blue basalt Moderately hard, black porous basalt	8	40		Black honeycomb basalt 7 72
Soft gray shale and clay	64	104		Pressure sufficient to operate desestic water and
Moderately hard, black basult	_	114		garden sprinkling system simultaneously without
variously nord, derk conglomerate	20	134		mechanical boosting.
Hard black basalt	6	140	Water, 50 gal, 1 day	
Untsually hard, gray basalt	61	201		
Moderately hard, brown porous basalt	7	208		
Soft, gray shale and clay	20	228		
Soft brown lave and sand	6	234	Water, 17 g.p.m.	Index number 170-W
Soft brown clay Very soft, darker gray	11	245		Fades (B. A.) File number
Very most, darker gray	18	263		Well name (Code: Tp., R., Sec., Sec
	+	 		LOCATION:
			<u> </u>	Morrov County E F G
ELY			Index number 171-H 42-25E-18-E	Flaluck Island Quadrangla M L K
Well name	<u>-</u> 		Film number (Code: Tp., R., Sec., Sec.)	Tp. Range Section Frectional section
LOCATION:				
HOFFOW COUR	nty		D C B A	STATISTICS: Well type-Dug Elevation (land sur- Use status- Well status-
Blalock Island Quadrang	-		M L K J	Well type-Dig Elevation (land aut domestic x domestic x abandoned
AND DESCRIPTION OF THE PARTY OF			N P Q R	below irrigation dry hole producer
W 25E 18 SEL of MEL	section			Final depth 93' aunicipal producer_
Tp. Range Section Fractional				R. A. Tades Abe Hausen Original Arillers name Original Arillers name
Tp. Range Section Fractional			•	
Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation ((land mur- ft.	dom	tatus- Well status-	Andress Statement Company
TD. Range Section Fractional STATISTICS: Well type-Dug Elevation (dom in: irr	esticabandonedigationdry hole	Date of drilling 1928
Tp. Range Section Fractional STATISTICS: Well type-Dig Elevation (Drilled x face)		dom in: irr mun	estic* abandoned	Date of drilling 1925 This record complied by N.S.V. from Despend rooths Collowing sources: re-cased
Tp. Range Section Fractional STATISTICS: Well type-Dug	ft.	dom in: irr mun *includ	ustriel abandoned leation dry hole leation producer leation producer	Date of drilling 1928 This record complied by E.S.V. from Despend
TP. Range Section Fractional STATISTICS: Well type-Dug	ft.	dom in: irr mun *includ	sstic*	Date of drilling 1928 This record complied by N.S.V. from data secured from the following sources: re-cased cleaned by
The Range Section Fractional STATISTICS: Well type-Dug Flevation (face) Driven below below Final depth 90'	Orig	dom in: irr mun *includ	astic	Date of drilling 1928 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date
Typ. Range Section Fractional STATISTICS: Well type-Dig facs) Driven sorre Pinal depth 90: Elvin L. Bly Owners name Address Boardman, Uregon	ft. Orig Ad De	dom in: irr mun *includ tinal dri dress ite of dr	satic abandoned spring from the strict abandoned spring from the s	Date of drilling 1928 This record complied by N.S.W. from date secured from the Pollowing sources: Owner Date compiled March 1948 Date Meterial Thickness Depth (feet) Remarks
TP. Range Section Fractional STATISTICS: Well type-Dug	Orig	dom in: irr mun *includ tinal dri dress ite of dr	satic abandoned spring from the strict abandoned spring from the s	Date of drilling 1925 This record complied by N.S.V. from Deepened re-cased cleaned by Owner Date compiled March 1945 Date Material Thickness Depth (feet) feet) 6° hole - cased to bottom So log available 93 6° hole - cased to bottom
The Range Section Fractional STATISTICS: Well type-Dig Faces Drilled A faces Driven Shore below Final depth 90: Elvin L. Bly Owners name Address Boardman, Oregon	Orig	dom ind irr mun includ inal dri dress ite of dr	astic abandoned lightion dry hole leipal producer a stock wells lier bane 1924	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
The Range Section Fractional STATISTICS: Well type-Dig	Original De Courses: r	dom ind irr mun includ inal dri dress ite of dr	astic abandoned lightion dry hole leipal producer a stock wells lier bane 1924	Date of drilling 1928 This record complied by E.S.V. from data secured from the Following sources: re-cessed cleaned by Owner Date compiled March 1949 Date Material (free) geet) Remarks Follog available 93 6° hole - cased to bottom
The Range Section Fractional STATISTICS: Well type-Dug face) Drilled x shore Pinel depth 90! Elvin L. Bly Owners name Address Boardman, Oregon This record compiled by M.S.V. data secured from the Collowing at	Orig Ad De from L Ourdes: r	dom in' in' includ inal dri dress ite of dr Despend e-casad	ustriel abandoned lightion dry hole leipal producer growth walls librar name 1924 by by	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
The Range Section Fractional STATISTICS: Well type-Dig face) Drilled face) Driven below Final depth 90' Elvin L. Fly Owners name Address Boardman, Oregon This record compiled by 8.5.V. date secured from the following at Owner Date compiled Harch 1948 Naterial	Orig Ad De from L Ourdes: r	dom in' irr mun *includ trindidri dress ite of dr e-casad cleaned	setic _ abandoned setion dry hole leipal producer_	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
The Range Section Fractional STATISTICS: Well type-Dig Faces Drilled x Solve Pinel depth 90: Five Delow Final depth 90: Five Delow Final depth 90: Five Delow Five D	Orig Ad De from L Ourdes: r	dom in: includ i	setic	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
Tp. Range Section Fractional STATUSTICS: Well type-Dug Flevation (Orig Ad De from L Ourdes: r	dom in: includ i	restor abandoned dry hole leipal producer se stook wells producer se stook wells libre hame self the self self self self self self self sel	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
Tp. Range Section Fractional STATISTICS: Well type-Dig Elevation {	Orig Ad De from L Ourdes: r	dom in: includ i	restor a bandoned dry hole icipal producer a restor wells by restor well by restor wells well and restor well by restor well by restor well	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest
Tp. Range Section Fractional STATISTICS: Well type-Dig Flevation (Orig Ad De from L Ourdes: r	dom in: includ i	with abandoned dry hole leipal producer session wills producer session wills producer session will be stook wills libra hame session will be second to service domestic sets system without sectantical boost. Pump necessary boy Vasary will but sectantical boost. Pump necessary by will be sets system without sectantical boost. Pump necessary by well be set of the sectantical boost. Pump necessary by well be set of the sectantic set of th	Date of drilling 1925 This record complied by N.S.W. from Despend re-cased cleaned by Owner Date compiled March 1948 Date Material Thickness Depth Remarks (feet) 90 6° hole - cased to bottom Whether this well flowed was cased out is not know Mades, Papped for domest

Eastern Oragon Food Co-op #1	_		Index number 23-U 45-352-15-P
Well name			File number (Code: Tp., R., Sec., Sec.
LOCATION:			
Umstilla Cour			D C B A
Unmapped Quadrang	şlə		E P G H
48 35E 15 SE of SW			MLKJ
Tp. Range Section Fractional	section		N P Q B
STATISTICS:			
Well type-Dug Elevation (Drilled x face)	land sur-	Uae a	tatus- Well status-
D1.1 A6 11 800 A6	rt.		
Pinal depth 737'			igation dry hole
			es stock wells
Bastern Oregon Food Co-op	A. A	. Durand inal dri	llers name
Address Veston, Oregon			Walls Walls, Washington
	_ De	te of dr	illing flmished Spring 1946
This record compiled by S.S.V. late secured from the following so	_from D urces: r	eepanad_ e-cased_	-
U. S. G. S. Ground-Water Division		leaned	by
enspany officials			
Date compiled Jan. and Fab. 1944	Thicknes	ats_	
Neteriel	(fest)		Remarks
5011	8	8	
Gravel	4	12	
Gravel and clay	4	16	ļ <u>.</u>
Zacalt, herd gray	10	26	
Basalt, medium hard	52	78	
Besslt, hard	55	133	
Basalt, hard gray	3	136	
Bassit, sedium hard	48	184	
Basalt, hard	32	216	
Basalt, gray, hard	20	236	
Basalt, medium	49	285	
Besalt, bard gray	25	310	
Basalt, hard	70	380	
Clay, brown sticky	- 5	385	
Basalt, medium hard	56	441	
Besalt, hard	194	485	
Basalt, dark	22	507	
Basalt, soft	11	578	
Basalt, dark	22	550	_
Besalt, gray	28	578	
Basalt, dark, black	72	650	
Baselt, gray and hard	5	655	
Baselt, dark	18	673	
Basalt, gray	20	693	
Basalt, dark	25	718	
Basalt, brown, medium hard	13	731	7.4 6.3.7
Basalt, gray	6	737	Bottom of hole
Casing 20" set to 20"; 16" se			
Pumped 1574 g.p.m. with 1611 d	ravdovn af	ter 42 h	purs - May 5, 1946.
Water Temp. 60°F.			
Company officials report SWL a at 1000 g.p.m. In usage, this was adversely affected by a pu at a depth of about 720;	t 30' and well is p mp test of	a 168'd amped ar the #2	pawdown in a 48 hour test bund 850 g.p.m. This well well when it was tested
	_		<u>- </u>
			-
	- 1		

Elgin City #1			Index number 191-Un 18-392-15-J
Well name			File number (Code: Tp., 2., Sec., Sec.)
LOCATION:			D C B A
Union Cou	inty		Z F G H
Unsapped Quadran			H L K J.
Tp. Range Section Fractiona	1		N P Q R
Ty. Manager Botteron Fractional	1 3400100		
STATISTICS:			
Well type-Dug Elevation face) Drilled 1 face) Driven above below	(land eur-	Uae a dom	tatue- Well atatus-
Driven above		in	striel abandoned dry hole icipal x producer x
Final depth 2901		au.	icipal x producer x
City of Elgin	A . A.	Durand	& Son
Owners name Address	Origi	nal dri	llers name Walla Walla, Wesnington
	Det	e of dr	Illing May to July 1940
This record compiled by H.S.W. lets secured from the Following so	from De	epened	
lata secured from the collowing so	ources; re	o-cased	ъу
Driller and clty officials	_		
ete compiled January 1948	De	ta_	
Naterial	Thickness (feet)	Depth	Remarks
Top soil	(1886)	6	8" hole
Gravel and boulders	6	12	Well flows 125 g.p.m.
Gravel and clay	12	16	Temp. 52°F.
Gravel and sand	16	18	
Boulders and clay	16	20	Fump installed delivers
Blue clay	20	23	400 g.p.m drawdown 106*
Clay	23	70	
Sandy, gray shale	70	75	According to City officials
Gray shale	75	109	According to City officials this well is capped. The pumping of the No. 2 Elgin
Shale	109	118	well drains this well to the point of drying it. Both this and the No. 2
Sand and gravel	118	123	well will flow, however,
Blue shale	123	127	given a sufficient period of recovery.
Clay	127	133	
Gray shale	133	170	
Blue clay	170	197	
Coarse sand	137	201	
Water sand	201	212	
Black sand and clay	212	232	
Gray snale	232	275	
Black basalt	275	283	
Hard, black basalt	28 -	290	Bottom of hole
		_	
	-		
	 		
	+		
	 		
	1		
	1		
	† -		
	1		
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		T	
	1		
	1		

			Index master 24-U 4E-35E-15-P
Hastern Oregon Food Co-op #2			File number
LOCATION:			(Code: Tp., R., Sec., 2 Sec.)
Umatilla County	•		D C B A
Unnapped Quedrengle			E F C H
			M L X J
Tp. Range Section Fractional	ection		
TATISTICS:			
fell twoe-This Elevation (1s	and sur-	Vac at	atus- Well status-
Drivenabove	ft.	dome	strial I abandoned
Final depth 1218'		munic	gation dry hole cipal producer x s stock wells
Bastern Oregon Food Co-Op Owners name Address Veston, Oregon	001.01	Durand on l	a Sch lare name Vells Walla, Washington
Address westen, bregen		o of dri	
This record compiled by W.S.V.			
lata secured thow the tottowing sort	.ces; 10	-cased	_ _ by
U. S. G. S. Ground-Water Division Driller from 539' to bottom of hole	60 539¹.		
Also company officials Date compiled Jan. and Feb. 1948		to	
Material	Thickness	Depth	Remarks
	(feet)	18	
Soil	18	21	
Rock, brown	5	26	
Basalt, dark hard	45	71	
Basalt, porous	14	85	
Basalt medium to hard	35	120	
Basalt porous and with green c		130	
Basalt soft gray	13	143	
Baselt herd black	4	147	
Basalt porous	11	158	
Basalt black	12	170	
Basalt hard gray	20	190	
Baselt black	2	192	_
Basalt gray	5	197	
Basalt hard black	14	211	
Baselt gray (SVL 11')	3	268	
Besalt, black, hard, caves	17	225	
Basalt, porous	2	242	
Basalt, hard black	26	270	
Basalt, perone gray Basalt, hard gray	2	272	-
Baealt, hard black	16	288	
Basalt, hard gray	13	301	
Basalt, porous black	20	321	
Basalt, black	30	351	
Basalt, porous	5	356	
Shale, wown	8	364	
Snale, brown and blue	8	372	
Basalt, porous	38	410	
Basalt, medium	13	423	
Basalt, porous	12	435	
Basalt, hard black	4	439	
Basalt, percus	2	441	
Basalt, medica	39	480	
Basalt, hard gray	12	492	
Basalt, porous - water	35	527	-
	12	539	
Basalt, nard black	25	564	-
Basalt, hard gray		***	
	5	569	
Basalt, hard gray Basalt, medium black Basalt, hard gray	5 3/4	601	Lost water at 6001
Basalt, hard gray Basalt, medium black	5		Lost water at 600'

3 n 3	681 752	
 	752	
3		
	755	
5	760	
25	785	
10	795	
52	847	
13	860	
20	880	
8	888	
2	890	
1	891	
244	1135	
6	1141	
74	1215	
3	1218	
		Bottom of hole
well at dep	h of 76	affected a drawdown of
104'. Tes	Dec. 4	a final drawdown of 171'. to 27, 1946.
g of pump t	est 5	oy. Tamp, increased with
remained co	dstant.	Final pump test Sept. 5, I 1012 g.p.s. drawdown was 13
, h.		
9 6"	<u> </u>	
	10 52 13 20 8 2 1 2444 6 74 3	10 795 52 847 13 860 20 880 8 888 2 890 1 891 244 1135 6 1141 74 1215 3 1218 well at depth of 76 200 6.p.m whowed 304'. Test Bec. 4 g of pump test 5 comm was 74'. At

Index mmsber -- 172-N
4N-25E-18-E
File number
(Gode: Tp., R., Sec., ; Sec.)

LOCATION:							
				D	С	В	A
Morrow Count	У			ž	7	G	н
Blalock Island Quedrangi	.•			¥	ı	x	3
Tp. Range Section Fractional				N	P	-	2
Tp. Range Section Fractional	section			L.,	بنا	_`	لتا
-							
STATISTICS:							
Well type-Dug Elevation (1 Drilled x face) Driven above	and our-	Use at	atue-	¥o	11 #	tetu	-
Drilled x face)	ft.	dome	atic"_x		a bar	402	ed .
Driven above below		irri	gation		ary	hole	;
Finel depth 851		zuni	gation oipal		pro	iucs	三
		include	s stock well	•			
A. R. Fortner							
Owners name Address Boardman, Oregon			lers name				
A141488	-				010		
	Dat	e of ari	llingal	20 E 1	917		
This record compiled by N.S.V.	from De	epened	_				
This record compiled by M.S.V. data secured from the Pollowing sou	rces: re	-cesed					
	61	eanea	_ ",				
Owner, McEntire and Bickerson							
Owner, McEntire and Bickerson	-				_		
Owner, McEntire and Bickerson Date compiled March 1948	-	t•				_	
Owner, McEntire and Bickerson	Thickness	Depth		lepark			
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	F				
Date compiled March 1948	Thickness (feet)	Depth	Well flows.			ter	
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	F	mesti	c va	ter	ro,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Vell flows.	mesti atura	c wa	ter	r•.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	re,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	re,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ri.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ri,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	re.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ro.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	re,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	re,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	ri.
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	70,
Owner, McEntire and Sickerson Date compiled March 1948 Material	Thickness (feet)	Depth (feet)	Well flows. Supplies do system by r	mesti atura	c wa	ter	

Fortner Well name

Bohe City			Index maker 77-0 3E-29E-16-E
Well name	-		File number
LOCATION:			(Code: Tp., R., Sec., ; Sec.)
Unetilla Coun			D C B A
Unatilla Quadrang			Z 7 G H
an son 14 mal e mal			M L E J
Tp. Hange Section Fractional	section		N P Q R
STATISTICS:			
Well type-Dist Planeties (lard sur-	Tae e	tatue- Well statue-
Drilledx face) Driven above	ft.	dom	estic* ustrial abandoned
Final depth 520'		irr mun	igation dry hole
·	-	*include	es stock wells
City of Echo	Ort a	inal /ci	lera nama
Adress	_ Ad	drans	Lexington, Oregon
		te dr	illing Oct, 1945 to Sept, 1947
This record compiled by E.S.V. data secured from the following sou	from D	e-cased_	_
Driller	c	leaned	
	-		
Date compiled October 1947		ate	
Naterial	Taicknes (feet)		Remarks
Soil	4	4	Casing log and pump test
Gravel and hardpan	26	30	data entered on last log
Dirt	5	35	ebeet.
Loose sand and gravel	2	37	
Red clay	7	44	
Loose gravel	2	46	
Hardpan	6	52	
Rock	4	56	
Red clay	6	62	
Soft red rock	10	72	70 - some water
Soft red rock	5	77	at 75 - lost most water
Pea gravel	11	78 <u>k</u>	
Red clay	5_	831	
Tellow rock with boulders	141	98	
Blue rock, broken and and	12	810	Some water
Blue rock	5	115	
Hard rock, mud and blue clay		<u> </u>	
between layers of boulders	10	125	
Solid rock	8	133	
Broken "cube" basalt	9	142	Very slow drilling
Blue gray basalt	10	152	
followed by very hard basalt	14	166	
of brown shale followed by	18	184	
Blue and gray basalt	30	214	
Shale and rock in 6° ave. layer		232	
Eard, solid clay	7	239	
Oreen shale, hard	16	241	Water at 250
Basalt	6	257	Vater at 257
			
Bassit - extremely hard Blue bassit - siternate soft and hard layers		274	
Brown rock	8	278 286	
Hard basalt	4	290	
Alternate hard rock and clay in 6° to 8° layers	6	296	
Crevices	4	300	Water dropped 281
Blue rock and some clay layers	25	328	
Bard baselt	62	390	
Extremely hard basalt	16	406	
Seams and previous in baselt		410	Water dropped 501
Yery hard basalt	1	411	
Shale	1	412	
Blue rock with crevices	8	420	
Very hard gray basalt	5	425	
	(sout)	med)	

	_		
Temp. H ₂ C is 67°y.			
Drawdown with above equipment a	man 601 at	100 g.p	m Ho difference meted w
Pump test with 6° deep well pum		1	
Cased 169° with 10° casing.			
00 hole to 169' to 536' 8 hole 336' to 520',			
124 hole to 169			-
Casing log:			
Hard baselt	22	520	Bottom of hole
thick between basalt layers	8	498	
Hard boulders and soft spots Green clay seams a few inches	30	490	
Black baselt (and water course)	17	1460	Water dropped to 220' leve
			5 hours with no penetration
Boulder and crevice	1	**3	Water and some sand, Dril
Black basalt	5	442	Vator at 442
Medium woft blue rock	12	437	

Onbert			Index ousbe	r 119-H
Well name	-		File number	S-231-32
	-			R., Sec., 5e
LOCATION:				D C B
Horrow Coun	ty			E 7 G 1
Unmapped Quadrang	le			
25 232 32 204				
Tp. Range Section Frectional	section			N P Q I
STATISTICS:				
Well type-Dug Elevetion ()	land our-	Uso at	tatuo-	Well status-
Drilled x face) Driven shows	ft.	dom	etio* x	
below		irr	gation	ebendomed dry hole_
Final depth 2761			icipal s stock wells	producer
Gabert Holmes	7			
Owners heme	Origi	Michoson nal dril	lers name	
Address Portland, Oregon	_ Add	lrees	Iona, Orego	
			lling Summ	er, 1947
This record compiled by E.S.W.	from De	epened_	_	
ats secured from the following sou	Tces: Le	-cased_	by	
Driller and Morrow County Recorder				
Oate compiled October 1947	De	te		
Material	Thickness (feet)	Depth	Ba	garks
Material Top soil	Thickness (feat)	Depth	5 5/8" hole.	
	(foot)	(feet)	_	
Top soil	(feet) 21/2 24/2	Depth (feet)	_	
Top soil Shelly boulder formation	(feet) 21/2 24/2	Depth (feet) 21/2	_	
Top soil Shelly boulder formation Soft formation with little cla	(feet) 2 1/2 24 1/2 8	Depth (rest) 21/2 27	5 5/8" hole.	
Top soil Shelly boulder formation Soft formation with little cla Blue basalt	(feet) 21/2 24/2 8 34	Depth (reet) 2½ 27 35 69	5 5/8" hole.	
Top soil Shelly boulder formation Soft formation with little cla: Elue basalt Hard gray basalt	2 1 2 1 3 4 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	Depth (feet) 21/2 27 35 69 82	5 5/8" hole.	
Top soil Shelly boulder formation Soft formation with little cla; Elue basalt Hard gray basalt Brown porous rock	(feet) 2½ 24½ 8 34 13 7	Depth (rest) 21/2 27 35 69 82 89	5 5/8" hole.	
Top soil Shelly boulder formation Soft formation with little cla; Elue basalt Hard gray basalt Brown porous rock Hard blue rock	(feet) 2½ 24½ 8 34 13 7	Depth (rest) 2 / 2 / 2 / 35 / 69 / 82 / 89 / 96	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Elue basalt Hard gray basalt Brown porous rock Hard bine rock Plack to known porous rock	(foot) 2½ 24½ 8 34 13 7 7	Depth	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Blue basalt Hard gray basalt Brown perons rock Hard blue rock Black to krown perons rock Moderately hard blue rock	(foot) 2½ 2½ 8 34 13 7 7 14 26	Depth (reet) 23 27 35 69 82 89 96 110 136	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Blue basalt Hard gray basalt Brown perons rock Hard blue rock Plack to krown perons reck Moderately hard blue rock Very hard gray rock	(feet) 2	Depth (feet) 2	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Blue basalt Hard gray basalt Brown perons rock Hard blue rock Plack to brown perons reck Moderately hard blue rock Very hard gray rock Hard blue perons basalt Hard solid blue basalt	(feet) 2	Depth (feet) 2½ 27 35 69 82 89 96 110 136 155 160 166	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Elne basalt Hard gray basalt Brown porons rock Hard bine rock Plack to krown porons reck Moderately bard blue rock Very hard gray rock Eard blue porons basalt	(feet) 2	Depth (feet) 2	5 5/8" hole.	
Shelly boulder formation Shelly boulder formation Soft formation with little cla; Elne basalt Hard gray basalt Brown porons rock Hard bine rock Plack to krown porons reck Moderately bard blue rock Very hard gray rock Hard blue porons basalt Hard solid blue basalt Rrewn porons rock	(feet) 2	Depth	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Blue basalt Hard gray basalt Brown perons rock Hard blue rock Plack to krown perons reck Moderately bard blue rock Very hard gray rock Eard blue perons basalt Eard solid blue basalt Rewn perons rock Moderately hard black rock Oray rock	(feet) 2	Depth	5 5/8" hole.	
Shelly boulder formation Shelly boulder formation Soft formation with little cla; Elne basalt Hard gray basalt Brown porons rock Hard bine rock Plack to krown porons reck Moderately hard bine rock Very hard gray rock Hard bine porons basalt Hard solid bine basalt Rewn porons rock Moderately hard black rock	(feet) 2	Depth	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Elne besalt Hard gray baselt Brown perons rock Hard blue rock Plack to brown perons reck Moderately hard blue rock Very hard gray rock Hard blue perons besalt Hard solid blue besalt Rewn perwns rock Moderately hard black rock Oray rock	(feet) 2	Depth	5 5/8" hole.	
Shelly boulder formation Soft formation with little cla; Blue basalt Hard gray basalt Brown perons rock Hard blue rock Plack to krown perons reck Moderately bard blue rock Very hard gray rock Eard blue perons basalt Eard solid blue basalt Rewn perons rock Moderately hard black rock Oray rock	(feet) 2	Depth	5 5/8" hole.	

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	Use students of the state of th	Bo C B A E F G C H M L K J* N P Q R The status- The sta
	Depth	Remarks Caeing: 12' over all length 287'6', aented at 286' extending 13' show ground surface. Pump test 6/21/41 300 g.p.m. at 50' drawdown 43g g.p.m. at 50' drawdown 500 g.p.m. at 62' drawdown 500 g.p.m. at 62' drawdown
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IN TOR 15 Heb of SED Procession TRATISTICS: [61] type-Dig Driven below below Final depth 3501 City of Elgin Address Address Original Address Determined Brillodge Section This record compiled by H.S.W. from Declars advanced from the Tellowing sourcess: [7] This record compiled by H.S.W. from Declars advanced from the Tellowing sourcess: [7] This record compiled Jamary 1948 [7] Determined City Officials [8] Determined Grant to Tellowing sourcess: [8] Clar, wand and gravel O Gravel 6 [9] Heavy boulders 8 [9] Gray shale 13 [19] Clay and heavy boulders 34 [19] Cray shale 13 [19] Clay and heavy boulders 34 [19] Sand and gravel 104 [19] Sand and gravel 120 [19] Sine shale 125 [19] Gray shale 126 [19] Sine shale 127 [19] Sand 198 [19] Shale 128 [19] Shale besalt 263 [19] Black besalt 263 [19] Black besalt 301 [19] Brown besalt 301 [19] Black besalt 302 [19] According to City officials, this well copy of to 8 day pumping period Degring 195 to 8 day pumping 195 to 8 day 195	Depth	Remarks Casing: Remarks Casing: 12' over all length 287'6', aented at 286' extending 13' shove ground surface. Pump test 6/21/41 300 g.p.m. at 38' drawdown 43g g.p.m. at 50' drawdown 500 g.p.m. at 62' drawdown
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Page 2012 Page 2013 Page	pened cesed aned o	Remarks Casing: 12° over all length 287'6°, seated at 286' extending 1½' above ground surface. Pump test 6/21/41 300 g.p.m. at 38' drawdown 436 g.p.m. at 50' drawdown 570 g.p.m. at 62' drawdown
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	8 15 34 48 104 120 125 145 175	12° over all length 287'6°, seated at 286' extending 13' showe ground surface. Pump test 6/21/41 300 g.p.m. at 38' drawdown 438 g.p.m. at 50' drawdown 530 g.p.m. at 62' drawdown
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Sandy gray shale	120 125 145 175 198	300 g.p.m. at 381 drawdown 438 g.p.m. at 501 drawdown 590 g.p.m. at 621 drawdown
Sand and gravel 120	125 145 175 198	438 g.p.m. at 50' drawdown 590 g.p.m. at 62' drawdown
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Sand 198		an also of antiting well
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Creen shale 234		flowed 85 g.p.s. over casin
Green shale 234	234	head.
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Elack basalt 278	278	
Forous basalt 263 Black basalt 254 Erown basalt 301 Bard black basalt 323 Black basalt 327 According to City officials, this well c by a 6 to 8 day pumping period Desring	283	
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According to City officials, this well c	350	Bottom of hole
is strong. This well is situated within		
Well drains the Mo. 1 Well. Both this a	A THE S	35. I well llow however given
a sufficient long period for recovery.		
		
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Union	Elgin City #3			File number
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18 39E 22 Section Fractional section				<u> </u>
### Practional Section Practional Section Practiconal Section Pr		1		
Elevation Continue		ection		N P Q R
Elevation Continue				
Prilled Fame Private	STATISTICS:			
Final depth 655 below intrigation with the producer x intrigation x municipal x intrigation x mu	Wall type-Dug Elevation (la Drilled I face)	nd sur-	domes	tic*
City of Elgin A. A. Derend & Son Designal drillers mans Address Date of drilling March - June 1947 This record compiled by E. S. W. from Despensed re-cased cleaned by Driller and city officials Date compiled January 1948 Date Naterial Thickness Depth Remarks	Driven above		intus irris	ation dry hole
Organical panes Midrass Midrass Midrass Date of drilling March - June 1947 This record complied by B. S. W. from Despensed re-cased cleaned by	Final depth 655		munic ircludes	ipal x producer x
Organic hame Mdrass Mdrass Mdrass Mdrass Date of drilling March - June 1947 This record compiled by E. S. W. from Despensed re-cased cleaned by Driller and city officials Date compiled January 1948 Date Material Thickness Doth (feet) Feet) Remarks Gravel and boulders 0 38 Casing: Gravel and boulders 0 38 Casing: Gravel 65 70 Botton of 16* at 429' 0* Clay and gravel 105 105 Brewn clay and gravel 115 105 Tellov clay, some gravel 145 148 Vell flowing 350 g.p.m. Fellov aticky clay 148 201 Temp. 530F. Blue clay 201 298 Drawdown 27* at 552 g.p.m. Shell rock 298 306 Draw down 87* at 1095 g.p.m. Fellov and green clay 335 364 excepting for a comple days of this well has been pumped for his well has been pumped for Sticky blue clay 410 417 Blue clay 410 417 Blue clay 428 430 Sticky blue clay 428 430 Sticky blue clay 480 560 Basalt rock 560 563 Blue clay 568 618 Basalt rock (flowing water) 643 651 Cinder rock (flowing water) 643 651 Cinder rock (flowing water) 643 651 Cinder rock (flowing water) 643 651	Other of Their		Domend d	Son
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This record complied by B. S. W. from data secured from the following sources: re-cased cleaned by Driller and city officials Data compiled January 1948 Data Haterial Thickness Dopth (feet) Feet) Remarks	Address			
Driller and city officials Date Naturial Thickness Depth Remarks				,
Data compiled January 1948 Data compiled January 1948 Reserved and bondere 0 38 Casing: Biue clay and gravel 38 65 Bottom of 20° at 61° 10° Gravel end bondere 65 70 Bottom of 16° at 420° 0° Clay and gravel 70 115 Bottom of 12° at 620° 0° Brewn clay and gravel 115 146 Yellow clay, some gravel 145 148 Well flowing 350 g.p.m. Yellow clay, some gravel 149 201 Temp. 53°F. Blue clay 201 298 Drawdown 27° at 552 g.p.m. Shell rock 298 306 Draw down 87° at 1095 g.p.m. Blue clay 306 335 Yellow and green clay 335 364 excepting for a couple days childown for publy repairs, childown for publy repairs, childown for publy repairs, this well has been pumped for 394 394 410 Sticky blue clay 394 410 417 Blue clay 410 417 Blue clay 410 417 Blue clay 428 430 Sticky blue clay 428 430 Sticky blue clay 480 560 Basalt rock 560 563 Blue clay 568 618 Blue clay 568 618 Bassalt (flowing water) 643 651 Cinter rock (flowing water) 643 651	data secured from the following sour	110m 200	cased	- * he
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Bive clay and gravel 38 65 Bottom of 20" at 61" 10"		(feet)	(feet)	Ramarks
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Provided and gravel 115 145 146 Vell flowing 350 g.p.w.	Gravel	65	70	Bottom of 16" at 427' 0"
Yellow clay, some gravel 145	Clay and gravel	70	115	Bottom of 12" at 620' C"
Yellow sticky clay	Brown clay and gravel	115	145	
Shell rock 298 306 Drawdown 27 at 552 g.p.s.	Yellow clay, some gravel	145	148	Well flowing 350 g.p.m.
Shell rock 298 306 Draw down 87 at 1095 g.p.s. Blue clay 306 335 Tellow and green clay 335 364 excepting for a couple days of a couple day a couple days of	Yellow sticky clay	148	201	Temp. 530F.
Shell rock 298 306 Draw down 87 at 1095 g.p.e. Blue clay 306 335 Tellow and green clay 335 364 excepting for a couple days of this well has been pumped for the served. Sticky blue clay 410 417 Blue clay 428 Sandy blue clay 428 Sticky blue clay 480 Sticky blue clay 480 Basalt rock 560 563 Blue clay 568 618 Basslt (flowing water) 613 643 Cinder rock (flowing water) 643 651	Blue clay	201	298	Drawdown 271 at 552 g.p.m.
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Mica, silt and sandy sline 390 394 ite campletion. No change in yield has been observed. Except the clay 394 410 417 428 480 Stricky blue clay 428 480				this well has been pumped for
Sticky blue clay 394 410 417			1	24 hours per day ever since
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Cinder rock (flowing weter) 643 651				
		+		
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	Hard basalt	651	655	Roffom of pure
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Fraceuter City #1 Well name	_		5%-35%-2-08 File number	
LOCATION:			(Code: Tp., R., Sec., 2 Sec.)	
Umatilla Cou	inty		D C B A	
Unempped Quedran			E F G H	
5H 35H 2 Sign Hai			 	
To. Bangs Section Fractions	1 section		H P Q B	
STATISTICS:				
Well type-Dig Elevation	(land our-	Dee at	atus- Well Status-	
Well type-Dag Elevation Drilled x feee) Driven above	ft.	iniu	strial abandoned	
Pinal depth 3741 8" below		muni	cipal x producer x	
		Tinclude	a stock wells	
Where reme	- A. A. Origi			
Address			Valla Valla, Vashington	
			lling	
This record compiled by S.S.W. ista secured from the following so	ources: re	-cased	- 	
City officials	61	eaned	by	
	_			
Oate compiled January 1948	Thickness	Dapth		
Naterial	(feet)	(test)	Remarke	
No log available		3741 8	According to City Officials this well is used as the	
	+	ļ	principal source of water supply, with the #2 well	
·	 		need only as an auxiliary	1
	+		In practice, this well is pumped at the rate of about	
	-		280 g.p.m. 24 hours/day.	
	-			1
	-	-		1
	+			1
			Index number 62-U	
	_		Inder number 62-U 3F-31E-6 711e number (Code: ?p., R., Sec., § Sec.)	_
ell name			3F-31E-8 File number (Code: Tp., R., Sec., Sec.)	_
ell name OCATION:	ıty		35-31E-6 711e humcer (Code: Tp., R., Sec., § Sec.) □ □ □ □ □ □ □ □	
CCATION: Castilla Coun			35-31E-6 711e humcer (Code: Tp., R., Sec., § Sec.) □ □ □ □ □ □ □ □	
OCATION:	i.		3F-31F-6 File numer (Code: Tp., R., Sec., ∑ Sec.) □ □ □ □ □ A □ F □ □ H	
CCATION:	i.		JF-31E-8 File numer (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	
OCATION: casilla Coun casilla Quadrang 2 212 6 522 p. Range Section Fractional PATISTICS:	section		35-31E-8 711e numeor (Code: Tp., R., Sec., Sec.) D C B A E F O H M L K J N P Q 2	
OCATION: OCATION: Candidica Country F. 312 8 52; F. Samps Section Fractional PATIFICS: pli type-Dug Elevation (face)	section	Use sta	JF-31E-8 File numer (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q E tue- tic* Well status-	
OCATION: OCATIO	section	Use sta domes incus irrus	JF-JIE-Burner (Code: Tp., R., Sec., Sec.) D C B A E F C H N L K J N P Q 2 tus- tic* wrial ation ation abandoned ation ation	
OCATION: OCATIO	section	Use sta domes inques irrig	JF-31E-8 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q 2 tus- tic* rrial ation sbandoned dry hole	
OCATION: Asatilla Coun FRACTOR: Quadrang P. 11E 8 32; P. Range Section Fractional PATIFICS: Sil type-Dug Elevation (1900) Driven Section (1900)	section	Use sta domes inqus irrig gunit inpludes	JE-JIE-B File number (Code: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q B tue- tic* rici	
COLITION: Candilla Coun Candilla Quadrang Candilla Quadrang Candilla Quadrang Candilla Section Fractional Candilla Section Fractional Candilla Section Fractional Candilla Section (Candilla Section (Cand	section land surft.	Use sta domes inqus irrig gunit inpludes	JE-JIE-B 711e numer (Code: T)., R., Sec., Sec.) D C B A E F O H M L K J N P Q B tue- tice I with status- tice I ation dipal produce I produce I produce I produce I produce I produce I	
OCATION: castilla Coun castilla Quadrang p. 31E 8 Section Fractional PATIFICS: pli type-Dug Entled Ent	land sur- ft.	Use sta domes injus irrig sunic 'includes al drill	JE-JIE-8 File numeer [Code: Ty., R., Sec., Sec.] D C B A E F O H M L K J N P Q B tue- tic" rrial abandoned ation dry hole producer a stock wells	
OCATION: castilla Coun castilla Quadrang p. 31E 8 Section Fractional PATIFICS: pli type-Dug Entled Ent	land sur- ft.	Use sta domes injus irrig sunic 'includes al drill	JE-JIE-8 File numeer [Code: Ty., R., Sec., Sec.] D C B A E F O H M L K J N P Q B tue- tic" rrial abandoned ation dry hole producer a stock wells	
OCATION: OCATIO	land sur- ft.	Use sta domes injus irrig sunic 'includes al drill	JE-JIE-8 File numeer [Code: Ty., R., Sec., Sec.] D C B A E F O H M L K J N P Q B tue- tic" rrial abandoned ation dry hole producer a stock wells	
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COLATION: Candisian Quadrang Sp. 11E 8 32; D. Range Section Fractional PATIFICS: Driven Section (100) Driven Section (100) Tractional Fractional Fraction	land sur- ft.	Uas sta domes invas irrig munic includes al drill ess of dril pened eased	JE-JIE-8 File numeer [Code: Ty., R., Sec., Sec.] D C B A E F O H M L K J N P Q B tue- tic" rrial abandoned ation dry hole producer a stock wells	
COLATION: Candisian Quadrang Sp. 11E 8 32; D. Range Section Fractional PATIFICS: Driven Section (100) Driven Section (100) Tractional Fractional Fraction	land surft, Origin Add Date from Descriptor From Descriptor From Descriptor Thickness	Use sta domes irrule and drill ees of drill pened cased and	JE-JIE-8 File numeer [Code: Ty., R., Sec., Sec.] D C B A E F O H M L K J N P Q B tue- tic" rrial abandoned ation dry hole producer a stock wells	
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OCATION: Inatification Quadrang Inatification Quadrang Inatification Quadrang Inatification Practional Inatification Praction Practional Inatification Praction Practional Inatification Praction Practional Inatification Practio	land surft, Origin Add Date from Descriptor From Descriptor From Descriptor Thickness	Use att domeoninum domeoninum de la	JE-JIE-8 File numeer (Code: Ty., R., Sec., Sec.) D C B A E F O H M L K J N P Q 2 tue- tic* trial ation ipal etock wells Free Bane Remarks	
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Freewater City #2 Well name	-		File number
			(Code: Tp., R., Sec., 2 Sec.
LOCATION:			D C B A
Umatilla Coun	ty		E 7 G H
Unnapped Quedrang	le		M L K J
Tp. Range Section Fractional	section		N P Q R
STATISTICS:			
Well type-Dug Elevation (I	land sur-	Use st	atus- Well status-
D1110HB0076	ft.	1810	istriki sodbuobed
Final depth 5021 below		irri inum ebulani	gation dry hole cipal x producer x setock wells
City of Freewater	A. A.	Durand	& Son lers name
Address	_ Add	ressV	Alla Valla, Vashington
	_	e of dri	lling
This record complied by S.S.V. data securad from the following sou	from De	epened	_
Driller and City Water Master	el	eaned	by
	_		
Date compiled January 1948		t•	
Material	Thickness (feet)		Remarks
Soil and gravel	3	3	Role 12* to bottom
Loose boulders and gravel Grave! and boulders partly	17	20	
comented	15	35	Casing: 40' of 18" and
Loose boulders and gravel	5	40	172' of 12"
Coment boulders and gravel	40	80	
Clay	10	90	
Beavy houlders and gravel	45	135	
Clay and sand	10	145	
Grevel and boulders, loose	15	160	
Basalt rock, black and wery ha	d 90	2 45	
Red porous baselt rock	45	290	
(extra			
Blue basalt porous rock (hard)		360	
Blue basalt porous rock (hard) Black basalt rock		360 405	
	70		
Black basalt rock	70 45 30	405	Bottom of hole
Elack basalt rock Hed basalt rock Black basalt rock, lots of wat- Surface water struck in the se-	70 45 30 r 67	405 435 502 t gravel	and boulders. More water
Elack basalt rock Hed basalt rock Black basalt rock, lots of wat- Surface water struck in the se-	70 45 30 r 67	405 435 502 t gravel	and boulders. More water
Elack basalt rock Hed basalt rock Black basalt rock, lots of wat- Surface water struck in the se-	70 45 30 r 67	405 435 502 t gravel	and boulders. More water
Black basalt rock Red basalt rock Black basalt rock, lots of water Surface water struck in the see was found in the next forty fe some water struck at different lev- were light flows. The heavy flow the black basalt rock. The water been previously. Pumping 750 cp.) Pumping 1025 g.p.m. the level was	70 45 30 er 67 enteen for tin cener is through an obtain mained 5 fee bout 68 fee	405 435 502 t gravel it gravel it the ver d in the et highe r lowere et below	and boulders. More water and boulders. There was ions layers of rock. All last sixy-seven fest of r to the surface than it had d to a layel of about 47 feet the ground surface.
Black basalt rock Red basalt rock Black basalt rock, lots of water Surface water struck in the see was found in the next forty fe some water struck at different lev- were light flows. The heavy flow the black basalt rock. The water been previously. Pumping 750 cp.) Pumping 1025 g.p.m. the level was	70 45 30 er 67 enteen for tin cener is through an obtain mained 5 fee bout 68 fee	405 435 502 t gravel it gravel it the ver d in the et highe r lowere et below	and boulders. More water and boulders. There was ions layers of rock. All last sixy-seven fest of r to the surface than it had d to a layel of about 47 feet the ground surface.
Elack basalt rock Hed basalt rock Black basalt rock, lots of wat- Surface water struck in the se-	70 45 30 er 67 enteen for tin cener is through an obtain mained 5 fee bout 68 fee	405 435 502 t gravel it gravel it the ver d in the et highe r lowere et below	and boulders. More water and boulders. There was ions layers of rock. All last sixy-seven fest of r to the surface than it had d to a layel of about 47 feet the ground surface.
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Well name	_	ZH-31E-31 File number	Oreener Well mane			75-26E-35 File number (Code: To R Sec. 4
T.O.O. B.T.O.O.	*	(Code: Tp., R., Sec., + 5ec.)	LOCATION:			(Code: To., R., Sec., ż
LOCATION:	-4	D C B A	Morrow Cou	ntv		D C B
Umatilla Cou		Z F G H	Unmapped Quadrar			E F G
Fendleton Quedram 21 31	Rta.	M I K 1			f Renna	H L R
Tp. Range Section Fractions	l section	N P Q R	2S 2SE 34 within ci	l section		H P Q
STATISTICS:			STATISTICS:			
Well type-Dug Elevetion prilled i feee)		status- Well status- omestic" x	Drilled x face}	(lend sur- ft.	Use a	tatus- Well state
Driven above below	i	riustrial abandoned rigation dry bole	Driven above below			igation dry hol
Final depth 6241	n incl	inicipal producer k	Final depth 133'		mun *include	icipal produce es stock wells
Ernest T. French			Ym. Greener	A. A	. Durand	& Son
Owners name Address Pendleton, Oregon	Original d	rillers news	Owners name Address Box 233	Orig	inal dri: dress	llere name Valla Valla, Washington
	Date of	rilling	Heppner, Oragon	Dat	te of dr	Started December : illing Floished Fabruary
This record compiled by M.S.Y.	from Deepens	<u> </u>	This record compiled by M.S.W.	from De	еерелеф_	_
dets secured from the following s	ources: re-cese cleaned		data secured from the following a	circes: re	e-cased_ leaned	
Owner			Driller	_		
Date compiled July 1947	Data		Date compiled January 194	<u>8</u> De	mte	
Material	Thickness Dept (feet)	h Resparke	Material	Thicknes (feet)		Remarks
No log available	624	SWL 501	Soil	9	9	Casing 6" to 111"
		Mo.wal pumping practice	Gravel and boulders	5	14	
			Broken basalt	17	32.	
			Hard blue basalt	50	81	
			Hard broken basalt	5	86	
			Bard blue basslt	3?	123	
			Hard gray basalt	10	133	SWL 48'
					-	2 bour bail test indicat 28 g.p.m. with 13 drawd
					1	and recovery in 11 sinut
		Index number 47-U	W-410-F			Index mamber - mene -M
Gillanders Well neme	_	IS-35E-3 File number	Badley Well name	_		Index mumber - mone -M File number (Code: Tp., R., Sec., 2
	_	15-35E-3 File number (Code: Tp., R., Sec., 2 Sec.)		_	····	File number (Code: Tp., R., Sec., 2
Well neme	nty	IS-35K-3 File number (Code: Tp., R., Sec., 2 Sec.)	Well name	nty		File number
Well name	•	15-35E-3 File number (Code: Tp., R., Sec., 2 Sec.)	Well mame			File number (Gode: Tp., R., Sec., 2
Tell hame LOCATION: Umatilla Cou	gle	18-35#-3 File number (Gode: Tp., R., Sec., 2 Sec.) D C B A E F G H	Well mame LOCATION: MOTTOW COU	gle	··········	File number (Gode: Tp., R., Sec., 2
Well name LOCATION: URBAILLE COU URBAILLE Quedren 18 35E 3 Tp. Range Section Fractions	gle l section	18-35K-3 File number (Gode: Tp., R., Sec., 2 Sec.) D C B A E F G H M L K J	Well name LOCATION: MOTTOW Cou Quadrum Tp. Range Section Fractiona	gle		File number (Code: Tp., R., Sec., 2 D C B E 7 G M L K
Well name LOCATION: URBAILLE COU URBAILLE Quedren 18 35E 3 Tp. Range Section Fractions	gle l section	18-3/5-3 File number [Gode: Tp., R., Sec., 2 Sec.] D C B A Z y G H W L K J N P Q R	Well name LOCATION: NOTION COU Quadran Tp. Range Section Fractions STATISTICS: Well typesbyr Elevation	gle	Use st	File number (Code: Tp., R., Sec., 2 D C B E 7 C M L X N P Q
Well name LOCATION: URBAILLE COU URBAILLE Quedren 18 35E 3 Tp. Range Section Fractions	gle l section	1S-75K-3 File number (Gods: Tp., R., Sec., 2 Sec.) D C B A E y G N N P Q R	Well name LOCATION: Morrow Cou Quadrum Tp. Range Section Fractiona STATISTICS: Well typo-Dig Drilled × face)	gle	dome inu	File number (Code: Tp., R., Sec., 2 D C B E 7 C M L X N P Q tatus- setic* x sebadon
Well name LOCATION: URBAILLE COUNTRY URBAILLE Section Fractiona STATISTICS: Well type-Dug Elevation face) Driven below	glo l section (land sur- Use ft. di	18-3/56-3	Well name LOCATION: Norrow Cou Quadran Tp. Range Section Fractiona STATISTICS: Well type-Dig Drilled x feee)	gle l section (land aur- ft.	dome intri irri muni	File number (Code: Tp., R., Sec., 2 D C B E 7 C M L X N P Q tatus- setice x setice x setice x setice x seticon dry holicital produce
Well name LOCATION: Unantilla Cou Unmapped Quedren 1F 35F 3 Tp. Bange Section Fractiona STATISTICS: Well type-Dug Elevation face) Drilled I face Driven above	glo l section (land sur- Use ft. d. i. i. i. section	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H H L K J N P Q R status- mestic L mustrial rigation nicipal producer L des stock wells	Well name LOCATION: Morrow Cou Quadran Tp. Range Section Fractions STATISTICS: Well type-Dig Driven Stove below below	gle l section (land aurft.	dome intri irri muni Finclude	File number (Code: Tp., R., Sec., 2 D C B E 7 G M L K N P Q tatus- setic* setic* setic* setic* tatus- setic* set
Well name LOCATION: Unnapped Quedren IN 35% 3 The Range Section Fractions. STATISTICS: Well type-Dag Rievation prilled I face) Driven above below Final depth 383' Entl Cillanders Descriptions	lland sur- Use ft. d. i.	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H W L K J N P Q R etatus- mestic z des stock wells #ell status- mestic dry hole micipal producer_x 14 Son	Mell Dame LOCATION: Cou Quadran	(land aur-ft.	dome inte irri muni *include . Edwards	File number (Code: Tp., R., Sec., 2 D C B E 7 G M L K N P Q tatus- setic* x setic*
Well name LOCATION: Unnapped Quedren IN 36% 3 The Bange Section Fractions STATISTICS: Well type-Dag Elevation prilled I face) Driven below Final depth 383' Entl Cillanders Owners name Address c/c Oillanders & Barron	lland sur- Use ft. d i i ft. d ft. A. A. Daran Original d sha Address	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H H L K J N P Q R status- mestic z understal des stock wells 4 Son Valia Valia, Vashington	Well name LOCATION: Norrow Cou Quadran Tp. Range Section Fractions STATISTICS: Well type-Dig Driven face) Driven below Final depth 196' Olen Hadley	(land mur- ft. A. M. Origi	dome into irri muni *include . Edwards inal dril irees	File number (Code: Tp., R., Sec., 2 D C B E 7 G M L K N P Q tatus- setic* set
Well name LOCATION: Unnapped Quedren IN 35% 3 The Bange Section Fractions STATISTICS: Well type-Dag Elevation Drilled I face) Driven below Final depth 383' Enri Cillanders Owners name Address c/c Oillanders & Barron 40) S. Main St., Pendle	cland sur- Uses ft. d. i. i. i. i. final frights A. A. Duran Original d. Address ton Date of d.	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H H L K J N P Q R status status well status mestic z rigation nicipal producar x des stock wells 1 4 Son Tillors name Valia Valia, Vashington rilling 1945	Well name LOCATION: Morrow Cou Quadran Tp. Range Section Fractiona STATISTICS: Well typo-Dig Drilled X face) Drilled X face) Driven below Final depth 196' Glen Hadley Ownere name Address	gla l section (land aurft. A. M. Original	dome inti irri muni *include . Edwards inal dril irees :e of dri	File number (Code: Tp., R., Sec., 2 D C B E 7 G M L K N P Q tatus- setic* x setic*
Well name LOCATION: Unnapped Quedren IN 35% 3 The Bange Section Fractions STATISTICS: Well type-Dag Elevation Drilled I face) Driven below Final depth 383' Enri Cillanders Owners name Address c/c Oillanders & Barron 40) S. Main St., Pendle	cland sur- Use ft. d. i. i. i. i. inclinate A. A. Doran Original d. Address ton Dete of re- ources: re-case	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H H L K J N P Q R status— mestic z vicintrial des stock wells i & Son Tillore name Valla Valla, Vashington 1945	Mell Dame LOCATION: Cou Quadran	gle I section (lend aur- ft. A. M. Origi Add Det from De ources: re	dome interior irri muni *include . Edwards insl dril irees :e of dri espened	File number (Code: Tp., R., Sec., 2 D C B E 7 G W L K N P Q tatus- setic x s
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Well name LOCATION: Unmapped Quedren JSE 3 TD. Range Section Fractiona STATISTICS: Well type-Dug Elevation Drilled x face) Driven above below Final depth 389' Earl Cillanders Address c/c Cillanders & Barron 403 S. Main St., Pendie This record compiled by E.S.V. data secured from the Collowing st.	(land sur- Use ft. d. i.	Tite number [Gods: Tp., R., Sec., 2 Sec.] D C B A Z F G H H L K J N P Q R status— mestic z vicintrial des stock wells i & Son Tillore name Valla Valla, Vashington 1945	Mell base	gle I section (lend surft. A. M. Originado Dat from De cources: re	dome into irri irri include Edward inal dril irees e of dri espened e-cased	File number (Code: Tp., R., Sec., 2 D C B E 7 G W L K N P Q tatus- setic x s
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Helvorsen #1 Hell name	_		Index number 117-W 15-24E-28 File number	Henna Well name			Index number — 51-U 15-32E-1-D
			(Code: Tp., R., Sec., Sec.)	HOLL ACTO			File number (Code: Ty., R., Sec., 2 5
OCATION:			D C B A	LOCATION:			D C B
Morrov Cour	nty		E F C H	Umatille C	County		E F G
Quedrane Quedrane	gle		MIKJ	Pendleton Quad	rangle		A T K
15 247. 28 On top of p. Range Section Fractional	Jordan Butt	e about couth	2 miles N P Q R	1N 32E 1 NW1 of Tp. Range Section Fraction	HWi onal section		N P Q
TATISTICS:				STATISTICS;			
fell type-Dug Elevetion (Drillad x face)		Dae at	catue- Well status-	Well type-Dig x Blevetic	-rue famil se	Une i	statue- Fell status
Driven above		inu	strial shandoned getion dry hole x	Drivenabove	ft.	in.	nestic x nustrial ebandone
final depth 1840		anun i	cipal producer	Final depth 27'		Zfru F	rigation x dry bole nicipal producer ies stock wells
Celbert Ernest		ichoson	lere name	Mr. J. B. Eanna			
Address Ione, Oregon		lress	Ione, Oregon	Owners name Address Route 1		ginal dri Adrees	ilars name
	_ Dat	s of dri	lling to 740' in 1913	Pendleton, Oregon	D	ate of dr	llling
his record compiled by N.S.W.	from De	epened_x	_	This record compiled by N.S.	V. from	Deepened_	_
Vorbal log report by the driller		eaned_	by Fred Nichoson	data ascured from the Following		re-cased_ cleaned_	by
	_		Ione, Oregon	Owner			
ate compiled Rovember 1947		t e	1917	Date compiled Jennary 1948		Date	
Natorial	Thickness (feet)		Remarks	Naterial		as Depth	Remarks
Crushed brown "dice" rock - seft	150	150	Dry hole	Sprdy lear	(feet)	(feet)	SWL 191.
	15	165		Saniy loss Black baseltic sand	2	8	Yield sustained flow of
Crushed brown "dice" rock - sof: - much caving	535	700	Water at -700 about 1 g.p.m.	Hard gravel - free clay	19	27	20 g.p.m. At 30g g.p.m. well pumps dry in 6 hr.
Sar gray basalt	290	990		unia Piatara risa craj		+	periods. Recovery time 3 hrs.
ross perous basalt	80	1620		,			1 10 2
Hard gray basalt	20	1640	- Bottom of hole -	A fossil animal skull was for especially complete but the	fragments r		
	1	1	nole sixe;	for identification purposes.	· —		
	 		5 5/8" to -740'		-	+	
			4 1/4" to -1040"	-	-	+	
		1	4 1/4" (0 -1040				
			Index number 116-H 15-202-33 #2	Enyues			Index number 36-U 31-34 E-20-E
ell name			Index number 116-M 15-24R-33 #2 File number (Code: Tp., R., Sec., Sec.)	Eaybes Well mamo			Index number 35-U 31-7-20-5 Filo number (Code: Tp., R., Sec., Sec.)
ell name			15-24E-33 #2 Filo number				33-3-E-20-E Filo number
Ralvorsen #2 Fell name .OCATION: MGPYOF Count	•		15-24E-33 #2. File number (Code: Tp., R., Sec., Sec.)	Hell name	punty		JU-JEE-20-E File number (Code: Tp., R., Sec., & Se
COATION: Counting Counti	La		15-24E-33 #2 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	Well mane LOCATION: DESCRIPTION Frailton Quedra	angle		33-3-E-20-E Filo number (Code: Tp., R., Sec., 2 Se
OCATION: Count	La	Jorana i	15-24E-33 #2 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	Well mane LOGATION: Umatilla Co	angle Wwł		334-94-20-2 File punber Code: Tp., R., Sec., Sec. Sec. Sec. File punber Code: Tp., R., Sec.
OCATION: Morrov Count Upmapped Quadrang 1S 24E 33-7 On the sout p. Range Section Fractional	La	Jorann I	15-24E-33 #2 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	Ty Range Section Fraction Ty Range Section Fraction Ty Range Section Fraction Ty Range Section Fraction Ty Range Section Ty Range	angle Wwł		Si-yr-20-2 Si-
OCATION: Government of the section	h slope of section wi		15-24E-33 #2 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J hutte one of well el N P Q R	Well mame LOCATION: Umatilia Co Fggilptoq Quadr Th. Range Section Fraction STATISTICS:	angle		Si-yr-20-2 File number
CONTION: Countrol	h slope of section wi	Ves sta	Tile number File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J hutte one of well el Rell statue- nice* Rell statue-	Well name LOCATION: Dantilla Co Pradicton Quadr Th. Range Section Fraction STATISTICS: Well type-Dug Dilled Tace	angle Wwł	40me	Si-ye-zo-z File number (Code: Tp., R., Sec., 2 Sec. 2
	h slope of section wi	Ues sta domes in.us irria	Tile number [Code: Tp., R., Sec., Sec.] D C B A E F G R L K J hutte one of well el N P Q B hutte-street tried x gitton dry bola	Total type-Dag	angle	dome inu irri	Sid=y=F-20-2 File number
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	.h slope of section wi	Ues sta domes in us irrig munic rincludes	Section Section	Well name LOCATION: Dantilla Co Exactlytoq Quadr Th. Range Section Fraction STATISTICS: Well type-Dus Drilled Tacel above below Final depth 155! Bert G. Raymas	angle Fri	dome into irri muni *include Durand	
OCATION: (Agroy Country Count	.h slope of section wi	Ues standomes in us irrigundo de control de	IS-24E-33 #2 File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J hutte one of veil el N P Q R stus- nice x ether dependent of veil el gitton dry bola ripal producer	Contine Cont	angle Wyi and section (land surft.	dome into irri muni finclude Durand dinal dril	
OCATION: (OFFOY Count Innapped Quadrang) (S. 24E 33-7 (P. Range Section Fractional FATISTICS: Bull type-Dug Face) Driven face) Driven blow below Driven below		Ues standomer in au irrigio municipal de l'includes Ritchie sal drill	Second Second Second	Total type Direction Total depth 1551 Sert 0, Rayne Owners name Owners n	A. A. Crig	dome in a irr: mun: finclude Durand dinal dril draes	File number [Code: Tp., R., Sec., Sec.] D C B Z 7 G W L K N P Q Status Stat
OCATION: dorrow Count Unmapped Quadrangi S 24E 33-7 On the sout P. Range Section Fractional PATISTICS: ell type-Dug Face) Drilled X Driven Show Show inal dapth 9464 Delbert Erneat wasers name Address loss, Oregon	An slope of section with sectio	Ues str domes in.us irric mundo 'includes Bitchie al drill ees of dril	S-24F-33 #2	Test Section Test	A. A. Crist	dome in: ir: mun: finclude Durand dinal dril draes te of dri ecpened	Filo number [Code: Tp., R., Sec., Sec.] D C B E F G E F
OCATION: Country Co	section wi	Use str domes in use irrig munic fincludes Ritchie al drill sees	S-24F-33 #2	Well name LOCATION: Dantilla Co Padigiton Quadra 38 345 20 SN of frection STATISTICS: Well type-Dag Driven Gace Show Frection Final depth 1554 Seri G. Hayuns Owners name Address 516 J. V. Garden St Fenileton, Gregon This record couptif dby J.S.W. data secured from the Jollowing	A. A. A. Crist. A. A. A. Crist. A. A. Crist. A. A. A. A. Crist. A. A. A. Crist. A. A. A. A. Crist. A. A. A. A. Crist. A.	dome in a irri muni finclude Durand dinal dril draes te of dri	Sid- PE-20-2 File number Code: Tp., R., Sec.
COATION: County Coun	section wi	Ues str domes in.us irric munic fincludes <u>Ricchie</u> al drill recs of drill opened x cased	S=24E-33 #2	Test Section Test	A. A. A. Crist. A. A. A. Crist. A. A. Crist. A. A. A. A. Crist. A. A. A. Crist. A. A. A. A. Crist. A. A. A. A. Crist. A.	dome in: irr: muni finclude Durand dinal drild draes te of drildepensed	Filo number [Code: Tp., R., Sec., Sec.] D C B E F G E F
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Counties: Counties: Counties:	o, P. Original Addr	Use strain and the st	Section Section	Well name LOCATION: Dantilla Pgadigtoq Quadra Tp. Range Section Fraction STATISTICS: Well type-Dag Drilled X Driven Show below below below Final depth 155' Pert G. Haynes Owners name Address 516 J. W. Garden State secured from the Johnson Compiled by J.S.V. data secured from the Johnson Compiler Date compiled January 1949	A. A. A. Criestes Andrews A. A. A. Criestes Andrews C. Criestes An	domenia in	File number [Code: Tp., R., Sec., Sec.] D C B Z 7 G W L K N P Q totus satic x strial [cation producer] sclopal producer stric x strial clipal producer strict x strial clipal producer strial producer
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CATION: Grow Count grapped Quadrangi Section Fractional ATISTICS: 11 type-Dug Frace Drilled Y Face) Driven below and depth 946' Filter Ernest mere hams Address Ions, Oregon 1s record complied by 3.5.V. ts secured from the following sou speak report by driller Fred Sich ts compiled November 1947 Naterial This well had already been sun the contract. According to the "soft formation" et all' times, bottom, -946', the hole was can		Ues string on the control of the con	Size Size Size	Well name LOCATION: Dantilla Co Padigiton Quadra 18 NAME 20 SN of 170. Range Section Fraction STATISTICS: Well type-Dag Driven above below Pinal depth 155' Pert G. Hayras Comers name Address 516 J. V. Garden S: Fendleton, Gregon This record compiled by J.S.W. data secured from the Jollowing Driller Date compiled January 1949 Material Soil Soft brown basalt Bard blue baselt Brown basalt	A. A. A. Crief And Surger And Andrews	dometric dom	File number File number [Code: Tp., R., Sec., Sec.] D C B Z 7 G W L K N P Q Sec. S
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Pendleton Quadr			State Line E F O E	Unmapped Quadran			
68 348 14 SE of			N P Q B	3S 2812 29 NE or SE			N P Q I
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Final depth 87'		mun *includ	icipal producer X	Final dapth 352			icipal 1 producer os stock wells
O. J. Hellberg				Reppner City	R. J	. Stranse	r Drilling Company
Owners name Addrses Lowder, Washington		nal dri	llere name	Owners name Address			llers name . E. 82nd St., Portland, Ore;
	Det	e of dr	Illing Jan. and Feb. 1947		De	nte of dri	illing between 1931 and 1933
This record compiled by Y.S.V.	from De	epened_	_	This record complied by R.S.W.	_ from I	Deepened_	·
iata secured from the following	sources: re	-сизед_	by	dets secured from the rollowing e		re-cased_ leaned_	by
State Engineer	_			Mr. Ramms, City Water Commissions	·r -		
ate compiled Feb. 1945	De	ite		Date compiled July 1947		Date	
Esterial	Thickness (feet)		Romarke	Material		ss Depth (feet)	Remarks
Sand	45	45	mole dismeter 6". Water	Log lost		352	16" carinr. A 300 g.p.m.
-Gravel	42	57	encountered first at 45'. SWL 16'. Maximum rate of				production is maintained practice, but the well was
			reported at 350 g.p.m.				given a hord 300 g.p.m. to pump from which it shawed
			Drawdown to 32".				ill-effects. Elev. water 425
							Temp. 650
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*					4		
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	_	_	Index number 125-44 35-293-29-4 211- number	Heppmer Lumber Company #1	_		Innex number 127-H
ell name				Well name	_		Innex number 127-H 2S-26E-21-ML #
OCATION:			3S-29E-29-J #1 File number	LOGATION:	_		Innex number 127-H 2S-26E-21-HL #
OCATION: Co	unty	<u> </u>	35-265-27-J #1. File number (Gode: Tp., R., Sec., Sec.) D C B A E F G H	Well name LOCATION: Morrow Coun			Inner number 127-H 28-265-21-KL File number (Code: Tp., R., Sec., 2 Sec D C B A E F G H
CCATION; LOITOY Co LEMAND Ped Quadra	ingle		35-265-27-J #1. File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L K J	Well name LOCATION: Horrow Coun Unnapped Quedrang			Intex number - 127-H
Innepped Quadra	ngle -		35-265-27-J #1. File number (Gode: Tp., R., Sec., Sec.) D C B A E F G H	Well name LOCATION: Morrow Coun	10		Inner number 127-H 28-265-21-KL File number (Code: Tp., R., Sec., 2 Sec D C B A E F G H
	ngle -		35-265-27-J #1. File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L K J	Nell name LOCATION: Coun Coun Uncapped Quadrang Quadrang Coun Count Count	10		Intex number - 127-H
OCATION: OFFICE CO	ingle	Uss at	35-265-27-J #1. File number (Code: Tp., R., Sec., Sec.) D C B A Z F G H M L K J N P Q R	Note	asction	Upp st.	Inter number - 127-H 28-263-21-ML # File number (Code: Tp., R., Sec. ; Sec.) D C B A E F G H W L K J N P Q R
	ingle	dome in u	35-265-27-J #1. File number (Code: Tp., R., Sec., Sec.) D C B A Z F G H M L K J N P Q R stus- stic- strial abandoned	Note	asction	done	Inter number - 127-H 28-263-21-ML # File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F C H W L K J N P Q R
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	(land surft.	dome intu irri muni include	35-285-29 J #1 File number	Countrols	nection	dome: intui irri, munic *include:	Inter Namber 127-H 25-265-21-ML #
COATION:	(land surft.	dome intu irri muni include Durand d incl dril	Tile number File number File number [Code: Tp., R., Sec., Sec.] D	LOCATION: Norrow	action land surft. Origi	dome: intui irri, munic *include: Sdwaris inal irill	Inter Namber 127-H 25-263-21-ML 6 File Bunder [Code: Tp., R., Sec. 2 Sec D C B A E F G H W L K J N P Q R
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	(land surft. A. A Origin Addr	dome intu irri muni include Durand d nal dril ress	Tile number File number File number [Code: Tp., R., Sec., Sec.] D	Mell name Count	land sur-ft. A. M. Orig: Add	dome: intuition irri, munic *include: *Sdwaris incl drill irass to of dril	Inter Number 127.4
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OCATION: DITAY CO Quadra So Con 27 ID of ST P. Range Section Fraction Driven above below inal depth 211 Sepport City mears name Address atta record compiled by J.S.V. its secured from the Collowing control of	A. A Origin Addr	dome intu irri muni include Durand d isl dril ress of dril	Tile number File number File number [Code: Tp., R., Sec., Sec.] D	Mell name Count	land surft. A. M. Original Add	nome: intuitivitium inrituitium inrituitiu	Inter number - 127-H 2S-26E-21-ML 9 File number (Gode: Tp., R., Sec., 1 Sec D C B A E F C H U L K J N P Q R L K J N P Q R well status- atica
DOCATION: DITCY CO TAMEDRE DESCRIPTION DESCRIPTION TATISTICS: PARTITION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION DESCRIPTION ADDRESS ADDR	A. A. A. Corigin Addr Date sources: re-	dome inau irri muni include Durand d nal dril ress of dri eppened cased	Tile number File number File number [Code: Tp., R., Sec., Sec.] D	Mell name	land sur- ft. A.M. Orig: Add Add Add From Detroes: re	domerical incurrence of the control	Inter number - 127-H S3-263-21-ML # File number [Code: Tp., R., Sec., 2 Sec D C B A E F G H W L K J N P Q R Attus- atte: attic: atticity att
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OCATION: DIFTAY CO COATION: DIFTAY Quadra \$ 200 29 ED of ST D. Range Section Fraction PATISTICS: shit type-Dug face) Driven below inal depth 211 seponer City mere same Address tis record compiled by J.S.V. tis secured from the Jollowing serbal log report by the driller tity Vater Commissioner, Earus. Naterial	A. A Origin Addr Date cle and cle and Thickness (feet)	dome intu irri nuni include Durand d nal dril reas s of dri spened cased seaned Depth frest)	Tite number [Code: Tp., R., Sec., Sec.] D C B A Z F G H M L K J N P Q R stus- stus- strial abandoned gation dry hole ciph X producer X s stock wells Son lars name walla Mathington ling about 1928 Banarks	Countron:	land surft. A. M. Original Additional Control of the Control of t	domerical interpretation of the control of the cont	Inter number - 127-H S3-263-21-ML # File number [Code: Tp., R., Sec., 2 Sec D C B A E F G H W L K J N P Q R Attus- atte: attic: atticity att
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OCATION: DITION CONTINUES DITION CONTINUES DITION CONTINUES P. Range Section Fraction FATISTICS: shit type-Dug face) Driven face) above below inal depth 2111 seponer City THE FORMAN COMPIL'S AND ADVERTISHED ADDRESS Address mis record compil'd by J.S.V. the secured from the callowing a serbal log report by the driller tity Vater Commissioner, Earnes, the compiled July 1747 and January Vater Commissioner, Earnes, the compiled Soil, gravel and sand Hard cube basalt Eed honeycoab basalt	A. A Origin Addr . Date	dome invu irri muni muni muni muni minclude dial dril ress of dri mappined cased saned Depth frest) 23 69 93	Tile number File number [Code: Tp., R., Sec., Sec.] D C B A E 7 G H N L K J N P Q R Setus- atica abandoned getton dry bole cipal X producer X s stock wells Soa lars name wella Walla, Mashington ling about 1928 by Remarks O' hole - artesian flow necuntered. Short to a neight of 18° above open paring: [2 to 14" above naming:	Countron:	land surft. A. M. Original Additional Control of the Control of t	domer in a control of the control of	Inter number - 127-H 2S-26S-21-ML # File number (Code: Tp., R., Sec., 2 Sec D C B A E F G M W L K J N P Q R N P Q R Well statustic St
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OCATION: DITAY	A. A Origin Addr . Date	dome invuite include and dril dril dril dril dril dril dril dri	Tile number File number Code: Tp., R., Sec., Sec.) D	Countron:	land sur- ft. A. M. Original Additional Control of the Control of	include: Sdwaris inel arillines sepened secased leaned 16 21 16 21 101	Inter number - 127-H 28-263-21-ML 6 File number (Code: Tp., R., Sec., 1 Sec D C B A E F C H W L K J N P Q R Attus- attu
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Heppner Lumber Company #2			lndex number 128-N 25-26E-21-NL #2
Well name			File number (Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Horrov County	•		E F G H
Unnapped Quadrangle	•		H L K J
28 26E 21 El of SW1 Tp. Range Section Frectional e	ection		N P Q R
STATISTICS:			
Nell type-Dug Elevation (1d face)	nd sur- ft.	domes	t10*
bslow		insus	strial x sbandoned gation dry hole producer x
Finel depth 229			stook wells
Reponer Lumber Company	Fred 3	. Micho	eon Lere name
Owners name Address Esppner, Oregon	Addr	•••	Ione, Oregon
	Date	of dril	lling Oct. 1940 to Feb. 1941
This record complied by 3.5.W. data secured from the Collowing sou	from Dee	pened	_
Company officials and driller.	el	ened	ру
20/0			
Data compiled October 1947	Thickness	Depth	Remarks
Hatorial	(feet)	(feet)	
Dirt end gravel	16	16	6* hole - cased to -201
Blue rock hard and boulders	7 _	23	Constant flow 55 g.p.m.
Soft streak Bacalt with crevices common		-5)	Intermittent pumping of
and nigger heads	56	81	75 g.p.m. good for 1 hour
Blue basalt	27	108	and 25 minute periods.
Oray basalt	46	154	Flow figures from lumber
Dark gray basalt	20	174	company officials
Light gray basalt	4	178	
Wery light gray end wery hard	3	181	
Darker gray and blue basalt	12	193	
Dark blue basalt, seams	12	205	
Boulders and nigger heads	9	214	
Hard gray basalt	Ł.	219	
Shelly and broken basalt	1	219	Some water
Hard becalt	10	229	
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ll name			File number
			(Code: Tp., R., Sec., Sec.)
CATION:			D C B A
atilla County			ž Y C H
antilla Quadrangle			H L K 7
Range Section Fractional S	ection		N P Q R
ATISTICS:		_	, tue
Drilledx face)	nd sur- ft.	Use sta	stus- Well Status-
helow			
nal depth 160'		munic includes	gation dry hole
ity of Hermiston	A. A.	Durand &	Son
ners name Address	Ortet	nal drill	lers name Walla Walla, Washington
			liing about 1920
nis record complied by M.S.N. ste secured from the Collowing sour erbal log report by the driller, leid conments and location by Mr. 1 tty Recorder.	from Decrees: re- claylor,	epened -cased eaned	-
ate compiled Nov. 1947 & Jan. 1946	Thickness	Depth	
Netorial	'(feet)	(feet)	Remerks
Sand and gravelabout	60	60	
Blue clay - about	30	90	
Basalt - about	70	160	9011
<u> </u>	 	-	Sttom of hole. Pumped 275 g.p.m. originally but has decreased.
	-	 	has decreased.
	·	1	
			Inner
Rermiston City #2			Index number 87-U 41-287-10-P Fila number
all made			Fila number (Code: Tp., R., Sec., Sec.)
OCATION:			
			D C B A
	у		D C B A
Umatilla Count			
Umstilla Count Umstilla Quadrengl	.9		E F G H
	.9		E 7 G H
Umatilla Count Umatilla Quadrengl	.9		E 7 G H
Unstills Count Unstills Quadrensl My 255 10 St of SV Tp. Range Section Fractional FRATISTICS: (a) type-Day Elevation (1)	section		E 7 0 H M L K 7 N P Q E
Unstille Count Unstille Quadrenci Li 28E 10 SL of SV D. Range Section Fractional TATISTICS: [st] type-Dag	section	10me	E 7 0 H N L K 7 N P Q 2 tentus- setic- setic- setic- shandoped
	section	in no	E 7 0 H N L K 7 N P Q 2 tentus- setic well status- setic shandomed dry hole dry hole testin
Countilla	section	in no	E 7 0 H N L K 7 N P Q 2 tentus- setic- setic- setic- shandoped
Destilla Count Destilla Quedrengi Destilla Quedrengi Destilla Sti of Svi Fractional TATISTICS: all type-Dug Elevation (1 face) Drilled x priven above balow City of Hermiston Whore name	section and surft. Orig	inal 4ril	E 7 0 H N L K 7 N P Q 2 tentus- setic well status- setic shandomed dry hole dry hole testin
	section and surft. Orig	irri muni *include (inal dri) dress	totus- satic* satic* set stock wells E F O H N L K 7 N P Q E Well status- shandomed dry hole clopal x producer X liers page
Destilla Count Destilla Quedrengi Discourse Count Destilla Quedrengi Di SE of SV2 Di SEL of SV2 Fractional TATISTICS: Ell type-Dug Drilled x Driven Above balow City of Hermiston Maners name Address	section and surft. Orig	inal dril drass	tentus- estic astrial gation tippe Q R Well status- estic abendoned dry hole producer I
Destilla Count Destilla Quedrengi Discourse Count Destilla Quedrengi Di SE of SV2 Di SEL of SV2 Fractional TATISTICS: Ell type-Dug Drilled x Driven Above balow City of Hermiston Maners name Address	section and surft. Orig Ad from De	dome ln:u irri muni *include inal dril drass te of dri eepsned e-cased	tentus- tentus
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Destille Count Instille Quedrenge Quedrenge Quedrenge Quedrenge Quedrenge Quedrenge Ste of Svt	and surft. Orig Ad pe from D urces: r	dome into irri munn *include inal dril drans tte of dri mespaned e-cased	tentus- tentus
Dasible Count Dasible Quedrenge Discourage Discoura	esocion and surft. Original Additional Control Description of the Control Description of the Control	domedomedomedomedomedomedomedomedomedome	tentus- tentus
Imptills Count Imptills Quadrengl Journal Strong Section Fractional PATISTICS: all type-Dug Elevation (1 face)	original surfit. Original surfit. Additional from Durcee: From Durce	dome had irri mini dril dril dril dril dril dril dril dri	thing 1924 Remarks T T O H N L K 7 N P Q E Well status- shandomed dry hole producer X Remarks cling 1924
Imptills Count Imptills Quadrengl Journal Stip of Swip P. Range Section Fractional PATISTICS: all type-Dug Fractional Drilled x Driven above balow inal dapth 500' City of Hermiston where name Address Address X. A. Dodds, Hermiston, City Offic and State Engineer ats compiled Nov. 1947, Feb. 194 Naterial This well was drilled by a st	original section original section original section of the section	dome had irri mini irri mini irri mini irri mini irri mini irri irr	this producer E produc
matilla Count matille Quarenel 1 285 10 SE of SV 1. Range Section Fractional PATISTICS: sell type-Dug Elevation [1	original section and surft. Original section and surft. Defined Durces: relate continues of the section and section and section and section are section as in the section are section as section are section ar	dome have irriganny irriga	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure by the crime for oil. The light but will be following positive because the repetition of
matilla Count matille Quadrengl 2 265 10 St of Svi Range Section Fractional PATISTICS: salt type-Dug	original section original section origi	dome have irriganny irriga	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure by the crime for oil. The light but will be following positive because the repetition of
matilla Count matille Quarenel 1 285 10 SE of SV 1. Range Section Fractional PATISTICS: sell type-Dug Elevation [1	original section original section origi	dome inri mnn irri mnn irri mnn irri mnn irri mnn irri mnn irri drass the of dri deepsned e-cased leaned bete ss Depth feet) y prospen toppen toppen toppen toppen toppen toppen 20	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure by the crime for oil. The light but will be following positive because the repetition of
matilla Count matille Querenel 2285 10 SEt of SV Range Section Fractional PATISTICS: shi type-Dug Elevation (1 Drilled x above below inal dapth 500 blow City of Hermision where name Address Address E. A. Dodds, Hermiston, City Officant State Engineer ets compiled Nov. 1947, Feb. 194 Naterial This well was drilled by a starting language of the principle information from recollection that the thickness intervals soli intervals made the figure.	original surfit. Original surfit. Original surfit. Per prom D per	dome have been a company to compa	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure be set of the following positive because the repetition of the positive because the repetition of the positive because the repetition of
matilla Count matilla Quarenel Marce Section Fractional MATISTICS: 101 type-Dug Elevation (1 Drilled x face) Driven above below inal dapth 500' Mity of Hermision where name Address Material Material Material Naterial This well was drilled by a starting and long in the county in the	original section original section origi	dome in a dome i	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure be set of the following positive because the repetition of the positive because the repetition of the positive because the repetition of
matilla Count matilla Quarenel S 288 10 SEt of SV C Range Section Fractional PATISTICS: Old type-Dug Elevation (1 Drilled x face) Driven Above below Inal dapth 5001 City of Hermiston where name Address Address E. A. Dodds, Hermiston, City Office and State Engineer ats compiled Nov. 1947, Feb. 194 Naterial lng made for the call Hermiston, one of the principle information from recollection that the thickness intervals Sol' intervals made the figure Sand and gravel Basalt Basalt	original services of the servi	dome in a dome i	thing 1924 Remarks cring for oil. The light but will be following positive because it a figure be set of the following positive because the repetition of the positive because the repetition of the positive because the repetition of
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matilla Count matilla Quarenel S 288 10 SEt of SV C Range Section Fractional PATISTICS: Old type-Dug Elevation (1 Drilled x face) Driven Above below Inal dapth 5001 City of Hermiston where name Address Address E. A. Dodds, Hermiston, City Office and State Engineer ats compiled Nov. 1947, Feb. 194 Naterial lng made for the call Hermiston, one of the principle information from recollection that the thickness intervals Sol' intervals made the figure Sand and gravel Basalt Basalt	original section original section original section orig	dome in a dome i	Remarks cling for oil. The lating 1924 Remarks cling for oil. The lating 1924 This first was Flow of 125 g.p.s. encounter at -775 This first was
matilla Count matilla Quarenel Marce Section Fractional MATISTICS: 101 type-Dug Elevation (1 Drilled x face) Driven above below inal dapth 500' Mity of Hermision mere name Address M. A. Dodds. Hermisten, Cit/Officent E. A. Dodds. Hermisten, Cit/Officent This well was drilled by a starting long and for the call Hermiston, one of the principle information from recollaction that the thickness intervals solve intervals sade the figure Sand and gravel Basalt Alluvial material Basalt Alluvial material	original services of the servi	dome in a dome i	Remarks cling for oil. The supplied the following pipe. Remarks cling for oil. The supplied the following pipe. This flow was readered nil by a 61 standard pipe. The property of the supplied the following pipe. The following
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metills Quadrengi N 28E 10 Sti of Svi Range Section Fractional ATISTICS: Ill type-Dug Fractional Drilled Torilled T	original section and surft. Original section and surft. Define Durces: recisis Thicknet (feet) oek company has in the section as in the section and surft. ZO 20 80 80 80 220	dome in a control of the control of	Ramarks cling for oil. The supplied the following supplied the following supplied the repetition of Flow of 125 g.p.m. encounter at -375'. This flow were readered nil by 0 6' stand pipe. Temp. 70°F. Light gas door.
matilla Count matilla Quadrengi S 285 10 SEt of SV Range Section Fractional PATISTICS: shi type-Dug	original section and surft. Original section and surft. Define Durces: recisis Thicknet (feet) oek company has in the section as in the section and surft. ZO 20 80 80 80 220	dome in a control of the control of	Remarks cling for oil. The supplied the following pipe. Remarks cling for oil. The supplied the following pipe. This flow was readered nil by a 61 standard pipe. The property of the supplied the following pipe. The following

TAMENTAL.			(Code: Tp., R., Sec., 2 Sec.)	Well name			File number (Code: Tp., R., Sec., 2
LOCATION: Unatilla	County		D C B A	LOCATION:			D C. B
	County rengle		E F G H	Umatilla	County		E F G
61 351 34			M L K J		drengle		M T K
Tp. Range Section Freetic	onal section		R P C R	75. Range Section Fract	f HW: ional section		N P Q
STATISTICS:				STATISTICS:			
Well type-Dug Elevation face)	on (land sur-	Tae at	satus- Well status-	Well type-Dug Elevat.	ion (land sur-	Use s	tatus- Well statu
Driven above	ft.	inst	estrial abandoned gation dry hols	Drilled x face) Driven above		ins	estic* ustrialsbandon
Final depth 103'		mun:	cipal producer x	Final depth 121		au r	igetion x dry holicipal produce
Ramey Hill	A. A.	. Durand d		George Hogden		*incima	es stock wells
Owners name Address 338 N. Hill St.	Orig	inal dril	lere mame Valla Valla, Westington	Owners name Address Route 2	Orlg	inal dri dress	llers name
Milton, Oregon	De	to to et	lling March 1946	Freewater, Oregon		to of dr	111ing 1945
This record complied by M.S.W. data secured from the following	from D	е-сасеd		This record complied by N.S.W.	from D	eepensd_	_
Driller	e.	leemed	by	data secured from the collowing	ng aources: r	e-cased_ leaned_	
	-			State Engineer	_		
Data compiled January 1948		ete		Date compiled February 1948	De	ate	
Naterial	Thicknes (feet)	(feet)	Remarks	Naterial	Thicknes (feet)	B Depth (feet)	Remarks
Dog pit	46	46		Dug weil	37	37	Hole 8*
Boulders	- 6	52		Cement gravel	84	121	
Cement gravel	35	87					Bottom of hole.
Loose gravel (coarse)	10	97				ļ	SWL when completed was :
roned Standl (Cogles)	6	103				-	Domp test at 285 g.p.m.
		1					,
		 		_			
						+	
					-		
							,
Hodson Well mame LOCATION:	_		Index number 108-H 13-263-72-7 File number [Code: Tp., R., Sec., 2 Sec.]	Horn Well name			Index number 52-U 13-325-1 File number (Gode: Tp., R., Sec., 2 S
Well name LOCATION: Mcrrov Go Blalock Island Quadra			IN-26E-32-F	LOCATION: Unatille (Continue Continue C	County		File number
Well mame LOCATION: Morrov Co	angle		13-26E-72-F File number [Code: Tp., R., Sec., 2 Sec.) D C B A E F G H	LOCATION: Umatille	angle		13-3E-1 File number (Code: Tp., R., Sec., S
Well name LOCATION: Mcrrov Go Blalock Island Quadra	angle		13-26E-)2-y 711e nuaber (code: Tp., R., Sec., Sec.) D C B A E 7 G H M L K J	LOCATION: Unatille Company Pendleton Quedr 18 322 1 El Tp. Range Section Fraction	angle		13-725-1 File number Code: Tp., R., Sec., S D C B E F G M L K E Code: Tp., R., Sec., S Code: Tp., Sec., S Code: Tp., Sec., S Code: Tp.,
Well name LOCATION: Morrov Go Blalock Island Quadra 1F 262 32 \$4 of W Tp. Range Saction Fraction STATUSTICS: Well type-Dig Elevation	angle with all section	Vse sta	13-26E-72-y Tile number Gode: Tp., R., Sec., Sec.) D	LOCATION: Umatille Pendiaton Quedr 18 JZZ Tp. Range Section Fraction STATISTICS: Rell type-Dug Elevetion	nal section	Ūde sti	File number File number (Code: Tp., R., Sec., S D C B E F G M L K N P Q
Mell name	angle	Use sta domes innus	13-26E-)2-y File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M L K J N P Q R tus- tic* x Scholars Well status- tic* x Scholars Schol	LOCATION: Unatille Pendieton Quedr IF JZZ 1 Et Tp. Range Section Fraction STATISTICS: Well type-Dug Elevetion Drilled x Face) Driven shows	nal section	inu.	Y
Mell name	angle	Use sta domes intus irrig	13-26E-)2-y Tile number Code: Tp., R., Sec., Sec.) D	LOCATION: Umatille	nal section n (land surft.	intu irri muni	19-72E-1 File number Fil
Molification Morrov	angle vi sal section (land surft.	Use sta domes incus irrig munic "includes	13-26E-72-y	Unatille Quedration Quedration Quedration Quedration Quedration Practical Practical Quedration Practical Quedration Practical Quedration Quedration Practical Quedration	nal section n (land surft.	dome: inru- irri- muni: include:	19-72E-1
Molification Morrov	angle vi al section (land surft.	Use sta domes incus irrig munic "includes	13-26E-)2-y File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M L K J N P Q R tus- tic* x tic* x tic* trial ation dry bole tipel	Unatible Quedration Quedration Quedration Quedration The provided Practic Quedration Practic Quedration Quedratio	nal section n (land sur- ft. C. E. 1 Origin	dome: inru irri muni: finclude: Levis nal dril:	Yu-72E-1 File number Gode: Tp., R., Sec., S D C B E F G M L K N P Q
Well name LOCATION: Morrov	angle it to the section of the sect	Use sta domes invis irrig aunic 'includes	13-26E-72-y	Unatible Pendleton Quedr IM 322 1 E- TP. Range Section Fraction STATISTICS: Well type-Dig Drilled I Driven showe below below 1200 below 120	nal section n (land surft. C. E. 1 Origin	dome: inru irri muni: finclude: Levis nal dril:	File number File number Foode: Tp., R., Sec., S D C B E F G M L K N P Q The status abandons stile x abandons spring producer estock wells ers name ers name
Mell name	origin Addr	Use sta domea invas irris "includes "includes e of drill append	13-26E-72-Y	Unatille	onal section I land surft. C. E. Original Addr. Gon Data	domeringuation in the control of drill c	File number File number File number Gode: Tp., R., Sec., S D C B E F F G M L K N P P Q Autustic X strial delay belief b
Well name LOCATION: Morrov	origin Addr	Use sta domea innus irrig munic *includes nel drill rees o of dril	13-26E-72-y	Unatible Quedration Quedration Quedration Quedration Quedration Practico	c. E.] Origin Addr fron Des	domeringuation in the second i	File number File number File number Gode: Tp., R., Sec., S D C B E F F G M L K N P P Q Autustic X strial delay belief b
Mell name LOCATION: Merrov	origin Date of From Dear or one our one	Use stated domes in law series and trill. The series of drill agents and the series and trill agents agents and trill agents agent	13-26E-72-Y	Unatilie Pendleton Quedr IN 322 1 Et Fraction STATISTICS: Mell type-Dig Drilled I Driven above below Final depth 95! Zoy Born Owners name Addrese Boute 1 Pendleton, Ore This record compiled by N.S. V. data secured from the Jollowing Mr. J. E. Banna, Pendleton, Ore	nal section n (land surft. C. E. Origin Addr gon Date sources: re- cle	domerin variable in variable i	File number File number Foods: Tp., R., Sec., S D C B E F G M L K N P Q The strict and stric
Mell name LOCATION: Merrov	origin Addr from Deseources: re- Chickness	Use sta domes industrial sunt control of the contro	IN-26E-72-Y File number [Code: Tp., R., Sec., Sec.] D C B A E F G H W L K J N P Q R tus- tic* x Hell status- tic* ation dry hole producer I stock wells by	Unatilie Pendleton Quedr IN 322 1 Eg Th. Range Section STATISTICS: Well type-Dig Drilled I Driven above below Final depth 951 207 Born Owners name Addrese Boute 1 Pendleton, Ore This record compiled by S.S.V. data secured from the Jollowing Mr. J. E. Ranna, Pendleton, Ore Date compiled January 1948	on land surft. C. E. I Origin Addr gon Date from Decesources: re- gon Date from Decesources: re- gon Date	domerinau de intuitation de intuitat	File number File number Foods: Tp., R., Sec., S D C B F F G M L K N P Q The strict of the str
Mell name LOCATION: Morrov Co Blalock Island Quadre TP. Range Section Fraction STATISTICS: Well type-Dig Klevstion Driven face) Driven below Final depth ? Hervey Metlic Dropers name Address Portland, Oregon This record compiled by M.S.W. Leta secured from the Collowing of the Compiled Control of the Collowing of the Col	origin Addr from Descources: re- cle Thickness (feet)	Use sta domea innus irrisg munic fincludes mal drill reces of drill pensd -cesed saned	IN-26E-72-Y File number [Code: Tp., R., Sec., Sec.] D C B A E F O H W L K J N P Q R tus- tic* x abandoned atios dry bole producer x steck wells Remarks	Unatilie Pendleton Quedr IN 322 1 Et Fraction STATISTICS: Mell type-Dig Drilled I Driven above below Final depth 95! Zoy Born Owners name Addrese Boute 1 Pendleton, Ore This record compiled by N.S. V. data secured from the Jollowing Mr. J. E. Banna, Pendleton, Ore	nal section n (land surft. C. E. Origin Addr gon Date sources: re- cle	domerina de la composición del composición de la composición de la composición de la composición del composición de la c	File number File number Foods: Tp., R., Sec., S D C B E F G M L K N P Q The strict and stric
Mell name LOCATION: Merrov	origin Addr from Descources: re- cle Thickness (feet)	Use sta domes innus irrisg munic fincludes enal drill reces of drill pensd -cesed saned Depth (feet)	IN-26E-72-Y File number [Code: Tp., R., Sec., Sec.] D C B A E F O H W L K J N P Q R tus- tic* x abandoned ation dry bole producer x stock wells Bre name Ing by Remarka Flowing well, with small consistent yield of were	Unatilie Pendleton Quedr IN 322 1 Eg Th. Range Section STATISTICS: Well type-Dig Drilled I Driven above below Final depth 951 207 Born Owners name Addrese Boute 1 Pendleton, Ore This record compiled by S.S.V. data secured from the Jollowing Mr. J. E. Ranna, Pendleton, Ore Date compiled January 1948	nal section n (land surft. C. E. 1 Origin Add gon Date from Des sources: re- gon Date Thickness	domerina de la consecución del consecución de la consecución de la consecución de la consecución del consecución de la c	File number File number Gode: Tp., R., Sec., S D C B E F G M L K N P Q The strict and strict
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il name			(Code: Tp., R., Sec., 2 5ec.)			 _	
OCATION:			D C B A	LOCATION:	tv		D C B A
matille Coun	nty		Z F G H	Umatilla Count			E F G H
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p. Range Section Fractional	of MEd		н Р Q В	7p. Range Section Fractional	section		N P Q R
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cell type-Dag Elevation	(land our-	Usa sta		Well type-Dug Elevetion (: Drilled x face)	(land sur-	Use sta domes	atic*
Drilledx fece) Driven above	tt.	domes inpus intia	strielabendoned	Driven above		inus irrig	strial abandonod ary hole
Final depth 180'	 .	irrie munic	geticn dry hole cipal producer x s etock wells	Final depth 171'		munic	cipal producer x s stock wells
Cunningham Sheep Company			lers pame	Watilds Johnson Owners name Address Route 2		nal drill	lers name
Address Pendleton, Oregon	Add:	1.004		Address Route 2			lling Nov. and Dec. 1946
	_	e of dril	111ing 1939	Frankater, Oregon	_	epened	
This record compiled by E.S.W. data secured from the following s	from Dec	epened	- -	This record complied by E.S.V. data secured from the following so	prices: 10.	epened -cssed	
	cl	leaned	ьу	State Engineer	e1.	u	
Company officials	_				Det		
Date compiled July 1947		Lto		Date compiled February 1948	Thickness	Depth	Remarks
lister is l	Thickness (feet)	(feet)	Remarks	Material	[feet]	(reet)	
No log available		180	Pumped for stock use only	Top soil	11	11	3º hole
				Loose gravel and mand	15	26	SWL 41'.
		Γ		Boulders and gravel	10	36	Haximum rate pumped in
	-	I		Cement gravel	16	52	1947 was 165 g.p.m.
		T		Open gravel	1	53	
		1		Cement gravel	31	84	<u></u>
		+		Open gravel	3	87	
		+		Cement gravel	34	121	
	-	+	-	Open gravel	5	126	
		+	-	Cement grevel	18	144	
			J	Open gravel	3	147	
				Open gravel Cenent gravel	6	153	
			Index number 27		2	155	
			Index number 95-U 5M-28E-17-J	Open gravel		161	
			W41	Cement gravel	6		
			File number (Code: Tp., R., Sec., Sec.)		2	163	
Well name			(Code: Tp., R., Sec., 2 Sec.)	Open gravel	2		
Well name	ounty		(Code: Tp., R., Sec., 2 Sec.)	Open gravel Cement gravel		163	
LOCATION: Umatille Co			[Code: Tp., R., Sec., 2 Sec.]	Open gravel Cement gravel Open graval	3	163 166	
	angle SE2		[Code: Tp., R., Sec., 2 Sec.] D C B A E F G H M L X J	Open gravel Cement gravel Open graval Cement gravel	2 3 2	163 166 168 169	Bottom of hole
No.	angle SE2		[Code: Tp., R., Sec., 2 Sec.]	Open gravel Cement gravel Open graval	2 3 2	163 166 168	Notion of hole
Moll name LOCATION: Unntilla Conductor Unntilla Quadra Spi 28g 17 Mg of 5 Th. Range Section Fraction STATISTICS:	angle	<u></u>	D C B A E F G H M L K J N P Q R	Open gravel Cement gravel Open graval Cement gravel	2 3 2	163 166 168 169	
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LOCATION: Co.	angle SEA nel section	dome in a irr	Code: Tp., R., Sec., 2 Sec.) D C B A E F G H H L X J N P Q R Status- setto* s	Open gravel Cement gravel Open graval Cement gravel	2 3 2	163 166 168 169	Index number — 73-U 2H-3CE-19-B File number
Moli name	angle SEA nel section	dome in a irr:	Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L X J N P Q B status- mettic- mettic- abandoned	Open gravel Cement gravel Open gravel Cement gravel Open gravel Jones #2 Well name	2 3 2	163 166 168 169	Index duaber — 73-U 2E-3/E-19-R File number (Code: Tp., R., Sec., 2 Sec
Moli Inage	angle SEd nal section p (land surft.	dom inu irr mun *include	Gode: Tp., R., Sec., 2 Sec.) D C B A E F G H M L X J N P Q B Status- mention mention dry hole producer x	Open gravel Cement gravel Open gravel Cement gravel Open gravel Jones #2 Well name	2 3 2 1 2	163 166 168 169	Iniex dunber — 73-U 28-378-19-R File number (Code: Tp., R., Sec., ; Sec.
Moli name	angle SEA nal Section a (land surft.	dom inu irr mun *include	Code: Tp., R., Sec., 2 Sec.) D C B A E F G H H L X J N P Q R Status- mettic- mettic abandoned dry hole micioal producer x	Open gravel Cement gravel Open gravel Cement gravel Open gravel Jones #2 Well name LOCATION: Umatilla Cou	2 3 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	163 166 168 169	Index duaber — 73-U 2H-3/F-13-R File number (Code: Tp., R., Sec., 2 Sec. D C B A Z F G R
Well name LOCATION: Constille	single SEA and section a (land surft. ft. Origination Additional Addition	dome into irri muni finclude finclude ginal dri.	Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L X J N P Q R Status- mentio* mustrial x destroin dry hole incipal producer x lilere name	Open gravel Cement gravel Open gravel Commant gravel Open gravel Jones #2 Well mane LOCATION: Unatilla Cou	2 3 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	163 166 168 169	Index dumber — 73-U 2H-3CE-17-E File number (Code: Tp., R., Sec., 2 Sec. D C B A Z F O B M L K J
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Wentilla Go Unetilla Guadra SH 28T 17 H2 of S FRATISTICS: Well type-Dug bore below Priven below Final depth Jones-Scott Sand & Gravel Company Owners name Address Wells Valla, Vashin This record complied by I.S.V. date secured from the following Company efficials	ngle Sti Dal section (land surft. ft. Origination Add from Dar sources: r	domminutinutinutinutinutinutinutinutinutinut	Code: Tp., R., Sec., 2 Sec.) D C B A E F G H M L X J N P Q R Status— Sta	Open gravel Cement gravel Open gravel Cement gravel Open gravel Jones #2 Well name LOCATION: Unatilla Zuedran ZN JCE 19 SI corner Tp. Range Section Fractions STATISTICS: Well type-Dug Elevation Drillad Z face)	2 3 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	163 166 168 169 171	Index dumber = 73-0 28-308-19-8 File number [Code: Tp., R., Sec., 2 Sec. D C B A Z F G B M L K J N P Q S
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Unatilla Quadra 58 282 17 EF2 of 5 Ty. Range Section Fraction STATISTICS: Well type-Dug Elevation Drilled x face) Driven below Final depth Jones-Scott Sand & Oravel Company Address Wells Valla, Vashin This record compiled by F.S.V. data secured from the following Company efficials Date compiled Harch 1948	ngle Stinal section a (land surft. Origination Additional Communication Additional Communication	dommination in a domination in a direct in	Code: Tp., R., Sec., 2 Sec.) D	Open gravel Cenent gravel Open gravel Cenent gravel Open gravel Jones #2 Well name LOCATION: Unatilla Counting Typ. Range Section Fractions STATISTICS: Well type-Dag Drillad X Driven show below Final depth 2001 Cunningham Sheep Company Owners name	2 3 2 1 2 1 2 unty ngle r of ME all section (land surft.	Use at dome in in irriman dri	Index dumber — 73-U 28-308-19-R File number (Code: Tp., R., Sec., Sec. D C B A Z F G B M L X J N P Q B Status— statu
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				R., Sec., 🗼
LOCATION:				рСВ
Omatilla Con				E F G
Umatilla . Quedra:	ng) e			M T K
Tp. Bange Section Fractions	al section			N P Q
		-		
STATISTICS:		_		
Wall type-Lug Elevation Drilled x face)	(land sur- ft.	Use .	status- meetic*	Well status
briven above		ir:	rigation	
Final depth			nicipal lea atock wells	producer
D. L. Johnson				
Owners name Address		ginal dri idreas	lllers name	
	De	ate of di	illing 19	÷0
This record complied by N.S.W. data secured from the following s	from 1	Deepened		
		:leaned		
U. S. Production and Marketing Ad	ministratio -	<u> </u>		
Date compiled March 1948	1	ate		
Natorial	Thickne	es Depth (feet)	Res	narke
No data available				
			Index number	61-U
Kik Well name			File number	-25E-23-M
Well name	_		518	-2512-23-M ., Sec., ½ Se
Well name	ity		File number (Code: Tp., R	-25E-23-M ., Sec., : Se
Well name LOCATION: Umatilia Coun			File number (Code: Tp., R	-25E-23-H ., Sec., 2 Se
Well name LOCATION: Cmatilia Cours Quadrale Quadrale	pie .		File number (Code: Tp., R	_25E_23_K ., Sec., ; Se D C B E F G M L K
Well name LOCATION: Umatille Coun Umatille Quadrans 5N 28S 23 Well of Well	pie .		File number (Code: Tp., R	-25E-23-H ., Sec., 2 Se
Mell name LOCATION: Countries Coun	pie .		File number (Code: Tp., R	_25E_23_K ., Sec., ; Se D C B E F G M L K
Well name LOCATION: Destille Councille Quadrange SN 285 23 Yel of Yel Tp. Range Section Frectional STATISTICS:	saction	Use st	File number (Code: Tp., R	_25E_23_K ., Sec., ; Se D C B E F G M L K
Well name LOCATION: Unatille Coun Unatille Quedrane 5N 285 23 Well of Well TP. Range Section Frectional STATISTICS: Well type-Dug Elevation (face) Driven bove	saction	10.70	File number (Code: 7p., R	25E23_M
Mol1 name	saction	irri	File number (Code: Tp., R code:	D C B E F G : M L K N P Q 1
Well name LOCATION: Destills Quadrans SN 285 23 Wid of IV Tp. Range Section Frectional STATISTICS: Well type-Dus Driven Server Server Pinal depth 1601	saction	irri muni *include	File number (Code: Tp., R (Code: Tp., R)	25E23_M
Mell name Count	section land surft.	irri muni *include	File number (code: Tp., R R R R R R R R R R	P C B E F G Sevential Seve
Well name LOCATION: Countille Countille Quadran SN 285 23 YM of JW TP. Runge Section Frectional STATISTICS: Well type-Dug Entre of Section face) Driven ebove below Final depth 1601 W. C. Kik Dairy Weners name Address Route 2	saction land surft. A. A. Origi	irri muni *include Durand d	Tile number (Code: Tp., R (Cod	D C B E F G I N P Q I Well status- shandoned dry hole producer
Mell name	action land surft. A. A. Original	into irri muni *include Durand d nal dril reas e of dri	Tile number (Code: Tp., R (Cod	P C B E F G Sevential Seve
Well name LOCATION: Unatille Quadran SN 285 23 ywid of Nvi Tp. Runge Section Frectional STATISTICS: Nell type-Dug Enter of Section face) Driven ebove below W. C. Kik Dairy Weners name Address Route 2	saction land surft. A. A. Original	innutirri muni *include Durand d nal dril reas e of dri epehed -cesed	Tile number (Code: Tp., R (Code: Tp., R R) atus- atus- stic- strial x gation (cipal s stock wells s stock wells (Son) lers name walle walle, Nov.	D C B E F G I N P Q I Well status- shandoned dry hole producer
Well name LOCATION: Unatilia	section land surft. A. A. Original Add from Detroms: re-	innumirri muni *include Durand d nal dril reas e of dri epehed -cesed eaned	Atus- atus- stic* stic* stic* stich stich strial x gation cipal stock st	D C B E F G I N P Q I Well status- shandoned dry hole producer
Mell name LOCATION: Unatille Quadrang SH 288 23 Wij of JV/ TP. Runge Section Frectional STATISTICS: Nell type-Dug Kleretion (Driven below Final depth 1601 W. C. Kik Dairy Weners name Address Route 2 Hermiston, Oregon This record complied by J.S.W. lata secured from the collowing son	land surft. A. A. Original Add Dat from De irces: reces: reces: claud also the	irri muni *include Durand d nal dril reas e of dri epened -cesed eaned e drille	Atus- atus- stic* stic* stic* stich stich strial x gation cipal stock st	D C B E F G I N P Q I Well status- shandoned dry hole producer
Meli name Location: Countilis Quadrang SN 288 23 Wil of Frectional STATISTICS: fell type-Dug Frection (land surft. A. A. Original Add Date Clark Control Detection	irrimuni irr	Atus- atus- stic* stic* stic* stich stich strial x gation cipal stock st	D C B E F G I N P Q I Well status- shandoned dry hole producer
Mell name Location: Capatilia Quadrang SN 288 23 Wil of Will De Range Section Frectional STATISTICS: fell type-Dig Kleretion (Driven ebove below Final depth 1601 V. C. Kik Deiry Where name Address Route 2 Hersiston, Oregon This record compiled by I.S.W. ata secured from the collowing so	land surft. A. A. Original Add Dat from De irces: reces: reces: claud also the	irrimuni irrimuni include Curand d nal dril reas e of dri epened -cesed end drille	Atus- atus- stic* stic* stic* stich stich strial x gation cipal stock st	P C B E F G : Well statusebandened dry hole producer Vannington 1, 1944
Meli name Location: Countilis Quadrang SN 288 23 Wil of Frectional STATISTICS: fell type-Dug Frection (A. A. Origi Adda Dat from De purces: re cland also th	irrimuni irrimuni include Curand d nal dril reas e of dri epened -cesed earille Depth	stus- stic* strict x	P C B E F G : Well status- ebandened dry hole producer Vannington 1, 1944
Mell name LOCATION: Comatilla Quadrang SM 285 23 Wid of TVi TP. Runge Section Frectional STATISTICS: fell type-Dig Face) Driven ebove below V. C. Kik Dairy Where name Address Route 2 Hermiston, Oregon This record compiled by I.S.M. ata secured from the collowing son, S. G. S. Ground-Water Division of the compiled Dec. 1947 and Jan. 19	land surft. A. A. Original Add Date from De land also the land also t	irri muni *include Durand d nal dril reas e of dri epened -cessed edrille te Depth reat	SIL TILL TO THE TENT OF THE TE	D C B E F G W L K N P Q 1 Well status- shandoned dry hole producer Washington 1, 1944
Mell name LOCATION: Cmatilla Quadrang SM 28 23 Wid of FVi Dr. Runge Section Frectional STATISTICS: fell type-Dig Face) Driven ebove below Final depth 1601 W. C. Kik Deiry Wheers name Address Route 2 Hermiston, Oregon This record complied by J.S.W. eta secured from the collowing son (S. S. S. Ground-Water Division of the complied Dec. 1947 and Jan. 1) Naterial Sand	A. A. Origi Add Dat from De purces: re cland also th Thickness (feet) 15	irri muni *include Durand d nal dril reas e of dri epened -cesed eaned e drille te	Atus atus atus stic strial x getion cipal s stock wells stock wells stock wells stock wells for mame valle valla, ling Nov. Casing, 6-inc 27 feet. Sty. water encount -27 to -55'.	D C B E F G G G G G G G G G G G G G G G G G G
Meli name LOCATION: Comatilia Counting STATISTICS: STATISTICS: STATISTICS: Well type-Dag Face) Driven ebove below Final depth 1601 W. C. Kik Dairy Wherer name Address Route 2 Hermiston, Oregon This record complied by I.S.W. lata secured from the collowing son S. S. G. S. Ground-water Division of the compiled Dec. 1947 and Jan. 19 Naterial Sand Basalt, broken	A. A. Origi And sur- ft. A. A. Origi Add Dat from De arces: re and also th Thickness (feet) 15	irrimuni *include Durand d nrens e of dri epened -cesed eaned e drille Depth feet) 15	Tile number (Code: Tp., R Code: Tp., R R Code: T	D C B F F G M L K N P Q 1 Washington 1, 1944
Meli name LOCATION: Committe	A. A. Origi And elso the pass (feet) 15 2 110	irrimuni irrimuni include Durand d nal dril reas e of dri epened -cessed e drille te Depth freet) 15 17	Atus atus atus atus atic stic stic s	D C B E F G G G G G G G G G G G G G G G G G G
Mell name LOCATION: Cmatilla Quadrang SIN 285 23 Wid of IVi The Runge Section Frectional STATISTICS: fell type-Dag Elevetion (face) Driven ebove below Final depth 1601 W. C. Kik Deiry Wheers name Address Boute 2 Hermiston, Oregon This record complied by I.S.W. eta secured from the collowing son (S. S. S. Ground-Water Division of the complied Dec. 1947 and Jan. 1988) Basalt, broken Basalt, water 87-95 fest	A. A. Origi And elso the pass (feet) 15 2 110	irrimuni irrimuni include Durand d nal dril reas e of dri epened -cessed e drille te Depth freet) 15 17	Tile number (Code: Tp., R Code: Tp., R R Code: T	D C B E F G G G G G G G G G G G G G G G G G G
Meli name LOCATION: Committe	A. A. Origi And elso the pass (feet) 15 2 110	irrimuni irrimuni include Durand d nal dril reas e of dri epened -cessed e drille te Depth freet) 15 17	Atus atus atus atus atic stic stic s	D C B E F G G G G G G G G G G G G G G G G G G
Mell name LOCATION: Cmatilla Quadrang SIN 285 23 Wid of IVi The Runge Section Frectional STATISTICS: fell type-Dag Elevetion (face) Driven ebove below Final depth 1601 W. C. Kik Deiry Wheers name Address Boute 2 Hermiston, Oregon This record complied by I.S.W. eta secured from the collowing son (S. S. S. Ground-Water Division of the complied Dec. 1947 and Jan. 1988) Basalt, broken Basalt, water 87-95 fest	A. A. Origi And elso the pass (feet) 15 2 110	irrimuni irrimuni include Durand d nal dril reas e of dri epened -cessed e drille te Depth freet) 15 17	Atus atus atus atus atic stic stic s	D C B E F G G G G G G G G G G G G G G G G G G
Mell name LOCATION: Logatilla Quadrang SM 28t 23 Wid of JVi Th. Runge Section Frectional STATISTICS: (ell type-Dug Face) Driven Schow Priven Schow Vinal depth 1601 W. C. Kik Deiry Whers name Address Route 2 Hermiston, Oregon his record complied by J.S.W. ata secured from the collowing son, S. G. S. Ground-Water Division of the compiled Dec. 1947 and Jan. 1: Naterial Sand Basalt, broken Basalt, water 87-95 fest	A. A. Origi And elso the pass (feet) 15 2 110	irrimuni irrimuni include Durand d nal dril reas e of dri epened -cessed e drille te Depth freet) 15 17	Atus atus atus atus atic stic stic s	D C B E F G G G G G G G G G G G G G G G G G G

Milkenney	ць		Index number Z File number (Code: Tp.,	Y-27E			
Tell name	ць		File number	Y-27E			
Dentilla Countilla Countilla Countilla Quadrang The Page Page	ць	,	(Code: Tp.,	R.,			
	ць				Sec.	, ;	Sea.
	ць			- 1		_	
Unatilla Quadrang 2B 27Z 22-1 Vest § Tp. Bange Section Frectional	ць			D	c	В	A
ZE 272 22-7 Vest 2 Tp. Bange Section Frectional				£	7	G	K
Tp. Range Section Fractional	section			Ж	L	K	7
	Section			N	P	Q	R
STATISTICS:				Ь_	Ш		
Well type-Dug Elevation (land sur-	Teas	+ n+u.e.	Wa!	11 =+	atus	
Drilled v face)	ft.	dom:	satic*				
below percent			igation		abar	done	,
Final depth 170			icipal es stock wells			ucer	
Bill Kilkenney Owners name	C. E. Origi	Levis	llers name				
Address Echo, Oregon			Pendleton, C	regon			
	Dat	e of dri	illing				
This record compiled by N.S.W.	from De	evened					
deta sacured from the following son	irces: re	-cased_ eaned	by				
Driller							
	_						
Date compiled July 1347	- Da	to					
Naterial	Thickness (feet)		Re	merks	,		
All hard rock to a total depth	,,,,,,,	F /	6" hole - Ar	tesia	n fl	ow.	
depth of either -		140	encountered periodic. W	but s	ald :	flow	is
-	or	170	pumped with	a lar	ge c	ntr	ru-
	.	1.70	gal pump.				_
		_					_
(incaid			Index number	11 23E-1	5-¥1 1-¥1		
Well name	•		File number				
			(Code: Tp., F	., Se	·c.,	Se	96.]
LOCATION:			ſ	а	c	R	A
			ŀ		-		н
orrev Count	7			- 1	-		_
			ŀ			K	J
nmapped Quadrangle				-	_		
				-	-	٥	R
nnapped Quadrangle S 23Z 11 Swint of Swint Tp. Range Section Fractional:				-	-	a	R
mapped Quadrangle 2S 23E 11 Swing of Swing Tp. Range Section Fractional:				-	-	a l	R
	section	Vae sto	itus-	-	P		
	section	dome a	stic* X	N Well	P		
	section	domes intes irris	stic* X strial gation	Well 8	P sta	tue-	<u>-</u>
	section and sur- ft.	domes intes irris munic	stic* X strial gation	Well 8	P sta	tue-	<u>-</u>
	section and surft.	domes intes irris munic includes	stic" x strial gation	Well 8	P sta	tue-	<u>-</u>
	and sur- ft.	domes intes irris munic includes	stic* x strial gation lipal stock wells	Well s d	P sta	tus- onnd ols_	<u>-</u>
neapped Quadrangle S 23E 11 SV1 of SV2 D. Range Section Fractional: TATISTICS: cell type-Dug Zievetion (1stac)	mection and sur- ft. H. E. C Origin Addre	domes in los irris munic includes otter	stic* x strial gation lipal stock wells	Well s d p	P sta	tus- onnd ols_ cer_	<u>-</u>

Material	Thickness (feet)	Depth (feet)	Remarks
Top soil and hardpan	20	20	6" hole
Cracked seamy rock	95	115	
Gray baselt	30	145	
Cracked rock with shale	35	180	
Hard, solld gray and blue basal	: 193	373	
Red rock with seams	67	440	
Blue basalt	40	480	
Cracked rock - no water	15	495	
Hard gray and blue rock	55	550	-
Cracked rock with light colored needs	12	562	
Nixed colored rock	68	630	
Hard blue basalt	25	655	
Cracked seamy rock - with water		685	Bottom of hole
			No pump test, but the lo
			carries the notation "Pl
			of water"

This record complied by J.S.V. from Despended data secured from the following sources: re-cased cleaned by

		In	dex number 61-0 48-325-3	
Hell name		F:	le number code: Tp., R., Sec., Sec.)	
LOCATION: Umntille County			D C B A E F G H	
Unotille Quadrangle			M L K J	
48 325 3 SE1	tion		N P Q R	
STATISTICS: Well type-Dug Elevetion (land	5).T-	Ope stat	us- Well status-	
Well type-Dag Elevation (land face) Driven above	ft.	lnaust	rielebandoned	
Final depth 168		munici	pal producer x stock wells	
		urand &		
Owners name Address Helix, Oregon			re name lla Walla, Washington	
Address Helix, Oregon			ing Oct. 1947 to Nov. 1947	
This record compiled by 2.5.W. f	rom Deep	ened		
data secured from the rollowing source priller	cles		ру	
Date compiled January 1947	Date hickness		Page	
Naterial	(feet)	(feet)	Remarks	
Soil	10		WL 321	
Hardpan and brown clay	6		Sail test at 32 g.p.m. for 30 minutes. Gave an initial	
Brown baselt Hard blue baselt	4		irawdown to 58'. This came	
Brown basalt	11		back to 444 and stayed constant.	ļ
Herd blue baselt	40	83	Recovered to 32' static level	
Soft brown basalt	16	79	in 10 minutes.	
Blue basalt	1 .	100		
Brown besalt	19		Insing, 8" to 46	1
Blue basalt	8	127		
Brown bacalt	10	132		1
Blue basalt Kedium Town basalt	3	145		
Very hard brown basalt	19	164		_
Hard blue basalt, broken	4	168		1
				1
				}
			Index number 71-U	
Kirk Well name			2H-3OE-28 File number [Gods: Tp., R., Sec., 2 Sec.]	1
				1
LOGATION: County	,		D C B A E F G H	
Umatilla Quadrangle			H T K 1	Ì
ZN 308 28 NV1			N P Q R	1
Tp. Sange Section Fractional				
STATISTICS:			W-33	
Well type-Dig Elevation (1: Drilled x fsoa)	ft.		satis* x shandoned share hole	1
Priven above below below		aun	icipal producer x	
7,121 depts		"include	es atook wells	
Cuaningham Sheep Company Owners made			llers name	
Address Pendleton, Oregon		te of dr	illing	1
This record compiled by 2.S.V.	· renn D	Denema		1
data secured from the collowing sou	roes: P	e-cesed_		
Company officials	_		·	
Date compiled July 1947	-	41.5		
Naterial	Thicknes (feet)	(feet)	Remarks	
Fo log available	ļ	114	Pumped for stock use only	
	-	+		
	1			- 1

		1	Index muster 145-0
Erebs #2 Well name		Fi	38-22E-2C lle number lode: Tu. R. Sec., 2 Sec.)
			Jode: Tu., R., Sec., Sec.)
LOCATION:			5 C B A
Gilliam County			E F G H
Arlington Quadrangle			N T K 1
77 22E 20 Tp. Range Section Fractional sec	tion		H P Q R
STATISTICS:			
Wall twos-Dug Elevation (land	i sur-	Tee stat domest	ue- Well Status-
Drilled x fece) Driven above below		irrige	tion dry hole
Final depth 609'		munici	pal producer x stock wells
Krebs Bros.	Origin	and Ander	ars hame
Address Cecii, Oregon			Malle Walla, Washington Ling finished Dec. 1947
		pened	
This record complicaby M.S.W. f	FOR Dec	cesed	by
Driller	614		
Date compiled January 1948	Det	;a	
	Thickness	Depth	Remarks
Naterial		(feet)	
Top soil and clay	<u>30</u>	126	
Green rock	36 	200	
Clay and rock	65	265	
Gray rock, hard	55	320	
Brown clay	141	461	nt '70' water horizon yielding about 2 g.p.m.
Brown clay	22	483	
Green clay	53	536	
Clay and rock	58	594	
ni de comis anter bearing	15	609	Woter here, apparently strong
This wall was drilled 8" to 95	t. into	drock t	ereafter 6" to 205 ft.
This well was drilled 8" to 95; where the first cavey clay was casing any logalize this coning formation was again encountered jevel in the moment of 2 c.c.s. strong flow was attack in the 1	t the 54	ft. lev	us to run a 4" string of
formation was again encountered level in the amount of 2 c. b. c.	The fi	ret water ter is me	struck was at the 370 it.
strong flow was struck in the l	et fifte	e feet d	TileC.
Krebs #1			lndex number 103-N 33-24E-12-D
Well name			File number (Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Morrow Count	у		E F G H
Blalock laland Quadrangl	•		M L X J
33 24E 12 18\frac{1}{2} of 18\frac{1}{2} Tp. Range Section Fractional			N P Q R
Tp. Mange Section Practional			
STATISTICS:			
Well type-Dug Elevation (1 Drilled x face)	and sur-		estic" x
Drivenbelow		inu irr	istriel abandoned dry bols
Final depth 304'		mun Finclud	icipal producer x
U. S. War Department	<u>Fre</u> d	H. Mulle	r
U. S. War Department Owners name Address	Orie	ginel drl	llers name Ontario, Oregon
			(1)1 (pg
	_ D	ete of dr	111148
This record comptied by M.S.W.	-	Deepened_	
(XI = 1) = = = = = = = = = = = = = = = = =	from 1	Deepened_	
deta secured from the Following sounds to recorded by Wirgil Starr and by R. S. Bennett, U. S. Bureau of	from 1	Deepened_	<u> </u>
(XI = 1) = = = = = = = = = = = = = = = = =	from larces: furnished Land	Deepened_ re-cased_ cleaned	<u> </u>
deta secured from the Politowing sot Log recorded by Wirgil Starr and by R. S. Bennett, U. S. Bureau of Kanagement, Baker, Oregon	from larces: furnished Land	Deepened_re-cased_cleaned_Date_	<u> </u>
data secured from the Tollowing sol Log recorded by Virgil Starr and by R. S. Bennett, U. S. Bureau of Kinagement, Baker, Gregon Date compiled Sevember 1947	from larces: furnished Land	Deepened_re-cased_cleaned_Date_	
data escured from to. [3] Iowing sol Log recorded by Wirgil Starr and by R. S. Wennett, U. S. Bureau of Knangement, Baker, Gregon Date compiled Sovember 1947 Naterial	from larces: furnished Land Thickne (feet)	Date ss Depth (feet)	
data secured from to. Collowing sol Log recorded by Virgil Stars and by R. S. Hencett, U. S. Bureau of Knangement, Baker, Gregon Dete compiled Sovember 1947 	from the following from the foll	Deepened re-cased cleaned Date ss Depth (feet)	Remarks
data secured from to. Tollowing sol Log recorded by Virgil Stars and by R. S. Nencett, U. S. Bureau of Knangement, Baker, Greyon Date compiled Sovember 1947 Keterial Soft brown sand Soft light cray shale	from larces: furnished Land Thickne (feet)	Deepened_re-cased_cleaned_re-cased_cleaned_re-cased_re-ca	
data secured from to. Tollowing sol Log recorded by Virgil Stars and by R. S. Bencett, U. S. Bureau of Knangement, Baker, Gregon Dete compiled Sovember 1947 Neterial Soft brown tend Soft light gray shale Very hard blue baselt	from three: furnished Land Thicknet (feet) 10 70 73	Date as Depth (feet) 10 173	Remarks Water eacountered at -180'.
data secured from to. Tollowing sol Log recorded by Virgil Starr and by R. S. Nencett, U. S. Bureau of Knangement, Baker, Green Dete compiled Sovember 1947 Neterial Soft brown sand Soft light orany shale Very hard blue baselt Soft red lava	from troes: furnished Land Thickne (feet) 90 73	Deepened cleaned clean	Remarks Water eacountered at -180'.
data escured from to. Tollowing sol Log recorded by Virgil Starr and by R. S. Nencett, U. S. Bureau of Knangement, Baker, Greeou Date compiled Sovember 1947 Naterial Soft brown sand Soft light cray shale Very hard blue basalt Soft red lava Soft blue shale	from arces: furnished Land Thickne (feet) 90 73 22 35	Deepened cre-cased cleaned cle	Remarks Water escountered at -180'. 50 g.p. hour.
data secured from to. Tollowing sol Log recorded by Virgil Stars and by R. S. Hencett, U. S. Bureau of Knangement, Baker, Gregon Dete compiled Sovember 1947 Neterial Soft brown tend Soft light gray shale Very hard blue baselt Soft red lava Soft hue shale Soft red lava	from surces: furnished Land Thickne (rest) 20 73 22 35	Deepened re-cased re-	Remarks Vater eacountered at -1807. 50 g.p. hour.

Tile name	Washington
Docation: Disease Docation	D C B A E F G H W L K J N P Q R Weil status— sbandoned dry hole— producer_x Vashington t 1925
Union County Unaspyed Quadrangle 35 3GE 6 SR\$ of ER\$ Th. Range Bootion Fractional section STATUSTICS: Well type-Dug Elevation (land aur Gomestic* investigation sunicipal x includes stock wells below investigation in	E F G H M L K J N P Q R Weil status— ebandoned dry holo— producer_x Vashington
Umaspped Quadrangia 35 38E 6 SE¢ of EE¢ TD. Range Boction Fractional section STATISTICS: Well type-Dig Elevation (land sur- domestic* domestic* domestic* domestic* irrigation irrigation irrigation irrigation delevation delevation domestic* domestic domest	W L K J N P Q R Weil status— sbandoned dry hole— producer_X Washington
TP. Range Section Fractional section STATISTICS: Well type-Dog	Well status- shandoned dry hole producer Vashington t 1925
TP. Range Bection Frectional section FTATISTICS: Well type-Dig	Weil status- abandomed dry hole_ producer_x Washington t 1925
### STATUSTICS: ### Nell type-Dug	ebandoned dry hole producer x
Well type-Dig	ebandoned dry hole producer x
Priven above invisited irrigation manicipal X ** ** ** ** ** ** ** ** ** ** ** ** *	ebandoned dry hole producer x
Priven above invisited irrigation manicipal X ** ** ** ** ** ** ** ** ** ** ** ** *	dry hole_ producer_i
Final depth 1093' La0rande City A. A. Durand & Son Owners name Address Original drillers name Address Ad	producer x
LaGrande City LaGrande City A. A. Burand & Son Detroin Address A S. Burand & Son Despend Thickness Daph Address A S. Burand & Son Despend Thickness Daph Address Address Address Address Address Address Address Address Address A S. Burand & Son Despend Thickness Daph Address Address A	Washington t 1925
Owners name Address Address Date of drillers name Address Date of drillers Date of drilling Address This record compiled by S.S.W. from Despensed at a secured from the Following sources: re-cased oleaned by Date compiled Howerhall (feet) feet) But a compiled Howerhall 1944 Date Compiled Howerhall 500 g.p.m. Waterial Thickness Depth (feet) feet) Related to the feet of the feet of the feet oleaned by Date compiled Howerhall feet oleaned by Date compiled Howerhall 500 g.p.m. Flow - reportedly 500 g.p.m. When well was first drilled. Rate meanered at 300 g.p.m. In 1947, This will is capped when not in mac. Strong pressure that we report four strey will is copped when not in mac. Strong pressure that we report four a strey will is opened. Narked sessonal variation named the Fall. This well amount by well are sivusted about 75' spart. LEGGRAND County LEGGRAND County LEGGRAND County LEGGRAND County The Proposition of Fractional section FRATIOTICS: Fall type-Dug Elevation (land sur domestic face) fit domestic face) fit domestic face of fit face	t 1925
Address	t 1925
This record compiled by E.S.V. from date secured from the Following sources: E. L. Stockman Sr., and City Water Master Narch 19-5 Date compiled Eorenber 1944 Material Thickness Dapth (fost) Related to the Following State Compiled Eorenber 1944 We log available 1993 Flow - reportedly 500 g.p.m. Where well was first drilled. Rate measured at 300 g.p.m. In 1997, This will is capped when not in nes. Strong pressure that we reported that we reported for selection of several fours after verification nature with first drilled and the Spring and tapering to Fall. The Spring and tapering to Fall. The Spring and tapering to Fall. The Water Strong Francisco Code: Tp., was made in the Fall. This well amount for Faveti rere structed about 75' apart. LaGrande City \$2 Nell name County Lagrande City \$2 Rell name Quadrangle 35. 384 6 SPA of NPA Tp. Range Section Fractional section FRATISTICS: Wall type Dag Elevation (land surported in the Spring and tapering to fall the Spring Spring Spring and tapering to fall the Spring Spri	
Associated from the Following sources: R. L. Stockman Sr., and City Water Master Natural 19-5 Date Date	Derke
Number 1945 Date	zarks
Number 1945 Date	nerks
Date compiled Howenber 1944 Date	zerke
Material Thickness Dapth Re	narks
Solog available 1023	zarke
Plow - reportedly 500 g.p.m. wher well was first drilled. Rate measured at 30 g.p.m. in 1947. This well is capsed when not in nec. Strong pressure hull's up resulting in stronger the inverge flow for periods of several hours after valids opened. Karked sessonal variation notes with flow strongest in the Spring and tapering to Fall was made in the Fall. This well and the \$\frac{1}{2}\$ west wre structed about 75' spart. Lagrande City \$2	
Rate seesared at 300 g.p.m. In 1970, Firs well its capped when not in nec. Strong pressure hall sup resulting its strongs; that swerage flow for periods of swerage flow for periods of swerage flow for periods of swerage hours dister will its opened. Karked sessonal variation RASER VIRT FIVE STRONGST IN the Spring and tapering to Fall. This well was made in the Fall. This well about 75' apart. LEGGRANGS LEGGRANGS LEGGRANGS County Inheamed. Quadrangle 35. 365 6 SP or NP 1 The Annes Getton Fractional section FRATISTICS: fall type-Dug	
Rate seesared at 300 g.p.m. In 1970, Firs well its capped when not in nec. Strong pressure hall sup resulting its strongs; that swerage flow for periods of swerage flow for periods of swerage flow for periods of swerage hours dister will its opened. Karked sessonal variation RASER VIRT FIVE STRONGST IN the Spring and tapering to Fall. This well was made in the Fall. This well about 75' apart. LEGGRANGS LEGGRANGS LEGGRANGS County Inheamed. Quadrangle 35. 365 6 SP or NP 1 The Annes Getton Fractional section FRATISTICS: fall type-Dug	
when not in me. Strong pressure halfs my resulting to stronger	
The content of the	
Control Court Country Countr	
Index out;	
Table Privation Privatio	
about 75' spart. LaGrande City #2 Well name LaGrande City #2 Well name County Location: Union County Unsamped. Quadrengle 35. 368 6 SF of NF2 TP. Range Section Fractional saction STATISTICS: Fall type-Dug Drilled x Driven Driven Above Irrigation Final depth 1370' Final depth 1	
LaGrande City #2 Well name File number (Code: Tp., LOCATION: Union County Unsamped. Quadrengle 35. 368 6 SF of NF2 Tp. Range Section Fractional saction STATISTICS: Fall type-Dug Drilled x face) ft. Accessive functival irrigation Final depth 1370' and one irrigation irrigation Final depth 1370' and one irrigation Final depth 1370' and one irrigation Final depth 1370' functional saction Final depth 1370' for irrigation irrigation Final depth 1370' and one irrigation Final depth 1370' functional saction Final depth 1370' and one irrigation Final depth 1370' and one irrigation Final depth 1370' functional saction Final depth 1370' and one irrigation F	
LaGrande City #2 Rel Lumber (Code: Tp.)	
LaGrande City #2 Rel Lumber (Code: Tp.)	
Code: Tp.	152-Un -38E-6-E
Union County County County	., Sec., 🖟 Sec.
Compared Quadrengle	D C B A
TRATISTICS: Fall type-Dig Elevation (land sur- Usa status- Drilled x face) ft. Accessive innustrial includes stock wells Final depth 1370' nicludes stock wells City of LaGrande Address Address Address Address Palla Wella, Date of drilling about status above includes stock wells A. A. Durand & Son Original drillers name Address Valla Wella, Date of drilling about stock wells Barbored from the Tollowing sources: re-cased by Rarch 1948 ats compiled Fowmber 1944 Date Material Date Thickness Depth Date	E F G H
TATISTICS: Comparison Comp	K T K 1
FIATISTICS: Fall type-Dag	N P Q R
This	" -
This	
rinal depth 1370'	Well status-
rinal depth 1370'	
Sincludes stock wells A. A. Durand & Son Original drillers name Address Valta Vaila, Date of drilling about the Following sources: re-cased by R. L. Stockman, Sr., and City Vater Master Narch 1948 March 1948 Mate dompiled Sovember 1944 Material Thickness Depth Date	dry hole producer I
Address Address Valle Valle, Date of drilling about this record compiled by E.S.V. from the Following sources: re-cased the second of the Following sources: re-cased by the following sources	producer =
Address Address Valle Valle, Date of drilling about this record compiled by E.S.V. from the Following sources: re-cased the second of the Following sources: re-cased by the following sources	
bis record compiled by E.S.V. from at a secured from the Following sources: re-cased cleaned by E. S. Stockman, Sr., and City Water Naster March 1948 Sets compiled Forember 1944 Match 1945 Thicknesd Doth	
this record compiled by S.S.V. from Deepened at a secured from the Following sources: re-cased by	
R. L. Stockman, Sr., and City Water Master March 1948 Date	a shington
E. L. Stockman, Sr., and City Water Master March 1948 Mater 1944 Material Material Material Material Material Material	a shington
Material Thickness Depth per	a shington
Material Thickness Depth per	a shington
	a shington
(feet) (feet)	a shington
	a shington
Hate measure	ne ebington nt 1926
1n 1947, Wa	arks edly 1500 g.p.s first drilled, at 600 g.m.s
DI-F. Press	reshington pt 1926 arks edly 1500 g.p.s. first drilled, at 600 g.p.s.
pressure and	arks eely 1500 g.p.s first drilled, at 600 g.p.s er temperature
ations of fi	arks eely 1500 g.p.s. first drilled, at 600 g.p.s. re temperature re seasured at 71 to well 71 to well 71 to december 2 to 2 t
	arks eely 1500 g.p.s. first drilled, at 600 g.p.s. re temperature re seasured at 71 to well 71 to well 71 to december 2 to 2 t
	arks eely 1500 g.p.s. first drilled, at 600 g.p.s. re temperature re seasured at 71 to well 71 to well 71 to december 2 to 2 t
	arks eely 1500 g.p.s. first drilled, at 600 g.p.s. re temperature re seasured at 71 to well 71 to well 71 to december 2 to 2 t
	arks eely 1500 g.p.s. first drilled, at 600 g.p.s. re temperature re seasured at 71 to well 71 to well 71 to december 2 to 2 t

Lexington City			Index number 111-M 15-25%-23-L
Well name	_		File number (Code: Tp., R., Sec., 2 Sec.)
LOCATION:			
Norrow Count	7		D C B A
Unmapped Quadrang	Le		N L K J
15 258 23 RB or SV			N P Q R
Tp. Range Section Fractional	section		
STATISTICS:			
Well type-Dig Elevation (I prilled x face)	and sur-	Use at	tatus- Well status-
Drivenscove		the o	ustriei shendoned
Final depth 420'		mun:	(gation dry hole icipal x producer x es stock wells
Lexington City Owners name	Origi	Durand	Liers name
Address	-		Valle Vella, Veshington
			illing Spring 1939
This record complied by E.S.W. deta secured from the Following sou		-cased_	
State Department of Realth and dri also City Recorder	ller,	bense	
	_		
Date compiled January 1948 Material	Thickness	Depth	Remarks
	(feet)	(feet)	
Soil	10	10	Casing 10" to 87' 11"
Soil and cement gravel Black rock	13	23	-
Black rock Boulders, caving	13	36	-
Coment gravel	11	63	
Oray rock	2	65	5MT - 60'
Clay and rock	5	70	Stabilized water level
-	-	 	
Cavey rock Blue limestone	10	75 85	183 at yield of 90 g.p.m.
Blue lime, black rock	10	95	Temperatura 540
	i		temperatura 34
Black shale rock, caving	15	110	
Blue and black rock	15	125	
Black and gray rock	10	135	
Black rock	75	210	
Volcanic rock mixed with	15	225	
lime and gray rock Volcanic ash rock and clay	30	235	
Volcanic and seems of harder re		315	
Black rock	20	235	
Gray basalt	18	353	
Gray basalt and iron ore	?	360	Cuttings so heavy they pack in hole.
Gray basalt	24	384	
Gray besalt and iron ore	4	388	
Gray basalt	2?	415	Heavy from 400 to 410
Gray basalt with soft and hard streaks	5	420	
			Bottom of hole
·=			

			Index number 121-M
Enndell Woll name			3S-23R-14-E
			(Gode: Tp., R., Sec., Sec.)
LOGATION:	_		D C B A
Norrow Count			E F G H
			M L K J
75 Range Section Fractional	section		N P Q R
STATISTICS:			
Well type-Dug Elevation (1)	ind sur-	Use str	ntus- Well status-
Well type-Dug Drilled x Driven Driven Driven Driven Driven		inau	stic* x strial abandoned gration dry hola
Final depth 5741		2uni	s stock wells
Algot Lundell	H. E.	Cotter	
Algot Lundell Owners name Address Ions, Oregon	Origin Add:	el dril	lars name lone, Oregon Started Oct. 28, 1919
	Date	of dri	Started Oct. 28, 1919 lling Fluished Oct. 30, 1926
This record compiled by E.S.V. data secured from the following sou	from Dec	pened_	.
Driller	cle	ened	by
	_		
Data nompiled November 1947			
Natorial	Thickness (feet)	(feet)	Remarks
This well was drilled to a department years, but then failed	In 1925	16 1919	deepened to 5741
The composite log follows:		-	
Cracked and caving rock	35	35	Comented
Brown rack with light brown se	80	115	
Bard blue and gray basalt	134	287	
Medium hard gray rock	30	317	
Soft red rock	23	340	
Gray and blue basalt	81	421	•
Rad rock, honeycomb	59	480	Water hore
Blue basalt	11	491	
Hard gray basalt	59	550	
Gray rock with brown seams	10	560	
Brown rock with yellow sompsto	14	574	Botton of hole
			Stood 523 feet in hole.
			stood 523 lest 12 hole.
-			
-			

Well name	•		ZN-312-16 File number
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Cmatilla Count	у		E 7 G H
Fendleton Quadrangl	•		M T X 1
28 318 16 SW			N P Q B
Tp. Range Section Fractional	section		
STATISTICS:			<u> </u>
		Tag at	stus- Well status-
Drilled v face)	ft.	dome	stio* x strial sbandoned
Driven above below		irri	gation dry hole
Final depth			producer x producer x
Clint Lewis			
Owners name		al drill	ers name
Address	•		iling 1940
W.C.H.			
This record compiled by M.S.W. data secured from the following sou	rces: re-	cesed	- -
U. S. Production and Marksting Admi	çle	aned	p)
	_		
Date compiled Harch 1948	Dat		
Material	Thickness (feat)	Depth (feet)	Remarka
No data available	,	•	
TO MOTO CLUTTONIA			
	1		
			<u> </u>
_			Index number 39-0 3M-34E-22-E
Well name	-		File number
	-		(Code: Tp., R., Sec., Sec.)
LOGATION:			D C B A
Usatilla Coun	y		z y G H
Pendleton Quadrang	Le	•	M T K J
NE NAME 22 NV of SE		•	- -
		·	M L K J
NE NAME 22 NV of SE			M L K J
345 22 N=\(\frac{1}{2} \)	section	Use et	M L K J N P Q R
38 34E 22 M4 of SE2 77. Range Section Fractional	section	dome	M L K J N P Q R
38 34E 22 N\(\) of SE\(\) Tp. Range Section Fractional	section	dome insu irri muni	atue- atic X strial gation dry hole of plal
38 34E 22 N\(\) of SE\(\) Tp. Range Section Fractional	section	dome insu irri muni	M L K J N P Q R atue- atic x strial abandoned gation dry hole
38 34x 22 N4 of SE2	section	dome insu irri muni *include	M L K J N P Q R atue- atic
38 34E 22 Nvt of St to the control of St to	and surft.	dome intu irri muni include Durand	atue- atue- atic x strial abandoned dry hole of producer x e stock wells
38 34E 22 Nvt of St to The control of St to St	aection Land surft. A. A. Origin	dome intu irri muni *include Durand nel dril	atue- atic" x strial gation cipal producer x e stock wells A Son
38 34E 22 Nvt of SEt	A. A. Origin	dome invu irri muni include Durand nel iril ress a of dri	atue- atie
38 34E 22 Nvt of St to The control of St to St	section iand surft. A. A. Original Det	dome intu irri muni include Durand pal dril ress a of dri spened cased	atue- atue- atic x strial abandoned dry hole oripal producer x estock wells 4 Son lere name Walla Valla, Washington 1944
38 34E 22 Nvt of SEt	A. A. Original From Detrices or	dome invu irri muni include Durand nel iril ress a of dri	atue- atie
38 34E 22 NW of SE2 77. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Driven below Final depth 315! Irvine Henn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Fillowing soo	A. A. Original Adding the Adding	dome inva inva inva include Durand nel dril ress a of dri spened cased spaned	atue- atue- atic x strial abandoned dry hole oripal producer x estock wells 4 Son lere name Walla Valla, Washington 1944
38 34X 22 N4 of SE Tp. Range Section Fractional STATISTICS: Well type-Dig Drilled x face) Driven Sebve below Final depth 315! Irvine Henn Owners name Address Adam, Oregon This record complied N.S.V. data secured from the Pollowing so U. S. O. S. Oround-Vater Division Date compiled December 1947	asction Land surft. A. A. Original Addi Addi from Deturce: received.	dome invu irri muni finclude Durand nel dril ress a of dri spened cased baned	atue- atue- atic* x strial abandoned dry hole oripal producer x e stock wells 4 Son L K J N P Q R Well statue- abandoned dry hole oripal producer x e stock wells 4 Son Ling 1904
38 34E 22 NW of SE2 77. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Driven below Final depth 315! Irvine Henn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Fillowing soo	A. A. Original Adding the Adding	dome invu irri muni include Durand nal dril ress a of dri spened -cased baned Depth	atue- atue- atic x strial abandoned dry hole oripal producer x estock wells 4 Son lere name Walla Valla, Washington 1944
38 34X 22 N4 of SE Tp. Range Section Fractional STATISTICS: Well type-Dig Drilled x face) Driven Sebve below Final depth 315! Irvine Henn Owners name Address Adam, Oregon This record complied N.S.V. data secured from the Pollowing so U. S. O. S. Oround-Vater Division Date compiled December 1947	A. A. A. Origin Addition Det	dome invu irri muni include Durand nal dril ress a of dri spened -cased baned Depth	atue- atue- atic* x strial abandoned dry hole oripal producer x e stock wells 4 Son L K J N P Q R Well statue- abandoned dry hole oripal producer x e stock wells 4 Son Ling 1904
38 34X 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Wall type-Dug Elevation (face) Drilled x below Final depth 315! Irvine Hann Domers name Address Adam, Oregon This record compiled V.S.V. data secured from the following so U. S. O. S. Oround-Vater Division Date compiled December 1947	A. A. A. Original Additional Detrom Decirce: recolumn Contract Con	dome invi invi include Durand and dril ress a of dri spened -cased baned Depth (rest)	atue- atic
38 34X 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Wall type-Dug Elevation (face) Drilled x bove below Final depth 3151 Irvine Hann Owners name Address Adam, Oregon This record compiled N.S.V. data secured from the following so U. S. 0. S. Ground-Vater Division Date compiled December 1947 Naterial Soil	A. A. A. Origin Addition Detrom Decirce: re-old Thickness (feet)	dome inva irri auni irclude Durand nal Aril ress a of dri spened cased baned Depth feet)	atue- atic
38 34X 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Drilled x bove below Final depth 315! Irvine Hann Omes name Address Adam, Oregon This record compiled by N.S.V. date secured from the following so U. S. O. S. Oround-Vater Division Date compiled December 1947 Naterial Soil FEard-pan* Orevel	A. A. A. Original Additional Part Part Part Part Part Part Part Part	dome inva irri auni irri auni irri binclude Durand nal dril ress a of dri spened cased baned Depth feet) 3	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Driven below Final depth 315! Irvine Hann Comers name Address Adam, Oregon This record compiled N.S.V. data secured from the fallowing so U. S. O. S. Oround-Vater Division Date compiled December 1947 Naterial Soil *Eard-pan* Orevel Shale, red, hard	A. A. A. Original Additional Control of the Control	dome inva irri auni irri auni irri nelude Durand nel dril ress a of dri spened -cased saned Depth frest) 3 10	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Drilled x bove below Final depth 315! Irvine Hann Omes name Address Adam, Oregon This record compiled by N.S.V. data secured from the following so U. S. O. S. Oround-Vater Division Date compiled December 1947 Naterial Soil FEard-pan* Orevel Shale, red, hard Bacalt, broken	A. A. A. Original Additional Control of the Control	dome inva irri muni include Durand nol dril ress a of dri e-cased e-cased e-cased Depth freet 10 10 16 40	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Drilled x bove below Final depth 315! Irvine Hann Owners name Address Adam, Oregon This record compiled by N.S.W. data secured from the fallowing so U. S. O. S. Oround-Vater Division Date compiled December 1947 Naterial Soil *Eard-pan* Orevel Shale, red. hard Basalt, broken Basalt, soft, red	A. A. A. Original Additional Addi	dome dome dome dome dome dome dome dome	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation of face) Driven bore Final depth 315! Irvine Mann Comers mane Address Adam, Oregon This record compiled by N.S.V. data secured from the following so U. S. G. S. Ground-Vater Division Date compiled December 1947 Naterial Soil FRard-pan* Grevel Shale, red, hard Basalt, broken Basalt, coft, red Basalt, blue, hard	A. A. A. Orieit Addition Date Transcript Parish Par	dome in a control of the control of	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation (face) Drilled x bove below Final depth 315! Irvine Hann Owners name Address Adam, Oregon This record compiled by N.S.W. data secured from the fallowing so U. S. O. S. Oround-Vater Division Date compiled December 1947 Naterial Soil *Eard-pan* Orevel Shale, red. hard Basalt, broken Basalt, soft, red	A. A. A. Date A. A. Date A. Da	dowe in a control of the control of	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation of face) Driven bore Final depth 315! Irvine Mann Comers mane Address Adam, Oregon This record compiled by N.S.V. data secured from the following so U. S. G. S. Ground-Vater Division Date compiled December 1947 Naterial Soil FRard-pan* Grevel Shale, red, hard Basalt, broken Basalt, coft, red Basalt, blue, hard	A. A. A. Orieit Addition Date Transcript Parish Par	dome in a control of the control of	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation Drilled x face) Driven below Final depth 315! Irvine Manu Demers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Fallowing co U. S. G. S. Ground-Vater Division Date compiled December 1947 Naterial Soil *Hard-pan* Grevel Shale, red, hard Basalt, broken Basalt, broken Basalt, broken Basalt, broken	A. A. A. Date A. A. Date A. Da	dowe in a control of the control of	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation Drilled x face) Driven below Final depth 315! Irvine Manu Demers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Fallowing co U. S. G. S. Ground-Vater Division Date compiled December 1947 Naterial Soil Flard-pan* Grevel Shale, red, hard Basalt, broken Basalt, broken Basalt, troken Basalt, troken Basalt, troken	A. A. A. Det Color	dowe in a control of the control of	atue- etic*
38 34x 22 N4 of SE2 Tp. Range Section Fractional STATISTICS: Well type-Dug Elevation of face) Driven below below Final depth 3151 Irvine Mann Demers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Fallowing co U. S. C. S. Ground-Vater Division Date compiled December 1947 Natorial Sail Flard-pan* Orevel Shale, red, hard Basalt, broken Basalt, broken Basalt, broken Basalt, broken Basalt, eoft Basalt, eoft Basalt, eoft Basalt, eoft Basalt, eoft	A. A. A. Det A. A. A. Det A. A. A. Det A. A. A. Det A. A. Det A. A. Det A. A. Det A. D	dome in we in a war i	atue- etic*
38 34x 22 N4 of SR2 Tp. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Drillad x Driven below Final depth 3151 Irvine Menn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Tallowing so U. S. 0. S. Ground-Vater Division Date compiled December 1947 Naterial Scil "Eard-pan" Oshale, red, hard Basalt, broken Basalt, broken Basalt, broken Basalt, ecft Basalt, ecft Basalt, hard Shale	A. A. A. Det Color	dowe in we in which we in which we in which we in which we in we in which we in we in which we in which we in we in which we in we in which we i	atue- etic*
38 34x 22 N4 of SR2 Tp. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Drillad x Driven below below Final depth 3151 Irvine Menn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Tallowing so U. S. 0. S. Ground-Vater Division Date compiled December 1947 Naterial Scil FRard-pan* Oregon Naterial Scil FRard-pan* December 1947 Readt, pred, hard Basalt, broken Basalt, broken Basalt, broken Basalt, ecft Basalt, hard Shale Basalt, hard Shale Basalt, hard Shale Basalt, hard	A. A. A. Det Color	dowe in a control of the control of	atue- etic*
38 34x 22 N4 of SR2 Tp. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Drillad x Driven below Final depth 3151 Irvine Menn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Tallowing so U. S. 0. S. Ground-Vater Division Date compiled December 1947 Naterial Scil "Eard-pan" Oshale, red, hard Basalt, broken Basalt, broken Basalt, broken Basalt, ecft Basalt, ecft Basalt, hard Shale	A. A. A. Det Color	dowe in we in which we in which we in which we in which we in we in which we in we in which we in which we in we in which we in we in which we i	atue- etic*
38 34x 22 N4 of SR2 Tp. Ramps Section Fractional STATISTICS: Well type-Dug Elevation (face) Drillad x Driven below below Final depth 3151 Irvine Menn Comers name Address Adam, Oregon This record compiled by N.S.V. data secured from the Tallowing so U. S. 0. S. Ground-Vater Division Date compiled December 1947 Naterial Scil FRard-pan* Oregon Naterial Scil FRard-pan* December 1947 Readt, pred, hard Basalt, broken Basalt, broken Basalt, broken Basalt, ecft Basalt, hard Shale Basalt, hard Shale Basalt, hard Shale Basalt, hard	A. A. A. Det Color	dowe in a control of the control of	atue- etic*

Marple #1 Well name			Vila neet
HATT REMA			File number (Code: Tp., R., Sec., 2 S
LOCATION:			рсв
Horrow	County		E 7 G
	drangle		M L X
Tp. Range Section Fract	ions) section		N P Q
STATISTICS:			
Well type-Dug Elevat Drilled x face)	ion (land sur- ft.	Use s	tatus- Well status
Driven above below		inu irr	estice x ustrial abendone igation dry hole icipal producer
Final depth 71		mun	icipal producer
Jack Marple	4. 4	. Durand	A Sor.
Owners name Address Ione, Oregon	Orig	inal dri	llers nams alla Walla, Washington
			illing Aug. to Sept. 194
This record compiled by E.S.			•
This record compiled by 2.8. data secured from the Collowi	ng sources: r	e-cased_ leaned	
Driller		_	
Date compiled January 1948	D	ats	
Naterial		Depth (feet)	Remarks
<u> </u>			<u> </u>
Dug pit	9	14	Casing 6" set to 32'.
Oray basalt	<u>5</u> 28	52	
Oray basalt and red rock		70	Some water here.
Gray basalt and red rock	1	71	Jour seror note.
Will Control		 '-	SWL 13' 3". 25 min. bail
·			initial drawdown to 26'.
			This recovered to 20° in 3 min. and to 15° in 1 h
		1	No check for full recover
			No check for full recover
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dcIntyre			No check for full recove Index number — 32-7 ANS-VAZ-25 File number
fell name			No check for full recove Index number — 32-7 ANS-VAZ-25 File number
COCATION:			No check for full recove Index number — 32-7 ANS-VAZ-25 File number
COCATION:	County		Index number - 32-U Wh-342-25 File number [Code: Tp., R., Sec., Sec.
COCATION: Destills Pendletos Quad	County		Index number - 32-U Wh-342-25 File number (Code: Tp., R., Sec., Sec.)
Mell name LOCATION: Destills Pendleton Quad 4H 24H 25 SW	irangle		Index number — 32-U WN-942-25 File number D C B E F G M L K
	irangle		Index number — 32-U 48-342-25 File number (Code: Ty., R., Sec., 2 Sec.) D C B E F G M L K
COCATION: Destills Pendletes Quad SH 3AR 25 SV4 Th. Range Bestion Fracti	onal section		Index number — 32-7 File number (Code: Tp., R., Sec., Sec.) D C B Z F G M L K N P Q
Mell name LOCATION: Dustilla Pendleton Quad Subject Section Fracti PTATISTICS: fell type-Dug Elevati Drilled x face)	onal section	Acme.	Index number — 32-U AND STATE (Code: Ty., R., Sec., 2 Sec.) D C B E F G N L K N P Q August Status- atus- atus- ##11 status-
COCATION: Describe Pendletos Quad Pendletos Quad Phy Jan 25 Svi Bention Fracti TATISTICS: [ell type-Dug Drilled x face) Driven above	onal section	dome indu irri	Index number — 32-7 File number (Code: T)., R., Sec.,
	onal section	dome indu irri muni	Index number — 32-7 File number (Code: T)., R., Sec.,
	onal section on (land surft.	dome indu irri muni *include	Index number — 32-U dw-y=2-25 File number (Code: Ty., R., Sec., 2 Sec.) D C B E F G N L K N P Q atua- atua- atica strial abandonad dry hola oipal aty hola producer
COGATION: Destills Pendleton Quad AN 34E 25 SVA TP. Range Section Fracti PLATISTICS: (ell type-Dig Rievati Drivean above clinal depth 200'	onal section on (land surft.	dome indu irri muni *include . Durand	Index number — 32-U Index number — 32-U #N-NE-25 File number D
Description Quadricol Pendieton Quadricol Qu	onal section on (land surft. A. A	dome indu irri muni *include Durand nal dril ress	Index number — 32-U Win > 32-25 File number (Code: T) R., Sec S
COCATION: Describe Describe Pendletos Quad Pendletos Gention Fracti The Range Gention Fracti PATISTICS: Color Fracti Col	onal section on (land surft. A. A. A. A. Original Add.	dome indu irri muni minclude . Durand nal dril ress e of dri	Index number — 32-7 Why-2-25 File number — 32-7 Code: Tp., R., Sec., 2 Sec. 2 F G M L K N P Q atus- atics x will abandoned dry hole oipal producer set
Pendleton Quad NE 25 SW1 Pp. Range Bootion Fracti PTATISTICS: [fell type-Dig Fane) Driven above below [final depth 200'] Address Athena, Oregon This record compiled by H. S. interested from the following below in the follo	onal section on (land surft. A. A. A. A. Original Added to the control of the c	dome indu irri muni minclude . Durand nal dril ress e of dri	Index number — 32-7 Why-N2-25 File number — 32-7 (Code: Tp., R., Sec., 2 St. N. P. Q. N. L. K. N. P. Q. N. L. K. N. P. Q. N. Section — abandoned dry hole oipal — producer sets a Soa lere name Valla Valla, Vashington ling October 1945
Mell name LOCATION: Duatilla Pendleton Quad The Sange Section Fracti TATISTICS: [cl] type-Dug Drilled x face) Driven above below Final depth 200' Address Athens, Oregon	onal section on (land surft. A. A. A. A. Original Added to the control of the c	dome indu irri muni include Durand nal dril ress e of dri epened -onsed	Index number — 32-7 Why-2-25 File number (Code: T)., R., Sec., Se
COGATION: Destilla Pedieto Quad Proposition Fracti PARISTICS: (ell type-Dug Driven Bolow Control Proposition Fracti Control Proposition Fraction Control Proposition Fract	onal section on (land surft. A. A. Original Add V. from De g sources: resion	dome indu irri muni include Durand nal dril ress e of dri epened -onsed	Index number — 32-7 Why-2-25 File number (Code: T)., R., Sec., Se
COGATION: Destilla Pendleton Quad Pendleton Quad Processor Series Processor Ser	onal section on (land surft. A. A. Original Add surfts and surft	dome inviu irri muni include . Durand nal dril rees e of dri epenedcased eaned te	Index number — 32-7 Why-2-25 File number (Code: T)., R., Sec., Se
Described Americal Process of the record compiled by H. S. late secured from the Following J. S. G. S. Ground-Water Divise Material	onal section on (land surft. A. A Original Add surfts and surces: residues: residues	dome invite the invite	Index number — 32-7 ### AND THE PROPERTY OF THE Number (Code: Tp., R., Sec., St. St. N. P. Q. ### ADDRESS OF THE Number of The Number of Type of Typ
COGATION: Describe Pendleton Quad SE 34E 25 SVL TP. Range Section Fracti PARISTICS: (ell type-Dug Elevati Drivean above Cinal depth 200' Scintyre Heil Muser name Address Athena, Oregon this record compiled by H. S. ata secured from the Followin J. S. G. S. Ground-Water Divise ata compiled December 1947 Material Dug pit	onal section on (land surft. A. A. Original Add surfts and surft	dome innum irri muni include . Durand nal dril rees e of dri epened eaned	Index number — 32-7 ### ### ### ### ### ### ### ### ### #
Well name LOCATION: DESCRIPTION: DESCRIPTION: PRATISTICS: (ell type-Dig Elevation Fracti Drivea Above Pinal depth 200' **Contyre Heil Money name Address Athens, Oregon This record compiled by H. S. ista secured from the Followin J. S. G. S. Ground-Water Divise Material Dug pit Old hole	onal section on (land surft. A. A. Original Add surfts and surft	dome invited in the second of	Index number — 32-U Why-N2-25 File number (Code: Tp., R., Sec., 2 Sec.) D C B Z F G N L K N P Q Abandoned dry hole gotten estice abandoned dry hole gotten strial producer stock wells A took lers name Valla Valla, Vashington ling October 1945 by Ramarks SVL 34' - 16 Oct. 1945
COGATION: Destills Pendleton Quad SM 348 25 SW2 TP. Range Section Fracti PLATISTICS: (ell type-Dig Rievati Drivean above Cinal depth 200' Micintyre Heil Where name Address Athens, Oregon This record compiled by H. S. ata secured from the followin J. S. G. S. Ground-Water Divise ata compiled December 1947 Material Dug pit Old hole Shale, Brown SWL 36	onal section on (land surft. A. A. Original Add surfts and surft	dome inviu irri muni include Durand nel dril ress o of dri opened caned eaned Depth (rest) 34 65	Index number — 32-7 ### ### ### ### ### ### ### ### ### #
COGATION: Destills Pendleton Quad AN JAN 25 SWL TO. Range Section Fracti PLATISTICS: (ell type-Dig Rievati Drivean Above Cinal depth 200' Micintyre Heil Where name Address Athens, Oregon This record compiled by H. S. ata secured from the followin J. S. G. S. Ground-Water Divise ata compiled December 1947 Material Dug pit Old hole Shale, Brown SWL 30 Shale, blue	onal section on (land surft. A. A. A. A. Original Add Surft. V. from Det Sources: resion 7. De Thickness (feet) 34. 31. 10.	dome invited in the invited in the invited in the include . Durand mail dril ress of dri espened ened . Depth frest) 34 65 77 67	Index number — 32-7 ### ### ### ### ### ### ### ### ### #
COATION: Description Fraction Fra	onal section on (land surft. A. A. A. A. Original Add surft. V. from Det Sources: resion 7. De Thickness (feet) 34. 31. 12. 10. 23.	dome invited in the control of the c	Index number — 32-7 ### ### ### ### ### ### ### ### ### #
COGATION: Destills Pendleton Quad AN JAN 25 SWL TO. Range Section Fracti PLATISTICS: (ell type-Dig Rievati Drives Above Cinal depth 200' College Heil Where name Address Athens, Oregon This record compiled by H. S. ats secured from the following. This record compiled December 1947 Material Dug pit Old hole Shale, brown SVL 30 Shale, blue Baselt Clay	onal section on (land surft. A. A. A. A. Original Add on (land surft. Thickness (rest) 31 12 10 23 18	dome invited in the control of the c	Index number — 32-7 ### ### ### ### ### ### ### ### ### #
CONTION: Destills Pendleton Quad AN JAN 25 SWL TATISTICS: [cell type-Dig Driven above below with a secured from the following fame) Minal depth 200' Material Dis record compiled by H. S. ata secured from the following fame at a compiled December 1947 Material Dig pit Old hole Shale, blue Basalt Clay Basalt Basalt, with blue clay (clay Basalt, with blue clay (clay Basalt Compiled December (clay Basalt Clay Basalt	onal section on (land surft. A. A	dome invited in the control of the c	Index number — 32-7 \$1-2-5 File number (Code: Ty., R., Sec., Sec.) D C B E F G N L K N P Q Well stetue- stice x strial abandoned estock wells A Son lara name Valla Valla, Vashington ling October 1945 BVL 34' - 16 Oct. 1945 EVL 34' - 16 Oct. 1945
COATION: Description Pendleton Description Driven Driven Above below inal depth 200' inal d	onal section on (land surft. A. A	dome invited in the control of the c	Index number — 32-7 \$1-2-5 File number (Code: Ty., R., Sec., Sec.) D C B E F G N L K N P Q Well stetue- stice x strial abandoned estock wells A Son lara name Valla Valla, Vashington ling October 1945 BVL 34' - 16 Oct. 1945 EVL 34' - 16 Oct. 1945

McBride	_		Index master 5-U 6F-35E-20-B
Well name			File number (Code: Tp., H., Sec., 2 Sec.)
LOCATION:			D C B A
Umatilla Cou	nty		Z Y G H
Unmapped Quadran	gle		MIXI
			H P Q R
fp. Range Section Fractional	•ection		
TATISTICS:			
Well type-Dug Elevation (land sur-	Use st	atus- Well status-
Tell type-Dug Elevation (Drillad x fece) Driven sbove below	ft.	dome	atus- stio* strial abandoned
final depth 3761			
		*include	s stock wells
McBride Brothers	<u>44.</u>	Durand	å Son lers ness
whe: a name Address Freewater, Oregon	Add	rees	Yalla Walla, Washington
	Dat	e of dri	lling Feb. 1944 to Mar. 1944
This record compiled by H.S.V. late secured from the Following so	from De	epsned_	_
ata secured from the Following so	urces: re	-cased	by
iller			
ate compiled January 1948	De De	ite	
Material	Thickness	a Depth	Remarks
	(feet)	(feet)	
Pit	+	26	Casing 12" to 105" 12" hale to 285"
Cement gravel	17	43	12 h2le to 285 to bottom
Gravel and clay mixed	15	59	
Loose gravel	11	70	
Clay and gravel	68	138	
Brown clay	5	143	
Gravel	2	145	
Clay and gravel	150	295	
Brown clay	40	335	
Clean gravel	5	340	
	5.	345	_
Clay			
Gravel	31	376	CMT Just Dane
	+		SWL 451. Pumps around
		<u> </u>	350 g.p.m.
	+		
	 		-
	+	<u></u>	
		1	1
_	+	1	
-			

			Index musber 122-M	
McClintock		3	3S-23E-33-B File number	McEnti Well n
			(Code: Tp., R., Sec., & Sec.)	
LOCATION:			D C B A	LOGATI
Morrow County			Z F G H	Morrow
Unmapped Quadraugle			N L K J	Blaloc
Tp. Range Section Fractional s	ection		N P Q R	45 Tp.
				STATIS
STATISTICS:			tus- Vell Status-	Well t
Well type-Dug Elevation (la priven Driven shove	nd sur-	domes	tric* x tericl sbandoned tericl dry hole	
Delon		irrie		Final
Final depth 630'		includes	stook wells	
William McCllntock	N. E.	Cotter	ers name	John)
Owners name Address lone, Oregon	Pyqu	.000	Ione, Oregon	Addr
	Date	of dril	ling June 1922 to Aug. 1923	
This record compiled by E.S.V. data secured from the Following sour	from Dec	paned_	-	This r
	ole	en ed		Dwzsr
Driller	_			
Date compiled Hovember 1947	Da			Date
Noterial	Thickness (feet)	Depth (feet)	Remarks	
Soil	12	12	6" hole	D
Cracked rock with different sea	28 7 8	90		E
Flue and gray basalt with ulenty of seams	117	207		
Soft red rock with some homeyo	mb 58	265		
Mard blue basalt	63	328		
Soft erneked rock, yellow seam	57	385		
Hard blue and gray rock	30	415		_
Cracked rock, yellow seams	40	455		<u></u>
Hard gray basalt	65	520	Had to cement from	<u> </u>
Red rock, some sompstone	22	542	-5201 to -5421	ļ
Hard blue basalt	- 68	610		
Brown rock with seass	20	630	Bottom of hole	
	-	-	Well 630' deep with 80'	МсГа
		+	of water. No pump test.	Well
		-		LOCAT
		┼		Mor
		 		Blai
		 		μ <u>η</u> Τρ.
		1		STAT
				Well
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cEntire			Index number 173-M 43-242-13-H
ell name			File number (Code: Tp., R., Sec., Sec.)
OCATION:			
lorrow County			D C B A
Slalock leland Quadrangle			M T K 1
p. Range Section Fractional s			N P Q R
p. Range Section Fractional s	ection		
TATISTICS:			
bell type-Dug Elevetion (la Drilled x face) Driven shove below	ind aur-	Use sta	tue- Well statue-
Driven shove		inus	tic X trial abundoned dry hole
inal depth 127'		munic includes	intion dry hote producer x
7 h - M- 9 -a Lau	B. Han	s on	
John McEntire where hame Address Boardman, Oregon	Origin	1 1 111	ers name Goldendale, Washington
A201900			ling_1928
This record compiled by H.S.W.	from Dec	pened	_
lata secured from the following sour	roms: re- ole	ceseq	by
Owner			
Oats compiled March 1948	Da		
Naterial	Thickness (feet)	Depth (feet)	Remarke
Dirt and soil	4	4	
Basalt, medium	100	104	
Hard blue basalt	В	112	lat water at 501.
Blue sticky clay	15	127	lat ertesian flow at 751.
			The above water cased out with 6" casing to 80'. 2nd water at 112. SWL 4'.
			Soft water - as compared to
	<u> </u>		the vicinity. Temperature reported at 450r.
		-	
		<u> </u>	
Norrow Count			Index number 174 -K
LOCATION:	and I do la de la	irr	## 25E-17 File number [Code: Tp., R., Sec., Sec.] D C B A Z F G H H L K T N P Q R
Morrov	land surft.	irr: mun: Tinclude . Edward inal dri	## 25E-17 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E T G H H L K T N P Q E Status- Status-
Morrov Count	land sur- ft. A. M. Orig	irr mun Tinclude Edward inal dri dress	## 258-17 File number [Code: Tp., R., Sec., 2 Sec.] D C B A E T G H H L K T N P Q B Restrict A Sec. A E T G H H L K T N P Q B Restrict A Sec. A H L K T N P Q B H H L K T N P Q B H L K T N P Q B H H L K T N P Q B H H L K T N P Q B H H H H H H H H H
Norrow Count	land eur- ft. A. M. Orig Da	irrinclude include Edward inal dri dreas te of dr	File number [Code: Tp., R., Sec., 2 Sec.] D C B A Z Y G H H L K J N P Q P tatus- satistatus- sat
Mell name LOCATION: Morrov	land eur- ft. A. M. Orig Da	irrinclude Tinclude Edward inal dri dreas te of dr	File number [Code: Tp., R., Sec., 2 Sec.] D C B A Z Y G H H L K J N P Q P tatus- satistatus- sat
Norrow Count	land eur- ft. A. M. Orig Da	irrinclude include Edward inal dri dreas te of dr	File number [Code: Tp., R., Sec., 2 Sec.] D C B A Z Y G H H L K J N P Q P tatus- satistatus- sat
Mell name LOCATION: Morrov	land surft. A. M. Oris Ad De from Durces: r	irrinclude include Edward inal dri dreas te of dr	File number [Code: Tp., R., Sec., 2 Sec.] D C B A Z Y G H H L K J N P Q P tatus- satistatus- sat
Morrov Counting	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. zun *include . Edward inal dri dreas te of dr ecopened e-cased leaned	## 258-17 File number (Code: The, R., Sec.) D C B A E T G H H L K T N P Q E Status-
Mell name LOCATION: Morrov	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. zun *includ Edward inal dri dreas te of dr eopened e-cased leaned	AS-25-17 File number [Code: The, R., See., 2 See.] D C B A E 7 G H H L K 7 N P Q B tatus- satic x satic x satic x set of x set
Morrov Counting	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irrinclude Edward inal dri ireas te of dr eopened e-cased leaned or of the tree of tre	## 257-17 File number (Code: Th., R., Sec., Sec.) D C B A Z F G H H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T N P Q R H L K T H L K H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K T H L K H L K T H L K T H L K T H L K T H L L T H L L T H L L T H L L T H L L T H L L T H L L T H L L T H L L T H L L T H
Mell name LOCATION: Morrov	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irrinclude Edward inal dri ireas te of dr eopened e-cased leaned or of the tree of tre	## 252-17 File number (Code: The, R., Sec.) D C B A Z T G H H L K T N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R
Mell name LOCATION: Morrov	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irrinclude Edward inal dri ireas te of dr eopened e-cased leaned or of the tree of tre	AS-25-17 File number (Code: The, R., Sec., 2 Sec.) D C B A E 7 G H H L K 7 N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Sec. Sec.
Mell name LOCATION: Morrov	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. nun "include . Edward inal dri dreas te of dr eopened e-cased leaned at Depth (feet)	AS-25-17 File number (Code: Ty., R., Sec., Sec.) D C B A Z F G H H L K 7 N P Q R The status- settic X settini Gration dry hole settic wells 11 Figure well file as sessor and at 50 g.p.n. Flowing well file res sessor and at 50 g.p.n. Flowing regards as being
Mell name Morrov Counties	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. nun "include . Edward inal dri dreas te of dr eopened e-cased leaned at Depth (feet)	AS-25-17 File number (Code: The, R., Sec., 2 Sec.) D C B A E 7 G H H L K 7 N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Sec. Sec.
Mell name Morrov Counties	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. nun "include . Edward inal dri dreas te of dr eopened e-cased leaned at Depth (feet)	AS-25-17 File number (Code: The, R., Sec., 2 Sec.) D C B A E 7 G H H L K 7 N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Sec. Sec.
Mostor Counting	land eur- ft. A. N. Örig Arom Da from D from D Thicknei	irr. nun "include . Edward inal dri dreas te of dr eopened e-cased leaned at Depth (feet)	AS-25-17 File number (Code: The, R., Sec., 2 Sec.) D C B A E 7 G H H L K 7 N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) N P Q B Latus- satic x Sec., 2 Sec.) Sec. Sec.

Morrov County E	C B F G L K P Q statue
Descript	F G L E P Q statue bandone ry hole
Blalock sland Quadrangle	E K P Q Statue
AN Extension Jack Rulligan A. M. Extension A. M. Extension	P Q statue
This record compiled by E.S.W. from Despended case of content of the content of t	statue bandone ry hole roducer
Well type-Dug Elevetion (land sur- Use status- Vell Drive above ft. domestic* X above insustrial all insustrial	bandone ry hole roducer
Drilled I face) ft. domestic I domestic I domestic I domestic I domestic I domestic I for the private and the private I domestic I d	bandone ry hole roducer
Driven above insustrial a irrigation di municipal properties de la complete de la	ry hole
This record compiled by N.S.V. from Despended by Striller and owner Driller and owner	roducer
Jack Rulligan Owners name Address Boardman, Oregon Address Boardman, Oregon Determine Lexington, O	
Owners name Address Boardman, Oragon Criginal drillers mane Address Lexington, Oragon Deto of drilling 1941 This record compiled by N.S.V. from Depended to accured from the Collowing sources: re-cased cleaned by Driller and owner	
Date of drilling 1941 This record compiled by U.S.W. from deta secured from the Collowing sources: re-cased cleaned by Driller and owner	
This record compiled by N.S.W. from Despaned deta escured from the collowing sources: re-cased cleaned by Driller and owner	
Driller and owner cleaned by	
Data compiled Hovesber 1947 Data	
Material Thickness Depth Remarks (feet) (feet)	
No log available 115 Flow estimated at	5 or 6
g.p.m. when well to Pressure low. Act pressure tower this pressure tower this	es dri
plugged when he as	quired
the property in it	d pipe
som of the place resored, a small re-gained. Water	report
as sulphurous.	
(e)ners 4N-3/2X-19 Well name File number (Gode: Ty., R., Sec	. 2 50
LOCATION:	В
Dmatilla County E F	G
	1 1
L1_	ĸ
Pent)eton Quadrangle M L	+
Pent)eton Quadrangle M L	+
Pentileton Quadrangle ## 22E 19 HZ TP. Range Section Frectional section ### STATISTICS:	Q I
Pent eton	Q :
Quadrangle	g status-
Quadrangle	Q :
	g status-
Quadrangle	status- andoned y hole oducer
	status- andoned y hole oducer_
Pentlaton Quadrangle 27 322 19 124 N P STATISTICS: Well type-Dug Drilled face) ft domestic* Driven below inright drillers name Address Pendleton, Oregon Address Valle Valle, Vaching Dete of drilling Jan, and Fel	status- andoned y hole oducer_
27 17	status- andoned y hole oducer_
Pentlaton Quadrangle 27 322 19 124 N P STATISTICS: Well type-Dug Drilled face) ft domestic* Driven below inright drillers name Address Pendleton, Oregon Address Valle Valle, Vaching Dete of drilling Jan, and Fel	stebus- andoned y hole oducer_
Year 15	stebus- andoned y hole oducer_
Pentlaton Quadrangle 23 322 17 124 Tp. kance Section Frectional section PARTISTICS: Sell type-Dug	stebus- andoned y hole oducer_
Processor Yama Y	stebus- andoned y hole oducer
27 17	stebus- andoned y hole oducer
272 13 124 N P	stebus- andoned y hole oducer
272 13 124 N P	stebus- andoned y hole oducer
Year 15	stebus- andoned y hole oducer
27 17	stebus- andoned y hole oducer
Y 1 222 13 154 154 155 156	andoned y hole oducer
Year 15	stebus- andoned y hole oducer
Year 15	stebus- andoned y hole oducer

KcHary Dam site			Index unaber 80-U 5x-28x-10
Well pame	•		File number (Code: Tp., R., Sec., Sec.)
LOCATION:			
Umatills Count	y		D C B A
Umatilla Quadrangi	.0		Z 7 G H
58 28% 10 Center of S	r t		N P Q B
Tp. Range Section Fractional	section		
STATISTICS:			
Well type-Dug Elevation (1 Drilled x face) 370	and sur-	Use st	atus- Well status-
briven eea		111111	gation dry hole
Final depth 1671		muni include	gation dry hole cipal producer x e etock wells
U. S. Engineers	A. A.	Durand a	4 Son
Owners name Address	Origi Add	nal dril ressW	lers name alla Valla, Washington
	Dat	e of dri	111ng August 12, 1947
This record enmption by M.S.V. Ante secured from the Following sou	from De	epened	-
Lloyd Ruff, U. S. Engineers, Porth	cl and. Orego	eaned	by
moya kuri, o. o. aagiaoore, rorea	-		
Date compiled August 1947		te	
Material	Thickness (feet)	(feet)	Remarks
Sand	6	6	12" casing to -127.5"
Gravel and amail boulders	6	12	
Boulders	18	36	
Gravel	5	35	
Sand and gravel	12	63 80	
Gravel and sand	8	88	
Gravel	13	101	275.8' or -95'.
Gravel and occasional boulders		110	
Gravel	5	115	
Gravel and sand	1	116	
Sand	1	117	
Gravel and coarse sund	6	123	
Boulders and fine sand	2	125	
Boulders	3	128	
Fine sand	2	130	
Boulders	8	138	
Soulders and sand	8	146	
Closely fractured basalt Sound basalt	13	167	Bottom of hole,
Entire water supply from gravel			
undetermined.			
Pumping data: 6,5' drawdown white 36,5' drawdown white	en pampin	105 g.)), u.
36.51 drawdown v	hen pumpi	g 222 g.	p.m.
		_	
<u> </u>			······································
1			

			Index number 176-M
Mesuenger ell name			4S-25E-17-L
			(Code: Tp., R., Sec., ¿ Sec.)
OCATION:			D C B A
Morrew County			E F C H
Blalock Island Quadrangle	•		H L K J
p. Range Section Fractional s	ection		N P Q R
TATISTICS:			
fall type-Dug Rlevetion (le	and sur-	Use state	tus- Well status-
Drilled x face)above		1111113	trial abandoned atton dry hole
Pinal depth 110° below	<u> </u>	aunic:	ipal producer I stock wells
E. T. Messenger	C. E. Origin	al drill	ога раде
whors name Address Boardman, Oregon			Pandleton, Oregon
			ling about 1933
This record compiled by E.S. W. late secured from the following sour	LOSD: 10-		by
Owner	. 010	aned	. 01
Date compiled Harch 1948		•	
Nate compiled Material	Thickness	Depth	Remarks
	(feet)	(teet)	
No log made		110	Well flows. Low g.p.m. and low pressure.
Owner reports:			
Soil and unconsolidated materi		28	
3011d rock	28	100	Hole 6" to 80°
Clay	100	110	5" from 80' to bottom.
	_		Index number 9-U 64-35-3-28
Miller #2 Woll name			Index number 9-U 63-35-R-28 Filo number (Code: Tp., R., Sec., ; Sec.)
Woll name			63-35-E-28 File number
Well name	7		6N-35-E-28 File number (Code: Tp., R., Sec., & Sec.)
Noll name LOCATION: Unstills Count Unsepped Quadrangl			63-35-E-28 File number (Code: Tp., R., Sec., Sec.)
Woll name LOCATION: DOANTILL Unnapped Quadrangl	.e ·		61-35-E-28 File number (Code: Tp., R., Sec., & Sec.) D C B A E F C P
Noll name LOCATION: Countilla Count Unnapped Quadrangi Tp. Sange Section Fractional	.e ·		6(-3)-E-28 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F C B H L X J
Woll name LOCATION: Unsapped Quadrang GE 35F 29 Center of N Tp. Range Section Fractional STATISTICS:	NA Section		61-35-E-28 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F C B H L K J N P Q R
Noll name LOCATION: Countilla Count Unnapped Quadrangi 63 35E 29 Center of N Tp. Range Section Fractional STATISTICS: Well type-Dug Elsvetion (1 face)	NA Section	dome	61-35-E-28 File number (Code: Tp., R., Sec., Sec.) D C B A E F C B H L X J N P Q R
Countilla Count	Wighter Section	inzu irri	6:1-35-E-28 File number (Code: Tp., R., Sec., Sec.) D C B A E F C C E H L K J H P Q B Attus- attus- attus- attus- attus- attus- attus- attus- dry hole
Countilla Count	section and surfit.	in un irri irri	61-35-Z-28 File number {Code: Tp., R., Sec., Sec.} D C B A Z F G E E L L K J N P Q R atus- atic- atic- atanoped_
Well type-Dug Drilled X Driven Prove below Prest S. Miller	section and sur- ft.	dome: in:us irri; munic include: Durand &	### A Son Sec
Well type-Dug Drilled X Driven Prove below Prest S. Miller	and surft.	domes in lust irris munic includes Durand d	### ### ##############################
Moli name LOCATION: Dentilla Count Unnepped Quadrangl 63 35E 29 Center of N 7p. Range Section Fractional STATISTICS: Well type-Dag Elevetion (1 face) Driven above Final depth 345' Evert S. Killer Owners name Address Kilton, Oregon	and surft. A. A. Original	domer includer Durand & cal drill ress	### ##################################
Noll name LOCATION: Unnepped Quadrangl GU 35E 29 Center of M Tp. Range Betton Fractional STATISTICS: Well type-Dug Elevetion (1 face) Driven below Final depth 345! Evert S. Hiller Compare name Address Hilton, Oregon	and surft. A. A. Original	domer includer munic fineluder Durand & mal drill ress of drill	A Son lars pane walls walls walls walls was and Feb. 1948
Moli name LOCATION: Unnepped Quadrangl GS 35E 29 Center of N Tp. Range Bection Fractional STATISTICS: Well type-Dug Driven Above Final depth 345' Evert S. Miller Owners name Address Milton, Oregon This record compiled by N.S.V. data secured from the Following sou	and surft. A. A. Original	domer includer munic fineluder Durand & mal drill ress of drill	File number File number File number Foode: Tp., R., Sec., Sec.) D C B A E F G H H L K J N P Q R Religious Anterior
Moli name LOCATION: Dentilla Count Unnepped Quadrangl GI 35E 29 Center of N Tp. Range Section Tractional STATISTICS: Well type-Dug Elevetion (1 face) above Final depth 345' Evert S. Hiller Commerc name Address Hilton, Oregon This record compiled by M.S.V. data secured from the following sou	and surft. A. A. Original	domer includer munic fineluder Durand & mal drill ress of drill	### A Son State State
Noll name LOCATION: Unnepped Quadrangl GU 35E 29 Center of M Tp. Range Betton Fractional STATISTICS: Well type-Dug Elevetion (1 face) Driven below Final depth 345! Evert S. Hiller Compare name Address Hilton, Oregon	and surft. A. A. Original Add. And patername and paterna	domerinami di mani di	### A Son Sec. Sec. #### A Son Sec. Sec. #### A Son Sec. Sec. #### A Son Sec. Sec. Sec. #### A Son Sec. Sec. Sec. Sec. #### A Son Sec. Sec. Sec. Sec. Sec. Sec. Sec. #### A Son Sec. Sec
Well tames LOCATION: Unmapped Quadrang Th. Range Bection Fractional STATISTICG: Well type-Dug Drilled X Driven above below Final depth 345' Evert S. Miller Demark name Address Milton, Oregon This record compiled by M.S.V. data secured from the Following sou	and surft. A. A. Original Add Add from Detross: call	dome: invition inviti	### A Son State State
Well name LOCATION: Unnepped Quadrang GJ 35E 29 Center of N TP. Range Bection Fractional STATISTICG: Well type-Dug Elevetion (1 face) Driven below Final depth 345' Evert S. Hiller Demars name Address Hilton, Oregon This record compiled by M.S.V. data secured from the Following sou	and surft. A. A. Original Add. Dat from Deciross: recipies: reci	dome: invition inviti	File number File number File number (Code: Tp., R., Sec., Sec.) D C B A E F G B H L K J N P Q R Well statua- stric* strica dry hols producer I a Son lars name Walla Walla, Washington ling Jan. and Feb. 1948
Moli name LOCATION: Dentilla Count Unnepped Quadrangl GI 35E 29 Center of N Tp. Range Section Fractional STATISTICS: Well type-Dug Elevetion (1 face) above Final depth 345' Evert S. Hiller Commerc name Address Hilton, Oregon This record compiled by N.S.V. data secured from the Following sou Driller Date compiled March 1948 Material	and surft. A. A. Original Additional Detrons: recipies: refines:	dome: inview inview inview inview includes Durand d and drill reas of dril spened -cesed samed Depth (Foet)	File number File number File number (Code: Tp., R., Sec., Sec.) D C B A E F G B H L K J N P Q R Well statua- stric* strica dry hols producer I a Son lars name Walla Walla, Washington ling Jan. and Feb. 1948
Noll name LOCATION: Dentilla Count Unnepped Quadrangl GI 35E 29 Center of N Tp. Range Section Fractional STATISTICS: Well type-Dug Elevetion (1 face) above Final depth 345' Evert S. Hiller Commerce name Address Milton, Oregon This record compiled by N.S.V. data secured from the Following sou Driller Date compiled March 1948 Material Soil	and surft. A. A. Original Additional Destross: recipioss: refiness: (fest) Destross: 2	dome: invui irri; muni irri; muni irriclude: Purand { aal dril; reas of dri cessd cessd aaned Depth feet)	File number File number File number (Code: Tp., R., Sec., Sec.) D C B A E F G B H L K J N P Q R Well statua- stric* strica dry hols producer I a Son lars name Walla Walla, Washington ling Jan. and Feb. 1948
Noll name LOCATION: Countilla STATISTICS: Well type-Dug	and surft. A. A. Original Additional Destross: recipioss: recipio	dome: innum irric mintric include: Purand c mal drill ress of dril spened -cased maned [Depth freet] 2	### A Son Son San
Noll name LOCATION: Unnepped Quadrangl GI 35E 29 Center of N Tp. Range Betton Fractional STATISTICS: Well type-Dug Elevetion (1 face) Driven Above below Final depth 345' Evert S. Hiller Compare name Address Milton, Oregon This record compiled by M.S.V. data escured from the Following sou Driller Date compiled Narch 1948 Material Soil Brown slay Oravel	A. A. Original Additional Part Colors of Color	dome: innum irri mint include:	### A Son Lars name A Son Lars name A Son L
Noll name LOCATION: Unnepped Quadrangl GJ 35E 29 Center of N Tp. Range Betton Fractional STATISTICS: Well type-Dug Driven Above Pinal depth 345' Evert S. Hiller Commerce name Address Milton, Oregon This record compiled be following accompiler Driller Date compiled March 1948 Material Soil Brown slay Gravel Commercian	A. A. Original Additional Part Property of the Part Part Part Part Part Part Part Part	dome: in unit in i	### A Son Lars name walls walls, Vashington walls by ### Remarks
Noll name LOCATION: Dentilla Count Unnepped Quadrangl GI 35E 29 Center of N Tp. Range Section Fractional STATISTICS: Well type-Dug Elevetion (1 face) Above Pinal depth 345' Evert S. Hiller Commers name Address Milton, Oregon This record compiled by M.S.V. data secured from the following sou Driller Date compiled March 1948 Material Soil Frown clay Gravel Commer gravel	A. A. Original Additional Parameter Services: From Decrees: From Decrees	dome:	### A Son Lars name walls walls, Vashington walls by ### Remarks
Material Description Country of the country of th	A. A. Original Additional Additio	dome:	### A Son Lars name walls walls, Vashington walls by ### Remarks

			Index number 21-U
Hilton City #1			File number
			(Code: Tp., R., Sec., & Sec.)
LOGATION:			D C B A
Umatilla County			E F G H
Unmapped Quadrangle			M I K 1
58 35E 12 FV of SE			N P Q R
Tp. Range Section Fractional s	ection		
STATISTICS:			
	ınd sur-	Use sto	tus- Well status-
Well type-Dug Zlevetion (la Drilled x fece) above	ft.	domes inqui	stric* strial abandoned artion dry hole
Driven above below		irrie munic	getion dry hole producer x stock wells
Final depen		include	stock wells
City of Wilton	A. A.	Durand &	y Son
Owners name Addrass	Origi Add:	sese	era nama Walla Walla, Washington
	Dat	of drl	lling
This record compiled by N.S.W.	from De	pened	_
This record complid by N.S.W. data secured from the collowing sour	rces: re-	-cased eanad	- by
Driller			
Date compiled January 1948	Da	ta .	
	Thickness (feet)		Remarks
Netorial	Г		
Oravel with some boulders	30	30	Small amount water at 25!
Cenent gravel	16	46	Water at 351
Gravel and clay	14	60	
Black basalt	38	98	
Black basalt and clay	17	115	
Hard blnck baselt	13	128	
Medium hard black basalt	17	145	
Soft red and brown basalt	35	180	Water between 175' and 180'
Medium hard black basalt	6	186	
Hard black baselt	16	202	
Medium hard gray basalt	10	212	
Soft besalt	37	249	
Brown basalt	16	265	Water at 2621
Soft brown basalt	32	297	
Gray baselt	12	309	
Medium hard gray basalt	107	416	Water between 403' ann 416'
Very hard block basalt	13	429	Water at 4291
Sard black basalt	11	440	
	10	450	
Hard gray basalt			Water at 455'
Black basal:	15	465	sacer ac ~27
Gray basalt	140	605	Process of Nation
Gray baselt, crevices and cave	46	651	Bottom of hole
			SWL -851
		ļ	
		<u> </u>	
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	-	+	
		+	_
			
			
	<u> </u>		

Nilton City #2	_		Index number 20-5 51-351-12-0
Well name			File num / T (Code: The R., Sec., 2 Sec.
LOCATION:			r
Umatilla Count	; y		D C B A
Unmapped Quadrangl			B 7 G H
5N 35R 12 SW of NR			MLXJ
Tp. Range Section Fractional	section		H P Q Z
STATISTICS:			
Well type-Dug Elevetion (1	and sur-	Use at	atus- Well status-
Driven above	ft.	inn	estic* abandoned
Final depth 902		irri	gmtion dry hole
		*include	s stock wells
City of Milton	A. A	. Durand	i & Son Llors name
Address_	Add	Tees A	alla Valla, Vashington
	Dat	e of dri	lling May to Oct. 1944
This record compiled by M.S.W. data secured from the following sou	from De	epened_	_
	o)	-oased_ bease	_ by
Driller			
Date compiled January 1948	De	te	
Material	Thickness (feet)	(Seet)	Remarks
Surface gravel, loose	28	28	Casing 20" OD to 40'-10"
Coment gravel	35	63	Hole 16" to bottom
Brown honeycomb	19	82	Static water level 1023
Black baselt	28	1 10	
Brown basalt	4	114	
Black basalt	35	149	
Brown basalt	27	176	
Brown and red rock	9	185	1095 g.p.m. yield with
Black basalt	10	195	stabilized pumping level
Gray basalt	9	204	at 2371.
Brown honeycomb	5	209	
Black basalt	7	216	
Brown rock	14	230	
Black and brown basalt	25	25 5	
Black basalt	63	319	
Brown honeycomb	7	325	
Brown and black basalt	12	337	
Black beault	12	34.9	
	4	353	
Brown basalt	49	402	
Black basalt			
Blue clay	1	403	
Black basalt	56	459	
Brown honeycomb	7	466	
Brown rock	13	479	
Black honaycomb	6	485	
Black basalt	41	526	
Black and brown rock	2	528	
Black beealt	33	561	
Gray besalt	22	583	
Black honeycomb	12	595	
Black basalt	26	621	
Gray basalt	33	654	
Black honeycomb	24	678	
Black basalt	19	697	
Black, brown and some honeycomb	6	703	
Black basalt	5	708	
Black and gray baselt	13	721	
0,		748	 .
Brown and black basels		H-17	-
Brown and black baselt	27 13	761	
Gray basalt	13		
Gray basalt Bed and gray basalt	13 32	793	
Oray basalt Bed and gray basalt Oray basalt	13 32 6	793 799	
Gray basalt Bed and gray basalt	13 32	793	

Black and brown basalt	5	810	
Black basalt	3	813	
Gray basalt	3	816	
Black basalt	17	833	
Black and brown basalt	14	847	
Black	55	902	Bottom of hele.
		1	
			
			<u> </u>
	-		
	-		
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		,	
			
*			
		1	

Moore Well mame	-		File number	er 177-M +8-258-18-F R., Sea., 2 Se
LOCATION:			(code, Ip.,	
Mortos Coun	ty			D C B
Blalock Island Quadrang	le			M L K
48 25E 18 SET of EVE Tp. Range Section Fractional				и Р с
STATISTICS:				
fell type-Dig Elevetion () Drillad x face) Driven sbove below	land sur-	Use st	atus-	Well status-
Drilled x face)	ft.	lnuu	strial X	abandoned
below		irri muni	gation	ary hole_
final depth 116		include.	s stock wells	producer_
Mr. Moore	А. Ж.	Edwards		
Mners neme Address Boardman, Oregon	Origi	nel dril	lers name Lexington,	Orngon
	AAQ.		+0	
This record compiled by H.S.V. lats secured from the following sou	Det	e of dri	11ing 19	39
This record compiled by H.S.V. late secured from the following son Driller Date compiled March 1948	from De- irces: re cl	e of dri	11ing 19.	
This record compiled by E.S.V. lata secured from the Tollowing sou Driller Dete compiled March 1948 Material	from Decirces: reclines: Decirces: Thickness (feet)	e of dri	11ing 19.	39
This record compiled by E.S.V. lata secured from the Tollowing son Driller Date compiled March 1948 Material Soil and clay	from Decirces: re- cl- Thickness (feet)	e of dri epenedcased_ eaned_ Depth (feet) 12	11ing 19.	
This record compiled by E.S.V. lata secured from the Tollowing sou Driller Dete compiled March 1948 Material	from Det from Denirces: re cl. De Thickness (feet) 12	e of dri epened -cased esaned Depth (feet) 12	11ing 19.	
This record compiled by H.S.V. late secured from the following sou Driller Nate compiled March 1948 Naterial Soil and clay Broken rock Groken man Baselt, black, sedium hard	from Decirces: re- cl- Thickness (feet)	e of dri epenedcased_ eaned_ Depth (feet) 12	11ing 19.	
This record compiled by E.S.V. late secured from the Following sou Driller Date compiled March 1948 Naterial Soil and clay Broken rock	from Det from Denirces: re cl. De Thickness (feet) 12	e of dri epened -cased esaned Depth (feet) 12	11ing 19.	
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1948 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, black, sedium hard medium hard	from Decirces: recluded to the column of the	e of dri epened	11ing 19.	
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, medium hard Baselt, black, medium hard Baselt, blue, wolld and	Det from re frees: cl De Thickness (feet) 12 8 6 12	pened cased eaned bearing to be considered to be consider	11ing 19.	
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det Det Thickness (feet) 12 8 6 12 22	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	111ing 19	pp
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det Det Thickness (feet) 12 8 6 12 22	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	111ing 19	pp
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det Det Thickness (feet) 12 8 6 12 22	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	by	nois. to 12' Hole to 12' bottom, bot bortom,
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det Det Thickness (feet) 12 8 6 12 22	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	by	nole. to L2' Hole to L2' bottom, bot bortom,
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det Det Thickness (feet) 12 8 6 12 22	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	by	nole. to L2' Hole to L2' bottom, bot bortom,
This record compiled by E.S.V. late secured from the following sou Driller Date compiled March 1946 Material Soil and clay Broken rock Baselt, black, sedium hard Baselt, blue, soilum hard Baselt, gray, very hard Clay, fown, tight, with	Det From Det	e of dri epened -cased seaned beta Depth (rest) 12 20 26 38 60	by	De Sanarka

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			Index number 18-U 58-358-2-J	Milton Barsery			Index number 15-5 63-365-31
Nilton City #3			File number (Code: Tp., R., Sec., 2 Sec.)	Well mass			File number (Code: Tp., H., Sec., 2 Sec.)
LOCATION:				LOCATION:			
Unatilla County	,		D C B A	Umetilla County			D C B A
Unsepped Quadrungle	•		M L X J	Unmapped Quadrangle			N L K J
Tp. Bange Section Fractional s	ection		и в б	63 368 31 200 feet from Tp. Range Section Fractional se	center		я Р Q в
STATISTICS:	-			STATISTICS:			
Well type-Dug Elevation (la Drilled x face) Driven above	nd sur- ft.	Use sta dome: inqui	stic* shandoned	Well type-Dag Elevation (lan Drilled x face) Driven above	ft.		stic*abandoned
Final depth 5501 below		aun i	mation dry bols producer x stock wells	Final depth 20001	= .	zun10	ention dry hole producer x a stock wells
City of Hilton		e Scott		Milton Wursery		Durand &	
Owners nome Address	Add	rees <u>5</u>	ers name 40 S. Main, Milton, Oregon	Owners name Address Milton, Oregon		ess	ars name Valla Valla, Washington
			lling Dec. 1945 to July 1946			of dril	lling
This record compil d by 3.3.4. data secured from the collowing sour	from Dec	spensd -cesed	<u>.</u> -	This record compiled by N.S.Y. f data secured from the Following source	88; TO-	CB Bed	<u>.</u> -
City Officials	cle	beans	ρλ	Company Officials	cle	aned	
Date compiled January 1948	Dar	t.a.		Jan. 1946 - Producti Date compiled November 1944 for lo	on Det		
Material	Thickness	Depth	Remarks	National 1	Thickness	Depth	Remarks
Clay and coarse gravel	(feet) 43	(foot)		-	(feet)	(feet) 	
Black basalt	36	79		Soil Gravel	180	200	,
Reddish rock	9	88		Basalt	217	417	
Bluck basalt	19	107		Shale	17	434	Gas here
Hard gray basalt	10	117		Gray basalt with black basalt rock bearing no water	278	712	
Black basalt	7	124		Black basalt	3	715	Vater bearing
Brown rock	7	131		Gray basalt	185	900	
Black basalt	109	239	Crevices from 209 to 218 rock harder	Black basalt with streaks of red	17	917	Water bearing
Brown rock	10	249		Gray baselt	203	1120	
Black basalt	14	265		Black basalt	2	1122	Vater bearing
Brown rock	24	257		Gray basalt	268	1390	
Black rock	6	293		Plack basalt rock with very what water washed gravel	3	1393	Vater bearing
Hard black baselt	22	315		Gray basalt	457	1850	
Black basalt	±1	356		Black basalt	6	1856	Water bearing
Eard basalt	12	368		Gray beamlt	84	1940	
Black basalt	99	46?		Black besalt	4	1944	Water bearing
Black basalt, broken	2 1	458		Stopped drilling in basalt at		5000	
Loose gray stone	3	491		ļ			Record of casing:
Rard black basalt	47 12	538	Bottom of hole	-			39' of 12"
Black porous rock	12	550	Borrow or Mule				207' of 10"
	l	-	SVI 501				3481 of 80 1201 of 620 easing
		<u> </u>	Drawdown 54' at 1400 g.p.m.				liners from \$17' to 537'.
			# 65' at 1550 g.p.m.				
			* 84' at 1950 g.p.m. 85' at 2000 g.p.m.				SVL - 115'
*** * * * * * * * * * * * * * * * * * *			Hole 20° to 43'				Drawdown to 1351 at 1100
			* 16* to 100'				g.p.m, which is normal pumping rate. This draw-
		ļ					down is stabilised at the
							shove rate for weeks on end.
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		ļ					
		<u> </u>					
		-					
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	L						

Morton Well name			3E-35E-17 File number [Code: Th. R. Sec. 2 Sec. 3	Horgan and Joy Well name	_		23-26E-21-Q File number
			(Code: Tp., R., Sec., 2 Sec.)				(Code: Tp., R., Sec., 2 Sec.
LOCATION:			D C B A	LOCATION:			D C B A
	ounty		E F G H	<u>Korrov</u> Co	unty		Z 7 G H
Onsapped Quedre	angle		H 1 5 J	Unmapped Quadra	ngle		м L к л
Tp. Range Section Frection	aal section		F P Q 1 2	Tp. Range Section Fraction	Bi al section		N P Q R
STATISTICS:		_		STATISTICS:			
Well type-Dug Elevetion	a (land sur-	Use at		Well type-Dug Elevation	(lend our-		tatus- Well status-
Drilled x face)	ft.	dome into	estic* ebandoned	Drilled x face) Driven above	ft.	dom	estic* x shandoned
Final depth 146'		irri	gation dry hole cipal producer ; s stock wells	Final depth 55'		irr mun	igation dry hole icipal producer x es stock wells
Norton Estate		Derend		Morgan and Joy	A. 1	N. Edward	<u> </u>
Owners hame Address	Origin	nal dril	lera name Kalla Walla, Washington	Owners name Address Portland and Chica,	Ori	ginal dri.	llers name Lexington, Oregon
			lling about 1928				illing Aprost 1947
This record compiled by E.S.W.	from Dec	apened		This record compiled by #.S.V.		ste or ar: Despened	Illing Aprole 12-1
aniwolle's the following	sources: re-	-cased_		This record complied by B.S. W. data secured from the Following	ources: 1	Despened_ re-cased_ leaned	
Messre, Williams, Foster and Bar			- ~	Tom Wilson		1640	07
Date compiled Harch 1948	Dat	••		non-tied barch 1948	-		
Material	Thickness (feet)		Remarks	Date compiled March 1948	_	as Depth	T _ ,
	(feet)			Material	(feat)	(feet)	Remarks
Hot available		146	Flow - low g.p.m. when originally drilled.	Soil and clay and gravel	18	18	ļ
		ļ	VII.5.104	Solid basalt	30	48	
	+	L	Pumps only now, but yield under pumping for domestic	Bleck eard	4	52	Water here
		<u> </u>	and stock use strong and consistent.	Solid besalt	3	55	
			consistent.		$\prod_{}$	T	SWL 20'. Bail test 15 g.p.
						Τ	
		Γ				 	
						+	
	1				-	+	
	 				+-	+-	+
			Index number 59-U 38-328-10-EF 711s number	Myers Well name			Index number 4-U (M-358-19 File number
COATION:	unty		3 E-32E- 14 -EF	Myers Well name LOCATION: Umatilla Cou			Index number — 4-D 6M-55E-19 File humber (Gode: Tp., R., Sec., Sec.) D C B A E F C H
COLATION: satille Cou spalleign Quadras f 2Z 14 54 of FW	ngle		38-223-10-BY File number (Gode: Tp., R., Sec., 2 Sec.) D C B A E 7 G H	Well name LOCATION: Umatilla Cou Unnapped Quedran	gle t from sast	† corner	Index enaber — 4-U 6M-758-19 File number (Code: Tp., R., Sec., Sec.) D C B A E F C H M L K J
COLATION: matille Con quadrati f 32 14 Sh of FV D. Range Section Fractions	ngle		38-)22-10-EY File number (Code: Tp., R., Seo., 2 Sec.) D C B A E F G H M L X J	Mell name	gle t from sast	‡ corner	Index number — 4-D 64-558-19 File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J
COLITION: antille Cot antille Quadran F 12Z 14 \$\frac{1}{2}\$ of FF Ty. Eange Section Fractions TATISTICS: (all tros-Due Elevation	al section	Uso sta	38-)22-10-EF File number [Gode: Tp., R., Seo., 2 Sec.] D C B A E 7 G H M L X J N P Q E	Vell name LOCATION: Umatilla Cou Umapped Quedran GS 35% 19 1360! wes Tp. Range Baction Fractiona STATISTICS; Well type-Dug Zievation Zieva	t from eact l section	Use at	Index onsber
	(land sur-	Use sta domas induc irrig	Tile number File number Gode: Tp., R., Seo., Sec.) D C B A E 7 G H M L X J N P Q B Student Status Tile	Mell name LOCATION: Umatilla Cou Unmapped Quedran Th. Range Section Fractional STATISTICS; Well type-Dug Drilled x Face Drivan Selow Delow D	gle t from eact l section	Use str dome: inuu: irri: munic	Index onsber 4-D SM-578-19 File number (Code: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R atua- atua- atua- tio* Well statua- atua- abandoned dry hole ciphl producer x producer x
	(land sur-	Use sta domas induc irrig	38-)22-10-EF File number Gode: Tp., R., Sec., Sec.)	Vell name LOCATION: Umailla Cou Umapped Quadran GS 35% 19 1360 wes Tp. Range Section Fractiona STATISTICS; Well type-Dug Elevation Face) Drilled Tace) Drilled Drivan Babye Babye Elevation Elev	t from eact l section	Use str dome: inuu: irri: munic	Index onsber
COLATION: satille Cou gnaleign Quadrat # 32Z 14 \$\frac{1}{2}\$ of FW The Range Section Fractions TRATISTICS: (sli type-Dag Driven Shore Selow consider the Shau' consider the Shau'	ogle	Use sta domes indue irrig munio includes	The number (Gode: Tp., R., Seo., 2 Sec.) D C B A E F G H M L X J N P Q B The number of the sec. 2 Sec.) E F G H M L X J N P Q B Standoned dry hole producer x stock wells	Vell name LOCATION: Umanipmed Quedran	gle t from east l section (land sur- ft,	Use at: dome: in:uu irri; munic	Index number — 4-D File number (604-358-19 File number (Code: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R Antus- matus-
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endleton quadrat # 32E 14 Sh of FW D. Range Section Fractions **TATISTICS: ell type-Dug Drilled x Driven blow blow 'inal depth Shu' charter Shu' charter Shu'	(land sur- ft. Origina Addre	Use sta domes injue irris munio includes	Tile number File number File number [Code: Tp., R., Sec., 2 Sec.] D C B A E 7 G H M L K J N P Q B N P Q B Stor x Stor x Standoned ary hole stor wells	LOCATION: Cou	gle t from saet i section (land aur- ft, Origi	Use at dome in the interior author includes the includes	Index number — 4-D File number (604-358-19 File number (Code: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R Antus- matus-
Tell name COATION: antilla Con quadrat £ 32Z 14 St of FF Dr. Range Section Fractions TATISTICS: cell type-Dug Elevation Drillad x face) Driven above below challent dapth 8441	(land surft. Origina Addre	Use sta domes indus irrig munio includes al drill ess of drill pened x	Tite number File	Near	gle t from east l section (land aur- ft. Original	Use stideness in a control of the co	Index onsber — 4-U GM-75-19 File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R A B B C B C C C C C C C C C C C C C C C
COLOTION: SACTION: SACTI	Origina Addre	Use sta domas injue irria munio includes al drill ese of dril	Tite number Fite number Fite number Gode: Tp., R., Seo., Sec.) D C B A E 7 G H M L X J N P Q B Student Status N P Q B Student Status Standoned dry hole stock wells For name hy C. E. Lewis	Usatilla Cou	cle t from eact l section (land sur- ft. Original Add Add from Det	Use stidents de	Index onsber — 4-U GM-75-19 File number (Gode: Tp., R., Sec., Sec.) D C B A E F C H M L K J N P Q R A B B C B C C C C C C C C C C C C C C C
Settile Concentration Control	Origina Addre	Uso sta domes inviue irrig munio includes al drill ese of dril	Tite number File number File number Gode: Tp., R., Sec., Sec.) D C B A E F G H M L K J N P Q E N P Q E Standard strice x stice x stice y strice y str	Near	cle t from eact l section (land sur- ft. Original Add Add from Det	Use stidents domeinum irrigamic sunic sincludes sincludes states and separate states s	Index omaber 4-U GM-752-19 File number (Gode: Tp., R., Sec., Sec. D C B A E F C H M L K J N P Q R Nell statue- stic attach stric attach stric attach stric producer x iers name ling Spring 1946
OCATION: Maille Con Maleien Quadrat p. 12Z 14 \$\frac{1}{2}\$ of FV p. Ease Section Fractions TATISTICS: ell type-Dug Ease Driven below inal dapth Sam' hn Num mars name Address his record compiled by N.5.V. atta secured from the Following served report by the driller	ogle (land surft. (riginal Address page 1000	Use sta domes inductive interest sunio sun	Tite number Fite number Fite number Gode: Tp., R., Seo., Sec.) D C B A E 7 G H M L X J N P Q B Student Status N P Q B Student Status Standoned dry hole stock wells For name hy C. E. Lewis	Usatilla Cou	cle t from eact l section (land sur- ft. Original from Det groupes: re- cl	Use stidents domeinum irrigamic sunic sincludes sincludes states and separate states s	Index omaber 4-U GM-752-19 File number (Gode: Tp., R., Sec., Sec. D C B A E F C H M L K J N P Q R Nell statue- stic attach stric attach stric attach stric producer x iers name ling Spring 1946
iell name OCATION: antille Con indicion Quadrat p. 2Z 14 \$\frac{1}{2}\$ of FV p. Hance Section Fractions TRATISTICS: ell type-Dug Elevation Driven below inal depth SA41 this record compiled by M.S.W. ats secured from the Following sections orbal report by the driller	(land surft. Origina Addre Date from Deep sources: re-o	Use sta domes inductive interest sunio sun	Tite number Fite number Fite number Gode: Tp., R., Seo., Sec.) D C B A E 7 G H M L X J N P Q B Student Status N P Q B Student Status Standoned dry hole stock wells For name hy C. E. Lewis	Well name LOCATION: Umatilla Cou Unmapped Quedran STATISTICS: Well type-Dug Fractiona Drivan above below Final depth 1)7' J. E. Myers Owners name Address Ronte 2 Trevarter, Orago This record compiled by E.S.W. date secured from the following state Engineer	cle t from eact l section (land surft. Original from Determination of the column of	Use stidents domein de la compania del compania de la compania de la compania del compania de la compania de la compania de la compania del co	Index omsber — 4-D Size 19-19 File number (Gode: Tp., R., Sec., 2 Sec.) D C B A E F C H M L K J N P Q R N P Q R Well status- stic abandoned dry hole producer x iter name ling Spring 1946
The second compiled by E.S.V. at second compiled by E.S.V. ats second of part of the second of the	ogle (land surft. (riginal Address page 1000	Use sta domes inductive interest sunio sun	Tite number File number File number (Gode: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q B Itua- Itua-	Well name LOCATION: Umanyped Quedran 6S 35E 19 13661 wes Th. Range Bection Fractional STATISTICS: Well type-Dug Privan Paco Bove Below Final depth 137' J. E. Myers Owners name Address Ronte 2 Freewater, Orago This record compiled by H.S.W. date secured from the following state Engineer Date compiled February 1948 Material	cle t from eact l section (land surft. Original Addition from Determination Thickness recording to the control of the cont	Use stidement of the state of t	Index onsber — 4-D File number GM-578-19 File number Gode: Tp., R., Sec., Sec., D C B A E F C H M L K J N P Q R A B C C H M L K J N P Q R Relation abandoned dry hole ripal producer x stock wells Gre name Ling Spring 1946
Sell name COCATION: Sentille Cocation: Sentille Cocation: Sentille Cocation: Sell type-Dag Driven Driven Sell type-Dag Cocation: Sell type-Dag Driven Sell type-Dag Sell type-Dag Driven Sell type-Dag	Origina Address From Deep Courses: From Deep Courses: From Deep From Deep Courses: From Deep From Deep Courses From Deep From	Use sta domes inductive interest sunio sun	Tite number File number File number (Gode: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q B Itua- Itua-	Well name LOCATION: Umanyped Quedran 6S 3SE 19 1366 vec Th. Range Bection Fractional STATISTICS: Well type-Dug Privan Pace Below Final depth 137' J. E. Myers Owners name Address Ennie 2 Freewater, Orago This record compiled by H.S.W. date secured from the following so State Engineer Date compiled February 1948 Material Dirt	cle t from eact l section (land surft. Original Addition from Determination Determination Thickness (feet) 14	Use st. dome.dome.dome.dome.dome.dome.dome.dome.	Index onsber — 4-D Silvania - 4-D File number Gode: Tp., R., Sec., Sec. D C B A E F C H M L K J N P Q R N P Q R Relief abandoned gation x cipal producer x producer x lare name ling Spring 1946
COLVENT: antille Cou padded # 32Z 14 \$ \$ of FF The Fractions **TATISTICS: (ell type-Dug Elevation Drilled X face) Driven above below 'inal depth Sau' ohn Name Address Address this record compiled by M.S.W. ats secured from the Following septal report by the driller **Material Well was about 200' deep when	Origina Address From Deep Courses: From Deep Courses: From Deep From Deep Courses: From Deep From Deep Courses From Deep From	Use stated domain includes industrial includes all drill see of drill pened includes and drill p	Tite number File number File number (Gode: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q R Trivial shandoned dry hole produces x ers name ling by C. Z. Levie Fendleton, Oregon	Well name LOCATION: Umanpped Quedran 6S 35E 19 1366' wes Th. Range Bection Fractional STATISTICS: Well type-Dug Privan Paco Bove Below Final depth 137' J. E. Myers Owners name Address Ronte 2 Freewater, Orago This record compiled by H.S.W. date secured from the Following state Engineer Date compiled February 1948 Material Dirt Loose gravel	cle t from eact l section (land surft. Original Addition from Det from Desurces: re cl Dear Thickness (feet) 14 21	Use st. dome. dome	Index onsber — 4-D File number GM-578-19 File number Gode: Tp., R., Sec., Sec., D C B A E F C H M L K J N P Q R A B C C H M L K J N P Q R Relation abandoned dry hole ripal producer x stock wells Gre name Ling Spring 1946
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COATION: antille Cor paddeign Quadrat # 12Z 14 \$ of FF The Fange Section Fractions THATISTICS: (ell type-Dug Elevation Drilled X face) Driven above below 'inal depth Sau' ohn Num where name Address Address Address Address ties record compiled by M.S.W. ats secured from the Following septal report by the driller waterial Well was about 200' deep when Levis started drilling. From point on it was sunk to a depth of about Material penetrated was rock for	ogle (land sur- ft. (rigina Addre from Desperatories: re- clea Charles (continue) (tiest)	Use stated domain includes industrial includes all drill see of drill pened includes and drill p	Tite number File number File number (Gode: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q R Trivial shandoned dry hole produces x ers name ling by C. Z. Levie Fendleton, Oregon	Well name LOCATION: Umaniped Quedran 63 351 19 1360' wee Th. Range Section Fractiona STATISTICS: Well type-Dug Privan Pace Delow Final depth 137' J. E. Myers Owners name Address Ronte 2 Freewater, Orago This record compiled by E.S.W. date secured from the following state Engineer Date compiled February 1948 Material Dirt Loose gravel	cle t from eact l section (land surft. Orist Add from De from De Cl De Thickness (fest) 14 21	Use str. dome: dome: in.u. irri; sunit; *include: inal drill bress ce of dril bepsnedcased cened ts D Depth frest) 14 35 54	Index onsber — 4-D Size 19
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isli name OCATION: SATTIPE SATTIPE AND THE STATE OF TRACTION TATISTICS: soli type-Dug	ogle (land sur- ft. (rigina Addre from Desperatories: re- clea Charles (continue) (tiest)	Use stated domain includes industrial includes all drill see of drill pened includes and drill p	Tite number File number File number (Gode: Tp., R., Sec., Sec.) D C B A E 7 C H M L K J N P Q R Trivial shandoned dry hole produces x ers name ling by C. Z. Levie Fendleton, Oregon	Well name LOCATION: Umaniped Quedran 63 351 19 1360' wee Th. Range Section Fractiona STATISTICS: Well type-Dug Privan Pace Delow Final depth 137' J. E. Myers Owners name Address Ronte 2 Freewater, Orago This record compiled by E.S.W. date secured from the following state Engineer Date compiled February 1948 Material Dirt Loose gravel	cle t from eact l section (land surft. Orist Add from De from De plures: re cl Thickness (fest) 14 21	Use stideness of designation of the state of drill separate of dri	Index comber 4-D File number GM-558-19 File number Gode: Tp., R., Sec., Sec. D C B A E F C H M L K J N P Q R N P Q R Well statue- stice abandoned dry hole ripal producer X sec. Remarks 6* hole Remarks 6* hole Remarks 6* hole
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Bickerson			Index number 178-M 4E-25E-18-L
Well name			File number (Code: Tp., R., Sec., Sec.
LOGATION:			D C B A
Horrow Count	7		E F G E
Blalock Island Quadrangle			M L X J
4H 25H 18 HIL of SV1 Tp. Range Section Fractional	saction		N P Q R
STATISTICS:			
Well type-Dug Elevation (1: Drilled X face)		Use st	atus- Well status-
Drilled I face) Driven shove below			strial abandoned gration dry hole
Final depth 86		zun:	cipel producer 1
W. N. Bickerson			lers name
Owners name Address Boardman, Oregon	. Add:		
This record compiled by M.S.W. data ascured from the Following acu	fron De	spened -cesed eaned	11ing sbout 1938
Date compiled March 1948	Da	t.	
Natorial	Thickness (feet)	Depth	Remarks
Fo log available	(7991)	86	Well flows. Water very co
			6" hole.
Nolan Tetate	-		Index number — 114-M 2S-23E-1-A File number
Meli Date			(Code: Tp., R., Sec., 2 Sec
LOCATION:			D C B
Morrov Count	. y		E F G E
Blalock Jeland Quadrangl	Le		M L X 3
25 232 1 SE of SE Tp. Range Section Fractional			N P Q B
STATISTICS:			
Driven above below	iand sur- ft.	irri	stic* x sbandoned
Well type-Dug Elevation (1 Drilled x face)	ft.	dome inuu irri muni	stic* x sbandoned
Well type-Dug Drilled x Driven Driven Final depth 533' Gerland Swaneon	ft.	dome inuu irri muni Tinclude	setic® x striel sbandoned ggstion dry bole cipal producer s stock wells
Well type-Dug Elevation (1 face) Drilled x face) Driven above below below	H. E.	dome intu irri muni finclude Cotter	setic* x striel shandored getion dry bole cipsi producer s stock wells
Well type-Dug Drilled x Driven above below Corners name	H. E. Origi	dome intu irri muni include Cotter nel dril	setic* x striel shandoned ggtion dry bole colpsi producer sa stock wells lere name Ione, Oregon
Well type-Dug Drilled X face Driven bove below Final depth 533' Gerland Swanson Genera name Address Boardman, Oregon This record comptied by 2.5.V.	Ft. N. E. Original Add Det	dome invu irri muni include Cotter nel dril ress e of dri apsned	setic* x setriel shandoned getion dry bole copel producer se stock wells lere name Ione, Oregon
Well type-Dug Drilled x Driven above below Corners name	Ft. Origi Add Det	dome invu irri muni include Cotter nel dril ress e of dri	setic* x striel shandoned ggtion dry bole colpsi producer sa stock wells lere name Ione, Oregon
Well type-Dug Drilled X face Driven bove below Final depth 533' Gerland Swanson Genera name Address Boardman, Oregon This record comptied by 2.5.V.	Ft. Origi Add Det	dome invu irri muni include Cotter nel dril ress e of dri apsned -cesed	stic* x striel shandoned getion dry hole orbal producer s stock wells lers name Ione, Oregon lling Dec. 1915 to June 19
Well type-Dug	Tt. N. E. Original Add Det from Deturces: recolumnes: recolumnes.	dome invu irri muni Finclude Cotter nel dril ress e of dri apsned -cesed eaned	stic* x striel shandoned getion dry hole orbal producer s stock wells lers name Ione, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X Drilled X Drilled X Driven Days Driven Days Driven Days Driller Driven Days Driller Elevation (1 face) Driller Elevation (1 face) Driven Days Driller Elevation (1 face) Driller Elevation (1 face) Driller Elevation (1 face) Driven Driller Elevation (1 face) Driven Dri	H. E. Origi Add Det	dome invu irri muni Finclude Cotter nel dril ress e of dri apsned -cesed eaned	stic* x striel shandoned getion dry hole orbal producer s stock wells lers name Ione, Oregon lling Dec. 1915 to June 19
Well type-Dug	N. E. Original Add Detros: recall rose De Trose	dome invu irri muni *include Cotter nel dril ress e of dri apaned -cesed eaned	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Drilled X face] Driven bove below Final depth 533' Garland Swaneon Compara name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Data compiled Sovember 1947 Material Cracked and seamy rock Eine baselt	H. E. Original Add Date from Desiroes: relations of the Park of th	dome invai irri muni include Cotter nal dril ress e of dri spaned -cesed saned Depth freet) 85	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Driven bove below Final depth 533' Gerland Swaneon Compare name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Data compiled Sovember 1947 Material Cracked and seemy rock Eine baselt Oray baselt	N. E. Original Additional Part From Detroes: recall for the Part From Detroes: recall for the Part From Detroes: for the Part Fro	dome inva irri muni include Cotter nal dril ress e of dri apened -cesed saned te Depth freet) 85 130 192	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Drilled X face] Driven bove below Final depth 533' Gerland Swaneon Compare name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Data compiled Sovember 1947 Material Cracked and seamy rock Eine baselt Oray baselt Red rock with seams	N. E. Determined the second se	dome invariant in include Cotter nei dril ress of dri apaned cessed cess	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Driven bove below Final depth 533' Gerland Swaneon Compare name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Data compiled Sovember 1947 Material Cracked and seemy rock Eine baselt Oray baselt	N. E. Original Additional Part From Detroes: recall for the Part From Detroes: recall for the Part From Detroes: for the Part Fro	dome inva irri muni include Cotter nal dril ress e of dri apened -cesed saned te Depth freet) 85 130 192	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Drilled X face] Driven bove below Final depth 533' Gerland Swanece Compare name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Date compiled Sovember 1947 Material Cracked and seamy rock Eine baselt Oray baselt Red rock with seams Dark red rock, porous	N. E. Original Additional Part Property of the Part	dome invariant for the first form of the first f	stice x striel day bole gation dry bole cipal producer s stock wells lere mage lone, Oregon lling Dec. 1915 to June 19
Well type-Dag Drilled X face] Drilled X face] Driven above below Final depth 533' Gerland Swanece Genrand Swanece Compare name Address Boardman, Oregon This record complied by M.S.V. data secured from the following countries Driller Date compiled Sovember 1947 Material Cracked and seamy rock Eine baselt Cray baselt Red rock with seams Dark red rock, porous Flue baselt Eard blue rock Wixed colored rock with some	N. E Original	domes invusive to the control of the	stice x striel shandoned gation dry bole cipal producer s stock wells lere mame lone, Oregon lling Dec. 1915 to June 19 by
Well type-Dag Drilled X face] Drilled X face] Driven above below Final depth 533' Gerland Swansen Compare name Address Boardman, Oregon This record complied by Z.S.V. data secured from the Jollowing sou Driller Date compiled Sovember 1947 Material Cracked and seamy rock Eine basalt Gray basalt Red rock with seams Dark red rock, porous Flue basalt Hard blue rock Mixed colered rock with some of the soul or the soul or the soul or the soul of the soul or the s	N. B Original	domes invusive to the control of the	stice x striel shandoned gation dry bole cipal producer s stock wells lere mame lone, Oregon lling Dec. 1915 to June 19 by
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stic* z strisl dandoned gation dry bole cipal producer s stook wells lers mane lone, Oregon lling Dec. 1915 to June 193 Banarks
Well type-Dag Drilled X face] Drilled X face] Driven above below Final depth 533' Gerland Swansen Compare name Address Boardman, Oregon This record complied by Z.S.V. data secured from the Jollowing sou Driller Date compiled Sovember 1947 Material Cracked and seamy rock Eine basalt Gray basalt Red rock with seams Dark red rock, porous Flue basalt Hard blue rock Mixed colered rock with some of the soul or the soul or the soul or the soul of the soul or the s	N. B Original	domes invusive to the control of the	stice x strish dandoned gation dry bole cipal producer stook wells lers name lost, Oregon lling Dec. 1915 to June 19 by Bamarks Batton of hole
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stice x striel dandoned gation dry bole cipal producer stook wolls lers name lost, Oregon lling Dec. 1915 to June 19 by Bamarks Bamarks Retion of hole Vell is 583' deep with
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stice x striel day hole cipal producer stook wells lers name lose, Oregon lling Dec. 1915 to June 193 by Ramarks Botton of hole Well is 583' deep with Aid of water. Number of
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stice x strish dry hole cipal producer stook wells lers mane lose, Oregon lling Dec. 1915 to June 191 by Bamarks Bamarks Remarks Retion of hole Vell is 583' deep with
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stice x strisl dandoned dry hole cipal producer stook wells lers mane lose, Oregon lling Dec. 1915 to June 191 by Bamarks Batton of hole Well is 583' deep with Aid of water. Number of
Well type-Dag Drilled x Driven Driven Driven Driven Droven	N. E Original	domes domes from from from from from from from from	stice x strisl dandoned dry hole cipal producer stook wells lers mane lose, Oregon lling Dec. 1915 to June 191 by Bamarks Batton of hole Well is 583' deep with Aid of water. Number of

Folin			2N-30R-6-H
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Umntills County	•		E F G H
Bmatilla Quadrangle	1		M L K J
23 3CE 6 SE corner of Fractional s	ection EE		N P Q R
TATISTICS:			
Sell type-Dug Elevation (la prilled x face)	and sur-	Use ats	tue- Well Status-
Driven above		inque	strial abandoned gation dry bols
rinal depth 2331 below		zunic	cipsl producer x
Cunningham Sheep Company	A. A.	Durand o	§ Son
Magers name Address Pendleton, Oregon	Origin Addr	. 988	Walla Walla, Washington
			lling finished Jan. 1947
This record compiled by M.S.V.	from Dec	pened_	-
ata secured from the Following soul Mr. Levy, Conningham Sheep Company	ole	aned	by
ate compiled July 1947	Dat		
Material	Thickness	Depth	Remarks
	(feet) 8	(feet) 8	Artesian flow estimated
Dug pit Coarse gravel and boulders	7	15	at 100 g.p.z.
Gravel and boulders - some cla		24	Temp. 55°F.
Gravel - coarse	3	27	Role cased 8° for 26.7'
Basalt	6	23	
Hard besalt - (water)	40	73	
Hard gray brealt	11	84	
Black basalt	8	92	
Hard blue basalt	4	96	
Gray basalt (pump test)	46	142	
Gray baselt, hard (water)	11	153	
Besalt	3	156	
Basalt, hard	5	161	
Basalt	7	168	
Black baselt	15	183	
Firm basalt	8	191	
Hard basalt	8	199	
Firm bacalt	7	209	
Basalt	8	214	
Hard baselt	11	225	
Porous brown basalt (well flowi	Lg) 8	233	
	-		
	-		
	-	<u> </u>	
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		-	
			

Olden Well name	_		Index number 113-M 25-24M-36 File number
Well lame			(Code: Tp., R., Sec., S
LOCATION:			рсв
Morrow Cour			D C B
Unmapped Quadrang	şlə		H L K
			N P Q
2S 24Z 36 Tp. Range Section Fractional	section		
STATISTICS:			
Well type-Dug Rievation (land sur-	Vae a	tatus- Well statue-
Well type-Dug Elevation (Drilled X face) Driven above below	ft.	dom in:	estic* x ustrial sbandone
Final depth 397			
		*includ	es etock wells
Ornut Olden	<u>и. в</u>	. Cotter	ilers name
Owners name Address lone, Oregon	_ 44	dress	Ione, Oregon
•	_ Da	te of dr	illing
This record compiled by S.S.W. data secured from the following so			_
	o:	e-cased_ leaned	by
Driller	_		
Date compiled November 1947		110	
Material	Tnicknes (feet)	S Depth (foet)	Remarks
Soil	16	16	6º hole
Cracked rock	94	110	
Blue basalt	25	135	
Blue and gray brealt	67	202	
Rock full of seams	68	270	
	79	348	
Brown rock with scams	49	397	Bottom of hale,
Stord Lock with serms	1 49)91	
	1	+	Stood 34' in hole.
	1		
			flow.
			Index number 10-0 62-352-21-F
Weli name	-		Index number 10-U 62-352-21-E
Well name	-		flow.
Weli name LOCATION: matilla Count			flow.
Meli name LOCATION: matilla Count imapped Quedrangl	Les		flow.
Meli name LOCATION: matilla Count imagped Quadrangi IF 38E 21 M/2 of S42	el éWK lo		Flow.
Meli name LOCATION: matilla Count maspped Quedrangi M 35E 21 M/2 or SW2	el éWK lo		Flow.
LOCATION: Lantilla Count Lamapped Quadrang LT 35E 21 Fractional Fractional STATISTICS:	of NW		Index number 10-U 67-351-21-E 716 number (Code: Th., R., Sec., i Sec. Francis Franc
Meli name LOCATION: matille Count nmapped Quedrangi M 35Z 21 M/4 of SV4 Th. Range Section Fractional STATISTICS: Fell type-Dig Elevation [1] Drilled face)	of NW	Use st	Index number 10-U SY-30E-21-E File number (Gode: Th., R., Sec., i Se D C B E F G G M L K N P Q I
Meli name LOCATION: matille Count mapped Quedrang Ty 35E 21 M/d of SVd Ty Range Section Fractional Fratistics: full type-Dig Elevation [1 face] Driven above below	of NW		Flow.
Meli name LOCATION: matille Count mapped Quedrang Ty 35E 21 M/d of SVd Ty Range Section Fractional Fratistics: full type-Dig Elevation [1 face] Driven above below	of Wwig section and sur-	irri	Flow.
Countrol: Countrol:	of NW2 section	irri muni Include	index number 10-U index number 10-U 67-352-21-E File number (Code: Tp., R., Sec., i Se D C B E 7 G I M L K N P Q I Well status- stic* atic* atical dry hole gation x stock wells
Meli name LOCATION: matilla Count mapped Quadrang The Range Section Fractional STATISTICS: [ell type-Dig Fraction frace) Driven Show inal depth 102' Libert Olsen Whors name	of Wwith section section ft.	irri muni include	Index number 10-U 62-35E-21-E File number (Code: Th., R., Sec., Sec
Countrol: Coun	of NW section and surft. Hardi Origi	irri muni include ng Broth nel dril	stus- stic* stress wells steel a steel as steel
LOCATION:	of Wwig section and sur- ft. Hardi Origi	irri muni include ng Broth nal dril rece e of dri	stus- stic* strick st
LOCATION:	e of NV2 section and surft. Hardi Origi Add Det from Decrees: reserved.	irri muni muni minciude ng Broth nal dril rece e of dri epened -cased	Index number 10-U Index number 10-U File number (X7-35E-21-E File number (Gode: Th., R., Sec., i Se E F G G M L K N P Q I Well status- stice strial strial cipal a stowells are lers name 21 Williard, Villa Walle.
Countron:	e of NV2 section and surft. Hardi Origi Add Det from Decrees: reserved.	irri muni include ng Broth nal dril rece e of dri	times number 10-U 67-35E-21-E File number (Code: Th., R., Sec., Sec.) D C B J E F G I M L K N P Q I will stetus- ation ati
Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron: Countron:	e of NW2 section section ft. Hardi Origi Add Dat from Da cross: cc	irri muni muni minclude ng Broth nal dril rece e of dri eponed cased	Index number 10-U Index number 10-U File number (X7-35E-21-E File number (Gode: Th., R., Sec., i Se E F G G M L K N P Q I Well status- stice strial strial cipal a stowells are lers name 21 Williard, Villa Walle.
Counting	e of NW1 section section ft. Hardi Original Add Det from Decrees: recolumn	irri muni muni molude ng Broth nel dril rece e of dri epened -cased	Index number 10-U Index number 10-U File number (X7-35E-21-E File number (Gode: Th., R., Sec., i Se E F G G M L K N P Q I Well status- stice strial strial cipal a stowells are lers name 21 Williard, Villa Walle.
Meli name LOCATION: matille Count mapped Quadrangl Just 35E 21 Mfd or Swd Th. Range Section Fractional PTATISTICS: fell type-Dig face) Driven above below Vinal depth 102' Albert Cleen Where name Address Rt. \$2 Treevater, Oregon this record compiled by M.S.V. ata secured from the Following son thate Engineer	e of NW2 section section ft. Hardi Origi Add Dat from Da cross: cc	irri muni muni minclude ng Broth nel dril rece e of dri eppened -cased bahed	Index number 10-U Index number 10-U File number (X7-35E-21-E File number (Gode: Th., R., Sec., i Se E F G G M L K N P Q I Well status- stice strial strial cipal a stowells are lers name 21 Williard, Villa Walle.
Meli name LOCATION: matille Count mapped Quadrangl Ty. 35E 21 M/2 or Sw2 Ty. Range Section Fractional PTATISTICS: fell type-Dig Elevation [1	and surft. Hardi Origi Dat from Da rose: re	irri muni muni minclude ng Broth nel dril rece e of dri eppened -cased bahed	stus- stus- strial gation X stock wells ers Page Page Page
Countron: Countron: Co	e of NW section section ft. Hardi Origi Add Dat from Da cl	irri muni muni minciude ng Broth nel dril rece e of dri epened cased eaned Depth freet)	store wells stance wells
Countron: Countron: Co	e of NW section section ft. Hardi Origi Add Dat from Da cl. Thickness (feet)	irri muni include ng Broth nel dril reee e of dri eponed -cased eahed Depth freet)	stus- stus- strial gation X stock wells ers Page Page Page
Countron: Countron: Co	e of NW section section ft. Hardi Origi Add Dat from Da ross: re cl Thickness (feet) 4 8 20	irri muni include ng Broth nel dril rece e of dri cased cased cased ts Dopth (feet) 4	stus- stus- strial gation X stock wells ers Page Page Page
Countrol	e of NW section section ft. Hardi Origi Add Dat from Da ross: re cl Thickness (feet) 4 8 20	irri muni muni muni muni muni muni muni mun	flow. Index number 10-U 67-35E-21-E 711c number (Code: Tp., R., Sec. : Sec.
Countrol Countrol	e of NW section section section ft. Hardi Original Add Dat from Da res: recas:	irri muni muni muni muni muni muni muni mun	flow. Index number 10-U 67-35E-21-E 711c number (Code: Tp., R., Sec. : Sec.
Countrol Countrol	e of NW section section section ft. Hardi Original Add Dat from Da res: recas:	Irri muni include ng Broth nel dril reee e of dri esased esased esased Dopth freet) 4 12 32 45	flow. Index number 10-U 67-35E-21-E 711c number (Code: Tp., R., Sec. : Sec.
Countrols	e of NW section section section ft. Hardi Original Add Dat from Da res: recas:	Irri muni include ng Broth nel dril reee e of dri esased esased esased Dopth freet) 4 12 32 45	flow. Index number 10-U 67-35E-21-E 711c number (Code: Tp., R., Sec. : Sec.
Imapped Quadrang ### 35E 21 #*\footnote{1} of S\footnote{2} ### 35E 21 #*\footnote{2} of S\footnote{2} ### 50	Mardin Date of Policies of Pol	Irri muni include ng Broth nel dril reee e of dri esased esased esased Dopth freet) 4 12 32 45	flow. Index number 10-U 67-35E-21-E 711c number (Code: Tp., R., Sec. : Sec.

Ordnance Housing Project			Index numbe	r 8-271	90⊣ -27	7	
Well name	-		File number [Code: Tp., 1				5eo.
LOCATION:				۵	c	В	
Unatilla Coun	T			E	7	6	À
Umntilla Quedrang	Le			¥	L	1	7
48 278 27 SB				N	P	q	P
p. Range Section Fractional	section				_		
TATISTICS:							
fell type-Dug Elevetion ()	land sur-	Uae et dome		Wel	1 #1	etu	3 -
Drilled I face) Driven above below		inac	strial		a bar	don hole	×-
Final depth 543		muni	gation z		prod	luce	
		120144					
Ordnence Housing Project Meners name Address D. W. Blias, Mgr.	Origi	nal dril	lera name				
Address D. W. Bliss, Mgr.	-	e of dri	111na		_	_	
This record compiled by M.S.V.	-		TITING				
lata secured from the Following sou	Trees. Te	-cased					
D. W. Blias, Ordnance, Mgr. and Roi L. Morio, Architect, Portland			- "				
Date compiled February 1948	De	se.					
Waterial .	Thickness	Depth		narke			
	(feet)	feet)				;•	
Sand	4	4	Casing: 16* 12* 10*	to 3	461 301		_
Luose gravel	127	131	 				
Gravel and clay	4	135	First Water	- 51	LIC	, o-	
Spall gravel	5	140	sealed off.				
Loces gravel	. 6	146					_
Bouldere	24	170					_
Brown clay	32	202					
Soapstone	6	208					_
Black basalt	97	305					
Sticky cley	7	312	Second water	104	led	off.	
Black honeycomb with clay	18	330	- SVL 931				
Black basalt	27	357					
Gray basalt	4	361					
Black basalt	14	375					_
Soft black baselt	10	385					
Clay	6	391	Third water	seal	ed o	ŧr,	
Honeycomb with blue clay	21	412	- SWL 98'				
Black basalt	20	432					_
Brown rock	2	434					_
Gray basalt	57	491					
Shale and red rock	23	514					
Ormy rock	2	516					
Brown rock	12	528					_
Brown rock	10	538	Fourth water	; 51	T I	21 .	
Bed porous rack	5	543	180# pressur	•			
			Bottom of ho				
Pump test at the rate of 1200 . SWL 101. Water temp. standing	53°. Af	an 8 ho	r period love derable pumpi	red to	be mp.	rie	**
to 58.							
The pump installed has a rated at the tank inlet (plus 120)	capacity	f 1000 ;	proximately %	vell 0 g.;	hes.	4.	
During the three dry months of day (24 hours) is used. This	rain on s	und 500 pply do	000 gallons o	i wat	er in	per the	_
vert to any great extent.							
The following is a report of the	e water a	alysie :			19	₩,	
Solids in Solution:	Grains	per Gal	Untreated Su on Phs. per	1000	gal	<u>.</u> .	
Silica Uxides of Iron and Aluminum		3.74		534 033			
Onlcium Carbonate Magnesium Carbonate		4.55		650 312			
Increating Solids		0.74	1.	534			
Alkali Carbonates		1.78		187 254			
Alkali Chlorides Alkali Eltrates		1-35 0.55		193 180			
Son-incrueting solids	L	5.00	.,,	114			
			•	24.0			
Total solids		15.74	2,	248_			
Total solids		15.74	2,			_	

Descripto	Ordnance Depot #1			lnder number 194-U AN-27N-22 File number	Index number 196-#
Desiring				(Code: Tp., R., Sec., 2 Sec.)	(Code: Tp., R., Sec., 2 Sec.)
Section Sect	LOCATION:			D C B A	LOCATION:
1	Unatilla County	•			Morrew County E 7 G H
The product formation of the product of the produ	Unstille Quadrangle	ı		M L X J	Umetilla Quadrangla M L K J
Real 1970-2014		ection		я Р Q В	
Colored Color Colored Colore	STATISTICS:				STATISTICS:
Print Spring Sp	Well type-Dug Elevation (la				Deilled x face) ft. domestic
Final depth 197	Driven shove		inau	strial = abandoned	Driven above intustrial abandoned
Control Cont			ann i	cipal producer 1	Final depth 453' municipal producer X *includes etock wells
Material		A-1-1	4-11	are seme	Ornara name
This record sample by \$3.57. For Several States and Secretary 1		Add		Walle Welle, Washington	Address Valla Valla, Vashington
Mate Process		Date	of dri	lling 4/22/1941	Date of drilling 9-11-41
Column Class and Caption Folly Date	This record compiled by J.S.V.	from Dec		_	This record compiled by W.S.V. from Deepened
Date complicit Name 1985 Date		ole			gleaned by
Interest Thickness Sept Banache Sept Banache Sept Banache Sept Sep	COLUMN AND AND AND AND AND AND AND AND AND AN				Colema alses and cabasta and
To log available 27	Date compiled Karch 1948	Des	·•		
To log available	Naterial			Remarks	Material Thickness Depth (feet) Remarks
Capacity 575 g.p.s. Present	Wo log available			Chaing: 12", SWL 105	He log available 453 Casing 12°. SWL -?
			<u> </u>		Capacity 500 g.p.m.
Since in the depth file nomical the full wing of Assessit which sales as the cally available information constraint fromtation assessments. "Wall No. 1 cased in real 135", bulle is No. of Walling to Post of Walling Told of Walling to Walling to Post of Walling Told of Walling Walling to Walling Walling to Walling Walling Walling to Walling			<u> </u>		
April 1975 Apr	Notes in the denst file contain	the foll	wing at		
Content to rock at 150', Naive is A6' of Amelia, then broken benealt buniders and city, enting in rock."					
March Marc			T		
National Activities 1776					
Description of tample 2.00		WINA		· · · · · · · · · · · · · · · · · · ·	
Total hardness at CaCO 140 14				P-34A	
Alteriaty (M.O.) 148_0 Hearbonate	Description of sample			- as Delivered	
Total tree	Total hardness as CaCO3			· · · · · · · · · · · · · · · · · · ·	
Total iron	Alkalinity (M.O.)		148.4	Bicarbonate	
Magnetim 10.6	op Asja⊕		7.7		
Calcium 35.1 Sulphates as 50a 11.5 Chicrides as 60b 11.5 Chicrides as 60b 10.5 Average color 2 1	Total iron				Ordnance Depot #2 4H-27E-22
Soliphine as SOA 11.4	Magnesius		10.6		Fils number (Code: Tp., R., Sec., 2 Sec.)
Charides as CG	Galcium		38.1		LOCATION:
Chartas se Ct. 10.5 Average clor 2 Average color 3 Average turbidity 1 Date analysis 4/22/41 Where sample taken 4/22/41 STATISTICS: Well type-Dag Elevation (land sur- Dec status- decention decry below irrigation irrigation amneting) producer from the low manufacture of	Sulphates me 504		11.4		D C B A
Average color 2 Average turbidity 1 A 278 22 5\frac{1}{3}	Chlorides se CL		10.8		Tractille Chedronele
Average turbidity Date analysis \$ \frac{1}{22\lambda}\$ Where sample taken \$ \text{west}\$ \frac{1}{4}\$ Where sample taken \$ \text{demantic}\$ \frac{1}{4}\$ Where samp	Average color		2		AE 27# 22 CL
Where easple taken Well #J By whom made Charlton Lab. Charlton Lab. Charlton Lab. Drillad x fece) ft. domestic invitation frights from the producer x invitation from the produce	Average turbidity		1		
Well type-Dag Rievetion (land aur- Driven above finds auritist abandoned Trial depth 3601 Timal depth 3601 Towners name O'reginal drillers name Address Valle V	Date analysis		4/26/4		gruptertes.
Drilled x fose) ft. domestic The shandoned below invigation dry hole municipal producer Sinal depth 360 municipal producer Mincludes stock wells U. S. Army A. A. Durand & Son Original drillers mans Address Original drillers mans Address Valle Valle, Vashington Dete of drilling 7/12/1901 This record compiled by H.S.W. from Despensed data secured from the following sources: re-ceased cleaned by Colonel Glass and Captain Kelly Date compiled March 1946 Date Material Thickness Depth (fest) Remarks He log available 360 Casing: 12*, 3WL 95'. Whose in the depot file contain down look, page 15 or pa	Where emple taken		1	 	Wall two-fact Elevation (land out. New status. Wall status.
Final depth 360: Final depth 360: Tincludes stock wells U. S. Army A. A. Durand & Son Owners name Original drillers name Address Ad	By whom made	_	Charlt	a Lab.	Drilled x fece) ft. domestic*
U. S. Army A. A. Durand & Son Owners name Original drillers name Address					below irrigation dry hole
Owners name Address Address Address Address Date of Arilling 7/12/1941 This record compiled by B.S.V. from Despensed data secured from the Pollowing sources: re-cessed cleaned by Colonel Olass and Captain Kelly - Date compiled March 1948 Date Material Thickness Depth (fest) Remarks Ec log available 360 Casing: 12°, 3VL 95°. Botes in the depot file contain down 100°. Botes in the depot file contain formation exists as the only available information concerning formation exists as the only available information concerning formation secondarded information concerning formations secondarded information concerning formation concerning formations secondarded information concerning formations secondarded information concerning formations secondarded information concerning formations secondarded information concerning formations secondarded informations secondarded informati			L		*includes stock melle
Address Address Vells Valls Valls Valls Valls (Nathington Date of drilling 7/12/1941 This record compiled by S.S.V. from Daspened cleaned by Colonel Glass and Captain Kelly Colonel Glass and Captain Kelly Date compiled March 1948 Date Material Thickness Depth (rest) Remarks Et log available 360 Casing: 12°, SWL 95'. Et log available 360 Casing: 12°, SWL 95'. Ettes in the depot file contain down 100'. Etter following statement which exists as the only available information concerning formation exists as the only available information concerning formation encountered. *Well Et. 2 is cased to 218' on rock, then. through beast ledges and honeyponb			L		
This record compiled by H.S.V. from Daepened data secured from the following sources: re-cessed cleaned by Colonel Glass and Captain Kelly - Date compiled Narch 1948 Date Material Thickness Depth (feet) Remarks			1		Address Valle Valla, Vashington
Colonel Glass and Captain Kelly - Date compiled March 1948 Date Material Thickness Depth (feet) West) Be log available 360 Casing: 12°. SWL 95'. Botes in the depot file contain down 100'. Hoter following statement which exists as the only available information concerning formation exists as the only available information concerning formation encountered. "Well Bo Cased to 218' on rock, then. through beauti tedges and honeyponb			L		Date of drilling 7/12/1941
Colonel Glass and Captain Kelly - Date compiled March 1948 Date Material Thickness Depth (feet) West) Be log available 360 Casing: 12°. SWL 95'. Botes in the depot file contain down 100'. Hoter following statement which exists as the only available information concerning formation exists as the only available information concerning formation encountered. "Well Bo Cased to 218' on rock, then. through beauti tedges and honeyponb			ļ		This record compiled by N.S.V. from Despensed
- Date compiled March 1948 Date Material Thickness Depth (rest) Remarks			<u> </u>		cleaned by
Material Thickness Depth (feat) Remarks ## Compared to the deposition of the following statement vehicle exists as the only available information concerning formations encountered. "## 180 2 is cased to 215" on rock, then . through beant ledges and honeypout					COLOREL GLASS ARC CAPTAIN ASILY
## C log available 360 Casing: 12*, 3NL 95'. ## Compacting the depot file contain Capacity 750 g.p.s. Draw- down loci ## Compacting the depot file contain Capacity 750 g.p.s. Draw- down loci ## Compacting the depot file contain ## Compacting formation ## Information concerning formations ## Information concerning formations ## Cased to 215' on rock, then ## Cased to 215' on rock, t					- Date compiled March 1948 Date
Ec log available 760 Casing: 12°, 3 WL 95°. Botes in the depot file contain down 100°. Enter Following statement which exists as the only available information concerning formation encountered. **Statement which encountered wh					Material Thickness Depth Remarks
Hotes in the depot file contain Capacity 750 g.p.s. Draw- the following statement which exists as the only available information concerning formations smoothered. "Vall Bo. 2 is cased to 210" on rock, then . through beast it edges and honeypout					
the following statement which exists as the only available information concerning formations encountered. **91 Bo. 2 is cased to 218 on rock, then. through beant ledges and honeyponb					Capacity 750 g.p.a. Draw-
information concerning formations snoomnered. "Well Mo. 2 is cased to ZIS' on rock, then. through baselt ledges and honeyponb					the following statement which
through basait ledges and honeyponb					information concerning formations
through basait ledges and honeyponb			<u> </u>		encountered. "Well Ho. Z is cased to ZIS" on rock, then .
DBRALL."					through besalt ledges and honeybomb
	<u> </u>	·	•	-	

Palmer Well name			File numbe	45-24 2-4 _
			(Code: Tp.	R., Sec.
LOCATION:				p c
	unty			E F
Unmapped Quadre				M L
Tp. Range Section Frection	Wł al section			N P
STATISTICS:				
Well type-Dig Elevation face)	(land sur-	. 10	mestic* x	Woll at
Driven above		11	rigation	aban dry
Final depth 500			nicipal des stock well	nrod
Lawrence Palmer	Α.	N. Edwar	-da	
Owners name Address Willow Creek w	ost of A	ginal dr ddress_	illers name Lexington.	Oregon
Lexington			rilling 1	
This record compiled by W.S.W. data secured from the collowing	from	Despaned		
neiller edt ment beruses data de		re-cased cleaned_	by	
neitfel				
Date compiled October 1947	:	Date		
Enterial	Thickne	ss Depth		marke
Basalt with crevices common	(feet)			
to abundant all the way.		500	Dry hole	
		+-		
		+		
		+	+	
Unatilla	gle			E F
Profileton Quadram 3N 3ZZ 32 Z2 of Sv4 3P Range Baction Fractional TATISTICS: 11 type=Dug Drilled x face Driven above below taal depth 825' City of Pendleton Profileton	land surft. Va.	dom invited irr mun *include E. Ruthe inal drift ireas	tatus- entic* ustriel x (cation	D C E F M L N P Walls Walls Walls Walls
Profileton	land surft. Va. : Original	dom invitre min *include E. Ruthe inal dri iress te of dri sepened :	tatus- catic* ustriel x [gation leipal leipal liers name Roosevelt St. llling Fell 15	D C E F M L N P Well state aband dry horoduct
Profileton Quadram 3N 3ZZ 32 Zi of Svi p. Range Section Fractional MATISTICS: ell type-Dug Driven Security face) above below City of Pendiston mars name Address	land surft. Va. : Original	dom invi irr nun *include E. Ruthe inal dri ireas	tatus- catics ustricl x (gation Leipal te stock wells r Illiers name accesslt St., llling Fell 15	D C E F M L N P Well state aband dry horoduct
Profileton Quadram 3N 3ZZ 32 Elof SV4 p. Range Baction Fractiona TATISTICS: ell type-Dug Elevation Drilled x face) Driven above below thad depth 825' City of Pendiston macro name Address Inited Airlines and also s Inited Airlines and also s	land surft. Va. Original Add	dom in: irr mun *include E. Ruthe inal dri iress ice of dri eepened eened	tatus- catics ustricl x (gation Leipal te stock wells r Illing Fell 15	D C E F M L N P Well state aband dry horoduct
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Profileton Quadram 3N 3ZZ 32 Zi of Svi p. Range Section Fractional HATISTICS: ell type-Dug	land surft. Va.: Original Particular Survey of the survey	dom inw irr mun *include E. Ruthe inal dri ires eopened	tatus- netics netics igstion leipal leipal leipan leipal leipan leipal leipan l	D C E F M L I I N P G M L I I N P G M L I I N P G M L I I N P G M L I I N P G M L I N P G
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Profileton Quadram 3N 3ZZ 32 Zi of Svi p. Range Section Fractional HATISTICS: ell type-Dug	land surft. Va.: Original Particular Survey of the survey	dom inw irr mun *include E. Ruthe inal dri ires eopened	tatus- netics netics igstion leipal leipal leipan leipal leipan leipal leipan l	D C Z F N L N P N P N P N P N P N P N P N P N P
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Profileton Quadram 3N 3ZZ 32 Zi of Svi p. Range Section Fractional MATISTICS: ell type-Dug face) Driven below inal depth 825' City of Pendiston where mame Address List record compiled by N.S.V. sta secured from the following so intend Africaes and also s Ferbal log report by driller the compiled Narch 1948 Material Top soil, clay, gravel and bon Oray baselt - medium hard Romeycomb baselt Gray baselt - medium hard Red homeycomb - with crevices	land surft. Va.: Original Add Date from Deuross: re olimitations (feet) Lores 80 185 20 226 62	domestic and the second	status- centics x (gation cleipal r (leipal r (l	Well stal aband dry he product walls Well water. Ruther sucked a picked n
Profileton Quadram 3N 32Z 32 2½ of svy 5D Range Section Fractional TATISTICS:	land surft. Vn. Thickness (feet) Lores 80 20 226 62	dome invariant in the control of the	tatus- matics action x gation	Wells vell Rother
Profileton Quadram 38 32Z 32 Zigof Swight Dr. Range Section Fractional MATISTICS: ell type-Dug Elevation face) Drilled X face) Drilled X face) above below inal depth E25' City of Pendiston meers name Address Mis record compiled by M.S.V. site secured from the following so faced Airlines and also s ferbal log report by driller the compiled March 1948 Material Top soil, clay, gravel and bon Oray baselt - medium hard Roneycomb baselt Gray baselt - medium hard Red honeycomb - with crevices vall bailed 12 g.p.m. with no d g.p.m. In practice. Casing 42' well up. Deepened by Ruther as fass, depth - 757 feet; Honeyco feet.	land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther
Profileton Quadram 38 32Z 32 Zigof Swight Dr. Range Section Fractional MATISTICS: ell type-Dug Elevation face) Drilled X face) Drilled X face) above below inal depth E25' City of Pendiston meers name Address Mis record compiled by M.S.V. site secured from the following so faced Airlines and also s ferbal log report by driller the compiled March 1948 Material Top soil, clay, gravel and bon Oray baselt - medium hard Roneycomb baselt Gray baselt - medium hard Red honeycomb - with crevices vall bailed 12 g.p.m. with no d g.p.m. In practice. Casing 42' well up. Deepened by Ruther as fass, depth - 757 feet; Honeyco feet.	land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther
Profileton Quadram 38 32Z 32 Zigof Swigh Dr. Range Section Fractiona MATISTICS: ell type-Dog Elevation face) Drilled E face) Drives below inal depth E25' City of Pendiston macra mame Address his record compiled by N.S.V. take secured from the following so for the face of the face	land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther
Profileton Quadram 38 32Z 32 Zigof Swight Dr. Range Section Fractional MATISTICS: ell type-Dug Elevation face) Drilled X face) Drilled X face) above below inal depth E25' City of Pendiston meers name Address Mis record compiled by M.S.V. site secured from the following so faced Airlines and also s ferbal log report by driller the compiled March 1948 Material Top soil, clay, gravel and bon Oray baselt - medium hard Roneycomb baselt Gray baselt - medium hard Red honeycomb - with crevices vall bailed 12 g.p.m. with no d g.p.m. In practice. Casing 42' well up. Deepened by Ruther as fass, depth - 757 feet; Honeyco feet.	land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther
Profileton Quadram Profileton Quadram Driver Section Fractiona **TATISTICS:** **ell type-Dug Elevation (land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther
Pendleton Quadram Pendleton Quadram Pendleton Quadram Pendleton Frectiona Perdleton Frection Perdleton Bessel Perd	land surft. Va.: Add. Pater Solution Va.: Add. Pater Solution Thickness (feet) ders 80 185 20 226 62	domoning in a series of drift from the series	tatus- matics matic	Buther Buther

- 4			Index name	or 179-M
Partlow (John)	_		File number	48-248-24- 7
LOCATION:	-		(Code: Tp.,	R., Sec., 5ec.)
Morrow Cour				D C B A
Blalock Island Quadran				E F G H
				M L K J
AF 24E 24 SE2 -7 of Tp. Range Section Frectional	section			N P Q R
STATISTICS:				
Well type-Dug Elevation (Drilled x face) Driven above below	land sur-	Use	etatus-	Well status-
Driven above		in	ustrial	abandoned
Final depth 138'		anu i	rightion hicipal des stock wells	producer x
John Partlow	Blad		lle Drilling Co	
Owners pame Address Boardman, Oregon	Ori	ginai dri	lilers name Portland,	
	_		illing Sp	
This record compiled by W.S.W. data secured from the Jollowing so	_ from 1	epened_	_	
Owner	ricea: 1	learned_	by	
	-			
Date compiled March 1948		Onto		
Noterial Following log made from owner	a notatio	(feet)	etess and form	marks
to him verbally by the criller	r during t	he cours	e of drilling.	
Se nd	3	3	Second water	at 27'. SVL 1'. r at 54'. SVL ove cased off was
Alkeli rock	2	5	10'. Third	water at 72'
Dark solid basalt, mediam	27	32	cased off wa	s 20'. SWL by hail test.
Very hard basalt Dark solid basalt, medium	19	35 54		
Brown clay, sticky	7	61		-
Basalt, broken	11	72	<u> </u>	
Blue clay	66	138	-	-
		T	Bottom of he	le.
		_		
	-			
Pertlow (Panl) Well name			lnder number	180- H -24 Z -24 -C
HO11 11116			filo number	., Sec Sec.)
LOCATION:			Γ	D C B A
Morrow County	,		<u> </u>	E F G H
Blalock Island Quedrangle	•			M L K 1
Tp. Range Section Fractional s	ection		[N P Q R
STATISTICS:				
· · · · · · · · · · · · · · · · · · ·	ind Aur-	Upe et	stus-	Well status-
Mell type-Dug Elevation (la Drilled x fece) ebove	ft.	inuu	striel	ebandoned
Final depth 971		munic	gation	dry hole
Paul Pertlow			etock wells	
Owners name Address Boardman, Oregon	Origin	nal drill	ers name Pendleton, Or	
Address postally stages				
This record compiled by H.S.V.	form The	of dril	.11118 1740	
ists secured from the following sour	ces: re-	cased_	by .	
Owner	_			
Date compiled March 1948	Det			
Material	Thickness (feet)	Depth (fest)	Rema	rke
He log made		97}	SWL 5. Comla	t lower by
Formation similar to the John Partley section with the blue			bailing. Reportedly los	st water et 72'
clay below a hard rock layer			Main water or cssed only 35	ginates lover
according to Mr. Paul Partlov				
· · · · · · · · · · · · · · · · · · ·				

Pendieton City	-		Index number 57-U 2M-32M-2
Well name			File number (Code: Tp., R., Sec., ¿ Sec.)
LOCATION:			
Umatilla Count	t v		D C B A
			\ -\-\-\-\- \
1001.11		4441	tion) x L X J
ZN 3ZE 2 (lot 13, b) Tp. Range Section Fractional	section	ers Muni	N P Q R
STATISFICS:		Man ata	tus- Well status-
Well type-Dug Elevation (Drilled x face) 109	3.14 ft.	domes	tio* shandoned
Driven above		irrie	strial abandoned dry hole producer x atook wells
Final depth 934	•	includes	stock ==11s
City of Pendleton	A. A.	Durand A	es name
Owners name Address	Origin Addr	al drill	Jalla Walla Washington
<u> </u>	-		11ing 1944 to 1946
This record complied by S.S.Y.	from Des	pened	_
This record complied by S.S.W. data secured from the Following so	910	ened	by
Driller and Unatilla County and F City Engineers.	endleton		
Date compiled July 1947	Dat	•	
Material	Thickness	Depth	Remarks
	(feet)		
Gravel	14	14	
Soft black basalt	11	25	
Hard black basalt	48	73	
Soft basalt and scapstons	12	85	
Hard black baselt	24	108	End 20" hole at 113' End 16" casing at 124'
Soft and medium baselt	32	141	Ind 16 casing at 124
Hard basalt	18	158	
Soft black basalt	32	191	
Soft red rock	7	217	
Medium black rock	10	227	
Red and black soft rock		265	
Hard gray basalt	62	327	
Hedium black basalt	- 6	334	Static water level went to
Oray basalt	12	345	70'. Then to 135' and re-
Soft brown and red rock	30	370	
Herd gray baselt	51	426	Evidence of water
Soft black basalt	24	451	
Eard black basalt	3	453	
Soft black basalt	11	462	
Hard gray basalt	8	472	
Redium black basalt	54	527	Some evidence of more
Hard black baselt	154	680	water.
Medium black baselt	43	722	
Herd gray baselt	4	727	
Black baselt	24	750	
Gray baselt - hard	22	772	Some evidence of water
Brown-red-gray - soft	11	783	
Herd gray banalt	17	800	
Brown basslt	5	805	
Black basalt	15	820	
Hard gray basalt	20	840	
Black basalt	39	874	
Gray basalt	4	884	
Black basalt	12	895	Probably water bearing.
Poroue black rock	16	912	
Black besalt	23	934	Bottom of hole.
	•	_	Note: This well caved and
		1	was cleaned out to a depth of 2241.
Compilere acte: Additio	n in above f	igures :	
			T = ** : * ======

		Index number 49-0 15-328-17-08
		File number (Code: Tp., R., Sec., Sec.)
		D C B A
ounty		E F G H
engle		M T K 1
		N P Q R
nel section		
n (land sur- ft.	Use ata	tus- Well status-
	in-us irris	trial shendoped stion dry hole
	nunic includes	ipal X producer X
Origin	al drill	ers hame
	_	ling completed February 1946
eources: re-	ensed_	by
Thickness	Depth	Remarks
-110003	40001	0 r.n.n. ● 65°7-
		y 6, p, a, = 0, 2,

*** *C N**** *****	ur- ^-	minto
my or New York,	nig, th	PWAM V B
		File number
		(Cods: Tp., R., Sec., Sec.)
County		D C B A
		E F G H
• <u></u>		W L X J
onal section		H P Q R
on (land sur-	Use at	atus- Well status-
on (land sur- ft.		
	irri	gation dry bole cipal producer x
	irri	sation dry bole
Origi	irri muni *include	gation dry bole cipal producer x
Origi Add	irri muni *include nal dril ress	gation dry hole cipal producer x stock wells
Origi Add Dat	irri muni finclude nal drii ress	gation dry bole cipal producer x stock wells
Origi Add Dat	irri muni finclude nal drii ress	gation dry bole cipal producer x stock wells
Origi Add	irri muni finclude nal drii ress	gation dry hole cipal producer X s stock wells lars name lling the by A. A. Durand 4 Scp
Origi Add Dat . from Det . g sources: re	irri muni include nal dril ress e of dri epened -casad eaned	gation dry bole cipal producer x stock wells
Origi Add Dat . from De 8 sources: re cl	irri muni finclude nal dril ress e of dri eponed -cased eaned	gation dry bols cipal producer 1 stock wells producer 2 stock wells lars name lars name by A. A. Durand & Sep Valla Valla, Vasbington
Origi Add Dat . from Det . g sources: re	irri muni include nel dril ress e of dri epened -casad eaned Depth rest	gation dry hole cipal producer X s stock wells lars name lling the by A. A. Durand 4 Scp
Origi Add Dat . from De g cources: re cl Thickness (feet)	irri mal dril ress e of dri -cased -cased ts Depth freet)	gation dry bols cipal producer 1 stock wells producer 2 stock wells lars name lars name by A. A. Durand & Sep Valla Valla, Vasbington
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bols cipal producer 1 stock wells producer 2 stock wells lars name lars name by A. A. Durand & Sep Valla Valla, Vasbington
Origi Add Dat . from De g cources: re cl Thickness (feet)	irri mal dril ress e of dri -cased -cased ts Depth freet)	gation dry bole cipal a stock wells producer 1 lars name ling by A. A. Durand & Scp. Vella Valle, Vasbington Remarks
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bole cipal a stock wells producer I a stock wells lars name ling by A, A, Durand & Scp Walla Walla, Washington Remarks SVL 51'. Relica about late for a name and lowered water
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bole cipal a stock wells producer 1 lars name ling by A. A. Durand & Scp. Vella Valle, Vasbington Remarks
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bole cipal a stock wells producer I a stock wells lars name ling by A, A, Durand & Scp Walla Walla, Washington Remarks SVL 51'. Relica about late for a name and lowered water
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bole cipal a stock wells producer I a stock wells lars name ling by A, A, Durand & Scp Walla Walla, Washington Remarks SVL 51'. Relica about late for a name and lowered water
Original Add Dat . from De g cources: re cl cl . Thickness (feet)	irri main dril ress e of dri epened casad eaned bepth frest 102	gation dry bole cipal a stock wells producer I a stock wells lars name ling by A, A, Durand & Scp Walla Walla, Washington Remarks SVL 51'. Relica about late for a name and lowered water
	A. M. Origin A. M. Origin A. M. Origin Cources: re- cle Thickness (feet) between 1,100 ter Company, Se	angle nal section nal section nal section the domes of domes in was irriguous irri

Potter Well name			Index musber none-3	Peol	_		48-25-18-P
Well name			File number {Code: Tp., R., Sec., Sec.}	Well name			[Code: Tp., R., Sec., 2 S
LOCATION:			D C B A	LOCATION:			D C B
Gilliam C	County		E F G H	Morrow Coun	ty		E F G
Quedr	angle		M	Blalock Island Quadrang	le.		M L K
			N P Q B	48 25E 18 SE; of SV;			N P Q
Tp. Range Section Fractlo	nal section			Tp. Range Section Fractional	section		
STATISTICS:				STATISTICS:			
Well type-Dug Elevetic	n (land sur-	Use at dome		Well type-Dug Elevation (-rue basi	Use st iome	atus- Well statue
Drilled x face) Driven above		insu	strlal abandoned	Drilled x face) Driven above below		lna	striel spandone gation dry hole
Final depth 1941		mun1	gation dry hole clpal producer z s stock welle	Final depth 961		munl	cipal producer
		11101440	31301 40113	Han Bank			
D. M. and R. E. Potter Owners name			lers name	Owners name Address Boardman, Oregon	Orig	inal iril	lors name
Address Hikkelo, Oregon		ress e of drl	lling	Angress Derman, oregin	-	te of dri	l)ing
This record complied by U.S.W				This record compiled by M.S.V.	-	eepened	
data secured from the .ollowing	sources: re-	-cased		data secured from the Collowing sou	irces: r	e-cased	
Durand			Walls Walls, Washington	Mesers. Wasmer and Mulligen, Boars	dman.		-
Dote compiled January 1948	Dat	t 0	Harch 1947	Date compiled Narch 1948		ate	
Material	Thickness		Remarks	Material	Thicknes	s Depth	Remarks
	(feet)	(feet) 165		No log available about	(feet)	96	Well flows
Old well Broken basalt	15	180		NO 100 BASTIGGIS SCOTE		1	Natural pressure suffici
Firm black basalt	14	194				†	to service domestic water
1112 DIGCK DREATE			SWL 00'. Couldn't lower by		1	 	affected by the Wasmer w Refer to log Wasmer well
			balling.		1		
						T	
Ransier Well name			Index number 183-H #N-252-20-H File number (Code: Tp., R., Sec., & Sec.)	Potts Well name	_		Index number 182-N hW-25E-17-N File number (Sode: Tp., R., Sec., 2.5)
LOCATION: Horrow Co	ounty		#N-252-20-M File number (Code: Tp., R., Sec., Sec.)				#3-25E-17-K File number (Gode: Tp., R., Sec., 2.5 D C B E F G
Well name	angle S₩ }		File number (Code: Tp., R., Sec., Sec.)	Roll name LOCATION: Korrow Count	la		File number (Code: Tp., R., Sec., 2 S
Well name LOCATION: Horrov Co Plalock laland Quadr by 25E 20 MW of	angle S₩ }		#N-25E-20-M File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J		la		#3-25E-17-K File number (Gode: Tp., R., Sec., 2 S D C B E F C M L K
Well name LOCATION: Norrow Company Com	angle Swit nal section n (land our-	Use at	#N-252-20-H Filo number (Code: Tp., R., Sec., Sec.) D C B A E F G H M. L K J N P Q R	No. No.	Rection	Use st	#3-25E-17-N File number File number Gode: Tp., R., Sec., 5 D C B E F G M L K N P Q
Well base LOCATION: Rorrow C Elalock laland Quadr Tp. Range Section STATISTICS: Well type-Dug Drilled L Driven Driven Sove	angle SWi nal section	dome	WN-25Z-20-M Filo number Filo number Filo number (Code: Tp., R., Sec., Sec.) D C B A E F G H M. L K J N P Q R	Note	Rection	dome	#2-25E-17-N File number Gode: Tp., R., Sec., S D C B E F 0 M L K N P Q atus- stic* Well statue-
Moltonic Morrov Co	single Swit nel section nel (land eur- ft.	dome insu lrri muni	#N-25Z-20-M Filo number (Code: Tp., R., Sec., Sec.) D C B A E F G M M L K J N P Q R	Note	Rection	dome iniu irri muni	#2-25E-17-K File number (Gode: Tp., R., Sec., S. S. E. F. G. M. L. K. N. P. Q. M. L. K. N. P. Q. M. E. K. M. P. Q. M. M. E. K. M. P. Q. M. E. K. M. P. Q. M. M. E. K. M. P. Q. M. E. K. M. P. Q. M. M. M. P. Q. M.
Morrov	ngle SWi mal section n (land eur- ft.	dome insu lrri muni finclude	#N-252-20-M Filo number Filo number Floode: Tp., R., Sec., Sec.] D	Note	section and eur- ft.	dome in u irri muni *Include	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### A L K N P Q ### A L K N P Q ### A L K N P Q ###
Morrov Comment Comme	angle Svi nel section u (land eurft. ft. Abe Bi	dome intu lrri muni finclude ansen	#N-25Z-2O-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R N P Q R	Note	section and eur- ft. Original	dome in u irri muni *Include	AUA-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q AUA-25E-17-N Well status- stic* strial getion dry hole cipal s stock wells
Morrov Co	angle Svi nel section a (land eurft. Abe B Origin	dome intu lrri muni include ansen mel dril	White wolls are considered with the status- Well status-	Note	asction and surfit. We. Original	dome in u irri muni *Include Ilte inel dril irees	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### A L K N P Q ### A L K N P Q ### A L K N P Q ###
Well bane LOCATION: Horrov C Phalock Island Quadr UJ 25E 20 Ht of Tp. Range Section Fraction STATISTICS: Well type-Dug Elevation Driven below Final depth 75! Wrs. Fore Rensier Owners name Address Boardman, Oregon	angle SWi nal section n (land eur- ft. Abe H Origin Add Add	dome intu lrri muni finclude ansen mal dril ress	#N-25Z-2O-M Filo number [Code: Tp., R., Sec., Sec.] D C B A E F G H M. L K J N P Q R Stus- Stic* I status- Strial status Strial status Strial producer I status ostock wolls ers name Ooldandale, Washington ling about 1928	No. No.	Rection Land eur- ft. Original Add Det	dome in au irri muni *Include Ilte inel dril irees te of dri sepensd_	#W-25E-17-N File number File number Gode: Tp., R., Sec., 5 D C B E F G M L K N P Q atua- stic* Standard dry hole cipal producer s stock wells lers name Portland, Oregon ling June 1947
Well name LOCATION: Horrow C. Pholock Island Quadr Ty. Eage Section Fraction STATISTICS: Well type-Dag Elevation Drilled face) Driven shore Final depth 75 Mrs. Hora Hansier Commar name Address Boardman, Oregon This record compiled by M.S. W. data secured from the Fillowing	angle Svi nal section u (land eurft. Abe Bi Origin Addr from Dece	dome intu lrri muni finclude ansen mal dril ress	#N-25Z-2O-M Filo number [Code: Tp., R., Sec., Sec.] D C B A E F G H M. L K J N P Q R Stus- Stic* I status- Strial status Strial status Strial producer I status ostock wolls ers name Ooldandale, Washington ling about 1928	Note	action land our- ft. Wa. Original	dome in au irri muni *Include Ilte inel dril irees te of dri	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### Well status stic* strial getion dry hole cipal s stock wells Frame Fortland, Oregon June 1947
Well bane LOCATION: Horrov C Phalock Island Quadr UJ 25E 20 Ht of Tp. Range Section Fraction STATISTICS: Well type-Dug Elevation Driven below Final depth 75! Wrs. Fore Rensier Owners name Address Boardman, Oregon	angle Svi nal section u (land eurft. Abe Bi Origin Addr from Dece	dome intu irri muni finclude ansen mel dril ress e of dril opened cnsed	#N-25Z-2O-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R Well status- tics x abandoned dry bole [pai or bole producer x about wells estock wells estock wells estock wells about 1926	No. No.	action land our- ft. Wa. Original	dome in au irri muni *Include Ilte insl dril irees te of dri sepensd	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### Well status stic* i
Well name LOCATION: Horrow C. Pholock Island Quadr Ty. Eage Section Fraction STATISTICS: Well type-Dag Elevation Drilled face) Driven shore Final depth 75 Mrs. Hora Hansier Commar name Address Boardman, Oregon This record compiled by M.S. W. data secured from the Fillowing	angle Svi nal section u (land eurft. Abe Bi Origin Addr from Dece	dome invu irri muni irri muni irri muni irri ciude ansen nal drili ressa e of drili ressa e of drili repenso e oned	#N-25Z-2O-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R Well status- tics x abandoned dry bole [pai or bole producer x about wells estock wells estock wells estock wells about 1926	Note	nection and curft. Ye. Original Ado from Detroes: rr	dome in au irri muni *Include Ille inal dril irees te of dri sepensd s-cased Leaned	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### Well status stic* i
Well name LOCATION: Rorrow Co	angle SWi nal section a (land eur- ft. Abe B Orlgic Addr Date from Deco	dome invu irri muni muni muni muni muni muni muni mun	#N-25Z-2O-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R Well status- tics x abandoned dry bole [pai or bole producer x about wells estock wells estock wells estock wells about 1926	Notion Count	land our- ft. Origi	dome in au irri muni *Include Ilte inel dril irees ite of dri sepensd ite and ite inel de inel de inel de inel de inel dril sepensd ite inel de inel d	#W-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q ### Well status stic* i
Well name LOCATION: Horrow C. Elalock lained Quadr Tp. Range Section Fraction STATISTICS: Well type-Dug Drilled face priven show below Final depth 751 Mrs. Hora Ransier Commars name Address Soundman, Oregon This record compiled by E.S.W. data secured from the Following Owner Date compiled March 1948	angle SWi nel section a (land eur- ft. Abe H Origin Add Date from Decesources: re- cle	dome invu irri muni muni muni muni muni muni muni mun	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R ## Strict ## status ## statu	Notion Count	Me. Origi Add Det Trickness	dome in au irri muni *Include Ilte inel dril irees ite of dri sepensd ite and ite inel de inel de inel de inel de inel dril sepensd ite inel de inel d	#W-25E-17-N File number Gode: Tp., R., Sec., S D C B E F 0 M L K N P Q ### Well status- stic* stric* stri
Well name LOCATION:	angle SWi nel section a (land eur- ft. Abe H Origin Add Date from Decesources: re- cle	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-25Z-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F C H Me L K J N P Q R ## Well status **Trial dry note producer I **Status **Trial dry note producer I **Status **Trial dry note **Tri	Morrow Count	Me. Origi Add Det Trickness	dome in au irri muni winclude Ilte inal dril irees te of dri sepensd teamed te	#W-25E-17-H File number File number Gode: Tp., R., Sec., S D C B E F 0 M L K N P Q ## Well status- atrial gation cipal producer as stock wells Remarks
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section a (land eur- ft. Abe H Origin Add Date from Decesources: re- cle	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	AN-25Z-2O-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H Me L K J N P Q R Well status- tice x strial dry hole grider x ers name Doldendale, Washington ling about 1926 by Remarke Present SVL is about 10'. When first drilled SVL was about 3'. No pump test data available. Well supplies three donessite water systems	Note	Me. Origi Add Det Tricknes (feet)	dome in au irri muni winclude Ilte inal dril irees te of dri sepensd teamed te	AU-SE-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q AU
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section a (land eur- ft. Abe H Origin Add Date from Decesources: re- cle	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R # abandoned strial shandoned strial producer I estock wolls ere name Ooldendale, Weshington ling about 1928 Present SVL Le about 10. When first drilled SVL was about 3. No pump test data available. Well supplies	Morrow Count	Me. Origi Add Det Tricknes (feet)	dome in au irri muni "Include Ille inel dril irees te of dri sepens de cased Leaned de leane de lean	AU-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q AU L K N P Q A
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section 1 (land eur- ft. Abe H Origin Add Date from Dec Sources: re- cle Thickness (feet)	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R ## L K J ## L K	Note	Me. Origi Add Det Tricknes (feet)	dome inau irri muni *Include Ille Include Ille Include Ille Include Ille Include Inclu	AU - 25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q AU - 25E-17-N Well statue- stic* atua- stic* atua- stic* atua- stic* atua- stic* atua- y Well statue- stic* abandone dry bole cipal producer atrial grion dry bole producer by Romarks Vell flows. First water succuntered 77': Second water su- countered at 5d' with a light flow over cesting. Neth flow ower cesting. Weight flow over cesting.
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section 1 (land eur- ft. Abe H Origin Add Date from Dec Sources: re- cle Thickness (feet)	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R ## L K J ## L K	Note	Me. Origi Add Det Tricknes (feet)	dome inau irri muni *Include Ille Include Ille Include Ille Include Ille Include Inclu	AU-25E-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q Well statue- stic* a shandone derival dry hole cipal producer s stock wells lers name Portland, Oregon lling June 1947 by Romarks Vell flows. First water succountered a 27° Second water su- countered at Sd' with a light flow over cesing, their flow found at Sd' with a light flow over cesing, their flow found at Sd' No pump or pressure tests and by the greanure suffice.
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section 1 (land eur- ft. Abe H Origin Add Date from Dec Sources: re- cle Thickness (feet)	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R ## L K J ## L K	Note	Me. Origi Add Det Tricknes (feet)	dome inau irri muni *Include Ille Include Ille Include Ille Include Ille Include Inclu	AU-CyE-17-N File number File number Gode: Tp., R., Sec., S D C B E F C M L K N P Q Well status- stic* abandone- getion dry bole cipal producer s stock wells lers name Portland, Oregon lling June 1947 by Romarks Vell flows. First water succuntered 27° Second water su- capuatered at 50' with a light flow over cesing, their flow found at 12!' No pump or pressure tests tandr but pressure; suffic to service domestic wate system and prinking ryit system act sprinking ryit system act apprinking ryit system act and system act and system act apprinking ryit system act and system act an
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section 1 (land eur- ft. Abe H Origin Add Date from Dec Sources: re- cle Thickness (feet)	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R ## L K J ## L K	Note	Me. Origi Add Det Tricknes (feet)	dome inau irri muni *Include Ille Include Ille Include Ille Include Ille Include Inclu	## A C SE - 17-H File number File number Gode: Tp., R., Sec., S D
Well name LOCATION: Horrow C Elalock lained Guadr Tp. Range Section Fraction STATISTICS: Well type-Dug	angle SWi nel section 1 (land eur- ft. Abe H Origin Add Date from Dec Sources: re- cle Thickness (feet)	dome invu irri muni finclude aasen aal dril. ress s of dri opened cased saned Depth freet)	#N-252-20-M File number [Code: Tp., R., Sec., Sec.] D C B A E F G H M* L K J N P Q R ## L K J ## L K	Note	Me. Origi Add Det Tricknes (feet)	dome inau irri muni *Include Ille Include Ille Include Ille Include Ille Include Inclu	AU-CSE-17-N File number File number Gode: Tp., R., Sec., S. D C B E F C M L K N P Q Well statue- stic* atrial dependence getion dry hole cipal producer s stock wells lers name Portland, Oregon lling June 1947 by Romarks Vell flows. First water ancountered a 27° Second water su- capuatered at 50' with a light flow over cesing. Mein flow found at 21'. No pusp or pressure test to service desestic with to service desestic with tagstess act sprinkler with

			· · · · · · · · · · · · · · · · · · ·					
			Index number - 13-0					Index number 107-M 1N-2cf-29-F
Rasmussen fell pame			63-352-35 File number		nice			File number (Code: Tp., R., Sec., Sec.)
			(Gode: Tp., R., Sec., 2 Sec.)					(code: 1p., R., Sec., 2 Sec., 2
LOCATION:			D C B A	Ī.	OCATION:			D C B A
County County	7		E F G H	_ _2	torrow County			Z P G H
Changed Quadrangl	•		M I K J	نے ا	Blalock Island Quecrangle			H L K J
6T 35E 35 Whof SBh			H P Q R		p. Range Section Fractional s	ection.		N P Q R
fp. Range Section Fractional	section .			- X	p. Mange Section Fractional S			
STATISTICS:				<u>s</u>	TATISTICS:			
Well type-Dug Elevation (1	and sur-	Use sta	tus- Well status-	w	ell type-Dug Elevation (la		Une st	stus- Well status-
Drilled Z fece)	ft.	domes	tice x trial abandoned		Drilledx fece) Driven shove	rt.		strielabandoned
below			mtion dry hole	,	inal depth 350		munic	gation dry hole cipal producer x
Pinal depth 225		*includes	Stook wells] -			*include:	s stock wells
C. V. Answassen		Durand &			Mr. Rowton		Sewlon	
where hame Address Box 68	Origin	mal drill	ers name	°	where name Address R.F.D. Lexington, Oreg		Lees TLII	lers name
Freewater, Oregon			ling Winter 1946			Det	e of dri	lling 1915
		epened			his record complicable M.S.V.		epened	
ata secured from the ibliowing sou	ress: re	-084ed	•		ata secured from the collowing sour	ces; re	-cased	_ by
riller	01	eensed	_ pà		Verbal log account by former owner B. B. Rice for whom original well w	-		
	_					-		
date compiled Jamuary 1948	De:			רָיָּ רָי	ets compiled October 1947	Thickness	d Denth	
Material	Thickness (feet)		Remarks		Material	(feet)		Remarks
Old well		.37	Casing: 8" to 87"	[Soft rock	150	150	6 ⁸ hole
Cenent gravel	14	51	Casing: 6s to battom		Harder rock	150	300	
Broken basalt	5	56	SWL 37'. Water level held	i i	Very sticky guabo	20	320	5" hole from -3201 on.
Saniy gravel and clay	11	67	on 57' with balling. The dug well went dry in Nov.		Mard rock	20	340	
	69	136	1945.		Softer rock and water	10	350	Bottom of hole.
Cecent gravel						_	+	
Sand and small gravel	2	138			Flow encountered - but there we countered at the water horizon measured flow of 600 g.p.m. bu	Rice s	tated the	the driller claimed a
Cenent gravel	35	173			measured flow of 600 g.p.w. bu	that he	Rice, h	of lone, reports however
Yellow clay and rock, sticky	2	175			figure to be high, Well drill that the flow appeared to be a the well shortly after its con	11 of 600 bletlos.	r.p.m., This well	If not more, when he wisited
Cement gravel	25	200			new owners of the property tri generally lost it to the exten	ed to eat	ourge the	Mail and in doing an.
Coment gravel and clay	25	225			and a new well was sunk. The original well. It is Rice's un	hew well	was locat	ea within 5 feet of the
Rasmusson (R. E.)	-		Index number 184-M 4N-24E-13-R File number		60 g.p.a. The water is quite w	aro.		
			(Code: Tp., R., Sec., & Sec.)					Index number 106-H
LOCATION:			D C B A		Bietman (David)			IN-24E-29-4 File number
Morros Coun	y		E F G H					(Code: Tp., R., Sec., 2 Sec.)
Blalock Island Quedrang	l•		M T K 1	1 1	OCATION:			D C B A
Tp. Range Section Fractional	tion		N P Q R.	_	Morrow County	,		E F G H
rp. Renge Section Fractional					Blalock Island Quadrangle	,		N L K 1
STATISTICS:				_	19 248 29 HS1 of NE1			N P Q R
fell type-Dug Elevation (land sur-	Use st		1 7	p. Range Section Fractional	section		<u> </u>
Drilled z face) Driven shows	ft.		etrial abandoned		TATISTICS:			
rinel depth 50'		muni	gation dry hole cipal producer_x_	- I			Vac st	atus- Well status-
		include	e stock wells	"	fell type-Dug Elevation (le	ft.	done	stic x strial abandoned
Raymond E. Rassmassen	_				Driven above below		irri	estion dry bole
Address Boardman, Oragon		inel dril breas	lers mane	'	final depth 427			cipal producer X
	-	e of Ari	lling		David Distant	n-+ 1	known	
This record compiled by H.S.V.	- from Di	bonened			David Bietman Wmers name	Orig	inal drii	lers name
lets secured from the collowing so	Tress: P	-case4_		1	Address Icae, Oregon		ires	
Mrs. Rasmassen and Mr. McEntire	0.			}			te of dri	
	-				This record compiled by F.S.V. late secured from the following sour	from D	epened_1 e-cased_	
Date compiled March 1948	-	d Dooth				c.	leaned	by Fred Sichoson
Neterial	Thicknes (feet)	(feet)	Remarks] "	riller	_		Ione, Oregon
No log available - about		80	SWL 41 9 . Reportedly did	,	Oate compiled October 1947	D	at o	October 1945
			flow but flow cased out on account of bacteria in		Material	Thicknes (feet)	e Depth	Remarks
	1		surface water.					hy Hichgeon as follows:
	+	 			This well was 302' to begin wi	n and wa	- resbere	
	+	+		 			-	5 5/8" hole
	+	+-			1		302	Pumps about 2 1/2 g.p.s.
			 		Dark gray basalt	35	337	
		 			Black porous basalt	5	342	
	-	4			Rard black basalt	22	364	
	<u> </u>				Bleck poroue baselt	49	413	
1	1	1 -	1					

Hotrow County		
		IF-248-16-E File number [Code: Tp., R., Sec., Sec.]
Morrow County		
		D C B A
Blalock Island Quadrangle		H L K J
Tp. Range Section Frectional section	on .	W P Q R
STATISTICS;		
	ır- Use a	tatus- Well statue-
Well type-Dug Elevation (land su Drilled x face) f Priven above below	t. dom	estic* rustrial shandoned
Final depth 5501 below	nun.	icipel producer z
		es stock wells
Victor Rietman Owners name		ilera name
	AddressDate of dr:	11)110

data secured from the following sources:	re-cased cleaned	by Fred Nichoson
Driller		ione, Oregon
Date compiled October 1947	Date	April 1943
Naterial Thick	t) (feet)	Remarks
This well was 455' deep to begin wit	h and was de	espened by Michoson as follows:
	455	5 5/8" hole
Hard blue basalt with occasional soft streaks 6	5 520	
Gray baselt	9 529	
Black porous basalt	3 532	
	8 540	
	541	Water here
Gray basalt	9 550	- Bottom of hole -
		Pump steady 3 g.p.m.
Rogere fell name		Index number 185-M 42-245-13-M File number [Code: The Page 1: See]
OCATION:		(Code: Tp., R., Sec., 2 Sec.)
Morgoy County		D C B A
		Z F G H
		اتا با البا
Blalock Island Quadrangla	_	M L K J
Blalock Island Quadrangla		
Blelock Jalend Quadrangla 49 242 13 SV1 of SV1 p. Range Section Fractional section TATISTICS:		N P Q R
Elekack Jalend Quadrangla by 242 13 Stå of Stå c. Range Section Fractional section TATISTICS: ell type-Dug Elevation (land sur Drilled x foce) ft	- Use sta	N P Q R
	- Use sta domes inque irric	BN P Q R
Elelack Jalend Quadrangle 43 242 13 SWi of SWi p. Range Section Fractional section TATISTICS: ell type-Dug Drilled x Driven above	- Use sta domes inque irria munic	N P Q R
	- Use sta domes inque irria munic Tincludes	W P Q R stus- stice x trial abandonsd grion dry hole stock wells
	- Use sta domes in use irria munic "includes	W P Q R stus- stice x trial abandonsd grion dry hole stock wells
	- Use sta domes invue irrig munic fincludes ck iginal drill	W P Q R stus- stice x trial abandonsd grion dry hole stock wells
Elelack Jalend Quadrangle Aug. 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug. Elevation (land sur Driled x feee) ft Driven bolow Inal depth 87' Emet Rogers Grands Grands Grands Market Rogers Grands Grands Grands Market Rogers Grands Grands Grands Market Rogers Grands Grands Grands Grands Market Rogers Grands	- Use sta domes invue irria munic *Includes ck iginal drill Address Dets of drill	Well status- hite X abandoned dry hole producer X about 1936
Elelack Jalend Quadrangla 13 242 13 SWi of SWi TATISTICS: ell type-Dug Drilled x face) ft Driven below inal depth 87 Derem below Kamet Rogers Warer ange Address Boardman, Oregon his record compiled by N.S.V. from ata secured from the following sources: (cosses, Wilson, Crowder and Vangbo	- Use sta domes invue irrie munic fincludes ck iginal drill Address Dets of dril	Well status- triel stand dry hole grown stock wells ere name
Elelack Jalend Quadrangla 13 242 13 SV2 of SV2 TATISTICS: ell type-Dug Elevation (land sur Drilled I Driven below inal depth 87 below Kamet Rogers Deardman, Oregon his record compiled by E.S.V. from ata secured from the following sources: feesrs. Vilson, Crowder and Vangbo Wangbo was a former owner)	- Use sta domes innue 'rrig' 'uncludes ck (ginal drill Address Dets of dril Despense re-rased cleaned	Well status- hite X abandoned dry hole producer X about 1936
Elelack Jalesd Quadrangle Aug. 202 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug. Elevation (land sur Driven above below inal depth 87' Emet Eggers Gradian, Oregon Address Boardman, Oregon his record compiled by N.S.W. from ata secured from the following sources: fessrs, Vilson, Crowder and Vangbo Wangbo was a former owner) the compiled March 1948 Natorial Thicky	- Use sta domes domes innue in	Well status- stics x well status- strial abandonsd gation dry hole stock wells producer x stock wells ere name ling about 1936
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Fell status- sites X
Elelack Jalesd Quadrangle Aug. 202 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug. Elevation (land sur Driven above below inal depth 87' Emet Eggers Gradian, Oregon Address Boardman, Oregon his record compiled by N.S.W. from ata secured from the following sources: fessrs, Vilson, Crowder and Vangbo Wangbo was a former owner) the compiled March 1948 Natorial Thicky	- Use sta domes domes innue in	Well catus- strice x abandoned dry hole strice y producer x ers hame Remarks Well flows periodically. Forser owner, Weagbo reports
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Well status- stice x shandoned dry hole strict a standoned dry hole strok wells stock well stock stock well stock stock well stock stock well stock sto
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Well etatus- tice X
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Well etatus- stice X
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Remarks Well flows periodically. Former owner, Vangbo reports well will just flow during whiter for about a sonthbat SWL would dry to 5 diving Swless and
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Remarks Well flows periodically. Former owner, Vangbo reports well will just flow during whiter for about a sonthbat SWL would dry to 5 diving Swless and
Elelack Jalend Quadrangle Law 242 13 SW2 of SW2 P. Range Section Fractional section TATISTICS: ell type-Dug	- Use sta domen innue in	Remarks Well flows periodically. Former owner, Vangbo reports well will just flow during whiter for about a sonthbat SWL would dry to 5 diving Swless and

Roberts	_		Index number 112-M 25-24x-5
Well name			File number (Code: Tp., R., Sec., 7 Sec.
LOCATION:			
Morrow Coun	1.0		D C B A
Unmapped Quadrang			Z 7 G H
			N L X I
ZW 24E 5 SW: Tp. Range Section Fractional	section		N P Q R
STATISTICS:			
Well type-Dug Elevation () Drilled x face)	land sur- ft.	aesu dom	tatus- Well status-
pelow F004e		10.	ustrial shandoned igation dry hole
Final depth 5291		aun	icipal producer x es stock wells
Nes I D Debaute			
Nrs. J. D. Roberts Owners name Address Fortland, Oregon	Orig	Nichoso inal dri	llers name
Address Fortland, Oregon		11000	Ione, Oregon Started Oct. 1946
			illing Finished June 1947
This record complied by N.S.W. date secured from the collowing sou	from De	eepened_ e-cesed	_
Driller	c.	leaned	
	_		
Onte nompiled October 1947		ate	
Material	Thicknes (feet)	Bopth (feet)	Remarks
Top soil	9	9	6" hole - casing set at -28
Shelly black basalt	9	18	
Solid black basnit	27	45	
			-
Solid blue basalt	10	55	
Very bard gray basalt	64	119	
Blue soapstone	4	12)	
Very hard gray basalt	33	156	
Moderate brown basalt	9	165	
Blue basalt	23	188	
Uumsually hard gray basalt	76	264	
Solid brown basalt	16	280	
Black basalt	10	29C	
Gray basalt	27	31.7	
Black porous besalt	8	325	
Brown porous basalt	6	331	
Flue basalt	25	356	
Gray bouldery basalt	7	363	
Blue bouldery basalt	36	399	
Gray bouldery baselt	13	412	
Blue basalt with seams, crevice			
boulders and clay-like mud	79	491	
Dark colored lava rock shot wit			
yellow soapstone and a trace of			
brown clay-like mud	19	510	
Dark porous basalt	19	529	Bottom of hole
Scapstone at -119' -123' is cer	ented out	The f	rat seep of water was
	E.C.D.	vas bei	ween -254 and -286 . All beep straight. Next water
Scapstone at -119' -123' is cented at -102'. The next water, about formations from -331'-491' were	hard to	Till and	11 ann 11
at -102'. The next water, about formations from -331'-491' were comes in at -510' to -515', over hours bailing time to lower water	r 5 g.p.m er to 40	1100 ge	ton at which level it would
at -102'. The next water, about formations from -331'-491' were comes in at -510' to -515', over hours bailing time to lower wat lower to more. This water will is set about 4 inches off botte	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
bours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
bours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
bours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
bours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
hours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump
bours bailing time to lower was lower no more. This water will	r 5 g.p.m er to 40' raise age	from bo	tions were removed in 3 ton at which level it would 116' deep in well. The pump

Bogers Canning Company, Athens #1	_		Index somber 29-U 45-358-19-B
Well name			File number (Code: Tp., B., Sec., Sec.
LOCATION:			D C B A
Umatilla Count	y		EFGH
Unmapped Quadrang	le .		N L X J
he are to suit or well			
Tp. Range Section Frectional	section		N P Q R
STATISTICS:			
Well type-Dig Elevation (I Drilled x face)	land sur-	Use st	atus- Well status-
Drivenabove	ft.	inuu	strial = abandoned
Final depth 10691 below		nuni	cipal producer x
		*include	s stock wells
Bogers Canning Company	A. A.	Durand	d Son lers name
Bogers Canning Company Programation Address Hilton, Oregon		rees	Walls Wells, Washington
	_ Dat	e of dri	lling completed April 194
This record complied by E.S.W. date secured from the Following sou	from De	epensd	_
		e erreq	by
Driller and company officials	_		
Date compiled January 1948	Da		<u></u>
Material	Thickness		Remarks
	(feet)		
Dirt	10	10	SWL was 52 at the time this well was finished.
Cement gravel	41	51	Company officials report that the SWL is now 16.
Black basalt	40	91	This well is used as a stand-by well. When used it is pumped at the rate of
Clay and black rock	39	130	
Black honeycomb basalt	31	161	the drawdown is to 400 whi
Black basalt	70	231	the drawdown is to 400' whi is the bottom of the pump line. Recovery at that level, however, is rapid.
Blue sospstons	4	235	
Black baselt	18	253	
Porous black baselt	10	263	
Black baselt and sompstone	7	270	
Black basalt	12	282	
Gray basalt - hard	80	362	
Black basalt- porous layers	28	390	
Gray basalt	6 6	456	
Black becalt, porous layers	74	530	
Hard gray besalt	46	576	
		621	
Brown honeycoub basalt	45		
Black becalt	24	645	
Brown honeycomb beenlt	13	658	
Black heavy basalt	82	740	
Black shale-tools stick	33	773	
Black basalt - drills coarse	66	839	
Gray basalt	25	864	
Red rock	5	869	
Blue clay	16	885	
Black basalt	12	897	
Gray basalt	95	992	
Flack basalt	12	1004	
Brown baselt - drille up fine	57	1061	
Gray basalt	4	1069	
	1	 	
	1	 	
	 		
	+		
	 -		
	+		-
	+		
			<u> </u>
	<u> </u>		

Bogers Camning Company, Athens #2			Index mmber 30-0 45-355-19-5
Well name			File number (Code: Tp., R., Sec., Sec.)
LOCATION:	_		
Unatilla Count	y		D C B A
			E 7 C H
12 24 27			M L X J
Tp. Range Section Fractional	section		H P Q B
STATISTICS:			atus- Well status-
Well type-Dug Elevation (1 Drilled x face)	ft.	dome	stic*
Driven above below		irri	strial x shandoned x gation dry hole
Final depth 1156			cipal producer s stock wells
Rogers Conning Company	A. A.	Durand	& Son
Owners name Address Milton, Oregon	Origi	nal dril rese	lers name Valla Valla, Vashington
			lling finished June 1944
This record coming by N.S.V.			
This record compiled by N.S.W. data secured from the collowing sou	ross: re	-cesed_	
Driller and company officials			- "
January 1968	-		
Date compiled January 1948	Thickness		
Material	(feet)		Remarks
Top soil	4	4	20" hole to 115' 16" hole from 115' to 507'
Gravel	15	19	10" hole from 50?' to 1156'
Eard comented gravel	3	22	
Gravel and clay	4	26	SWL from 0' to 86' was 35'
Cemented gravel	21	47	SVL from 0' to 86' was 35' at 85' SVL changed to 25' at 25' SVL changed to 18'
Red gravel and clay	12	59	at 475 SWL changed to 16'
Brown gravel and shale	10	69	Final SVL - 16'
Large boulders	3	72	
Brown grevely clay	8	90	
Cemented gravel	4	84	Well Abandoned
		1	
Clay and gravel	2	86	
Hard black basalt	8	34	
Broken basalt	5	99	
Hard basslt	19	118	
Hard black besalt	16	132	
Black besalt	28	160	Bad crevice from 132' to 137'
Black porous rock and brown cl	y 16	178	
Hard black besalt	67	245	
Black basalt	60	305	
Green sticky clay	7	312	
Hard black baselt	11	323	
Eard gray basalt	91	414	
Bard black besalt	61	475	
Hard gray basult	47	522	
Black basalt	148	670	
Hard baselt	37	707	
Medium hard basslt	56	763	
Soft basalı	102	865	
Hard gray basalt	67	932	
Medlum hard besalt	16	948	
Brown basalt	47	995	
Red and black basalt	82	1077	· <u>-</u> .
Den who cluby chagit			
Red hees!*		1156	
Red basalt	79		
Red baealt	/9		Bottom of hole
Red bacalt	/9		Fottom of hole
Red basalt	/9		Bottom of hole
Red basalt	79		Fottom of hole
Red basalt	/9		Sottom of hole
Red basalt	/9		Notion of hole
Red basalt	/9		Notion of hole
Red basalt	79		Notion of hole
Red basalt	79		Notion of hole

Bassas Complex Company Athenn #3			Index mumber 31-U 48-34E-24-J
Rogers Canning Company, Athena #3 Well name	•		File number (Code: Tp., R., Sec., & Sec.)
LOCATION:			
Umatille Count	у		D C B A
Pendleton Quadrangl	9		M L X J
4# 34% 24 NE 01 SE			N P Q R
Tp. Range Section Fractional	section		
STATISTICS:			
Well type-Dug Klevation (1	and sur-	Use st	stus- Fell status-
Drilled x face) Driven above			
Final depth 1148		gunl #Include	getion dry hole cipal producer x s stock wells
		Durand &	
Rogers Canning Company Owners name Address Hilton, Oregon	Origi	nal dril	lera pame alla Walla, Washington
Address Hilton, Oregon			lling Jan. to May 1946
This result day N.S.V.			
This record compiled by H.S.W. data secured from the rollowing sou	rces: re	-cased	
Driller and company officiels			_ ~
Date nompiled January 1948	De	te	
Naterial	Thickness	Depth	Remarke
		(feet)	
Tellow silt	16	7	24" casing at 22" 20" to 102' 6" 16" to 230' 4"
Gravel	15	22	Hole reduced to 12½ at 5501
Gray basalt.	7	31	unia Leguced to 15\$, at 250,
Broken basalt		41	Mell flows est. 40 g.p.m.
Brown shale	3	——	Fumps 1515 g.p.m. with stabilized production level
Gray basalt	19	60	at 175'
Frown and gray shale	15	75	
Hard gray basalt	50	125	According to Company officia
Broken basalt and shale	60	185	the pumping water level at 650 g.r.m. stabilized at abo
Black baselt, soft	8	193	196 in June 1947 for a peri
Gray basalt	19	21.2	dropped to 245' in July 1947 This level regained constant
Dark broken basalt	18	230	and the well recovered and
Gra; and dark basalt layers	106	336	flowed 15 days after being shut down.
Broken basalt	6	342	
Gray and dark basalt layers	28	370 380	
Blue shale	10	390	
Black baselt Dark broken basalt	34	424	
Brown tasalt	17	441	
Oray basalt	47	488	
Brown shale	12	500	
Dark basalt	41	541	
Oray basalt	29	57°C	Reduced hole to 12}" at 550'
Broken dark basalt	38	608	
Solid dark basalt	64	672	
Sticky blue shale	6	678	
Oray and dark hasalt	103	781	
Broken dark basalt	15	796	
Dark baselt	14	810	
Broken basalt	15	825	
Gray baselt	100	935	
Gray sticky mud	5	940	
Gray baselt	6	946	
Brown basalt	14	960	
Broken reddiah brown basalt	15	975	
	10	985	
Red rock		1607	
Red rock	22		
Brown basalt	10	1017	
Brown basalt Broken dark basalt		1017	
Brown basalt Broken dark basalt Dark basalt	10	1031	
Brown basalt Broken dark basalt Dark basalt Gray basalt	10	1031	
Brown basalt Broken dark basalt Dark basalt	10 14 3	1031	

Oray and dark basalt	74	1132	
Broken brown basalt	7	1139	
Black basalt	5	1144	
Oray basalt	4	1148	
			Fottom of hole
Water courses:			
Water between 185' and 193'.	ore water	from 200	and 713' well flowed for
3 hours between 730' and 736'	SWL 11.	Flowing	constant at 7591. More wate
between 796' and BlC'. More w	ter botwe	n 11141	and 11481,

Rogers Canaling Company, Hilton #1			Index number 19-0 511-35E-12-6
fell name			File number (Cods: Tp., R., Sec., Sec.)
LOCATION:		*****	
Umatilla County	,		D C B A
Unmapped Quadrangle	1		M L X J
5N 35E 12 SW of NE			N P Q B
Range Section Fractional s	section		
TATISTICS:			
Hell type-Dug Elevation (lo	nd sur- ft.	done	etic*
Driven above below		irri	strial x shandoned gation dry hole
final depth 7022		nunl	cipal producer x satock wells
Rogers Comning Company	A. A.	Durand &	Son
Address Kilton, Oregon	Origi Add	nai iril ress	lers name Valla Walla, Washington
			lling Feb. to May 1964
Pote mecond committed by W.S.V.			
This record compiled by M.S.W.	cas: re	becas-	
Driller and company officials			
ats compiled January 1948 and Nov.	1054 P=	t e	
	Thickness		Remarks
<u> </u>	(feet)	(test)	According to company
Gravel	21	21	officials in Jan. 1948 the SWL is 117'. This
Cemented gravel	26	47	well is pumped at the rate of 1200 g.p.m. 24 hours a
Rock	3	50	day during the height of
Black basalt	7	57	under such conditions la
Gray basalt	5	65	According to the driller
Black basalt	67	132	the SWL was 15' in this
Brown basalt	35	167	At 1021 the SVL rose to
Black baselt	15	182	dropped to 120' where it
Brown and black honeycomb basa	1t 3	185	of the hole.
Black basalt	18	203	Water temp. 1s 5007.
Brown and black basalt	52	255	
Black basalt	140	395	•
Gray basalt	6	401	
Black basalt	107	508	
Gray baselt	13	521	
Black besult	15	536	
Gray besalt	33	569	
Black honeycombed	15	584	
Black basalt	38	622	
Gray basalt	17	639	
Black basalt	631	702}	Bottom
		[
		<u> </u>	
		 	

		Index number 37-U	Index number ~- 69-M 15-29E-3
dothrock		33-342-18-R File number (Code: Tp., R., Sec., 2 Sec.)	Rugg fl
CCAPTON .	 		LOCATION:
OCATION:		D C B A	Morrov County Z 7 C H
Pendleton Quadrangle		E F G H	Unmapped Quedrangle M L K J
38 342 18 5E of SE		N P Q R	15 29B 3 Center N P Q R
p. Range Section Fractional s	ection		Tp. Range Section Fractional section
matistics:			STATISTICS: Nall Type-Dis Elevation (land sur- Use status- Well status-
fell type-Dag Elevation (la Drilled X face)	ft. dom	stic*I	Drilled x face) ft. domestic x
Driven abovs below	irr	striel abandoned	below irrigation dry hole municipal producer X
Final depth 175	*include	es stock wells	*includes stock wells
Robert Rothrock	A. A. Durand Original dri	lers name	George Rugg A. M. Edwards Owners name Address Echo, Oregon Address Lexington, Oregon
Address Admms, Oregon	Address	Walla Walla, Yashington	Address Echo, Oregon Address Lexington, Oregon Date of drilling in the 1930's
This record complied by S.S.W.			This record compiled by M.S.W. from Deepened x
iate secured from the following som	ces: re-cased_		deta secured from the 15110wing sources: 19-15304 by C. F. Lewis
U. S. G. S. Ground-Water Division			Both drillers Pendleton, Gregon
Date compiled December 1947	Date		Date compiled July 1947 Date 1941
Meterial	Thickness Depth (feet)	Reparks	Weterial Thickness Depth Remarks (feet) test)
Boil	6 6	SWL 23' - 2 Nov. 1945	Hole drilled thru hard rock al the 5° bole - Artesian flow way with cuttings black like chai reported at 455 g.p.z.
Grevel and clay	6 12	Bailed 10 g.p.m.	at the water horizon 161
Oravel SWL 23	159 175		This well was visited by the compiler will constitute the lattering of the providing and apparently as wholly baselt. The well is still active y flowing and apparently as
Andry San C)	-55 475		strongly as ever,
	l I		
		ludex number 135-W	Index number 142-U
Rugg #2 Toll name	-	lndex number 135-W 18-278-14 File number (Code: Tp., R., Sec., Sec.)	Index number 142-U Sacreson
Bugg #2 Well name		File number	Sacreson 15-312-2
LOCATION: Location: Count		15-29E-14 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G H	Sacreson 15-312-2
Moll name LOCATION: Norrow Count Unmapped Quadrangl		15-29E-14 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G B M L K F	Secreson 15-312-2
LOCATION: Location: Count	•	15-29E-14 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G H	Sacreson 15-312-2
Well name LOCATION: KOFFOW Count Unmapped Quadranel 18 298 14	•	15-29E-14 File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F G B M L K F	Sacreson 18-312-2
Norrow Count	section and mur- Use if	15-29E-14 File number (Code: Tp., R., Sec., § Sec.) D C B A E F G H M L K 7 N P Q R	Secretion Secretion State Secretion Secretio
Mofrow Count Unmapped Cuadrangl 13 29E 14 Tp. Range Section Fractional STATISTICS: Well type-Dug Live in (1 face) Driven bolve bore	section and sur- Use : ft. dor in:	15-275-14 File number (Code: Tp., R., Sec., Sec.)	Secretor
Morrow Count	section and sur- ft. dor in: ir: sur- sur-	15-275-14 File number (Code: Tp., R., Sec., Sec.)	Secreson 15-312-2
LOCATION: Count	section and surfit, doring in	Tile number (Code: Tp. R., Sec., Sec.) D C B A E F G H M L K J N P Q R Tratus- restics x restics x restics at the second dry hole producer T restics at the second dry hole producer T	Secreson 15-312-2
DOCATION: Count	section and sur- ft, do in in munum original dr Address	Tile number [Code: Tp., R., Sec., Sec.] D C B A E F G B M L K 7 N P Q R Thatus- testio* x ustrial dry hole ticgation producer I les stock wells	Secreson 15-312-2
Countrols	and sur. Use ft. dor in irran union of the control	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G B N L K J N P Q R Tratus- restic* X rest	Secretion Secr
Morrow Count	ond sur- Uee ft. do ft. in irrans and fur- inclus ft. do f	Tile number (Code: Tp., R., Sec., Sec.) D C B A E F G B N L K J N P Q R Tratus- restic* X rest	Secretor
Mofrey Count Mofrey Count Mofre	ond sur- Uee ft. do ft. in irrans and fur- inclus ft. do f	File number [Code: Tp., R., Sec., Sec.] D C B A E F G B N L K 7 N P Q R Thatus- restice x ustrial dry hole ricitial producer I les stock wells Filling	Secreson Well name Tilo number (code: Tp., R., Sec., Sec. LOCATION: Unnapped Quadrangle Unnapped Quadrangle Unnapped Quadrangle Unnapped STATISTICS: Well type-Dug x Driven Briven Bri
Morrow Count	and sur- Use i ft. door in	Tile number [Code: Tp., R., Sec., Sec.] D C B A E F G B M L K J N P Q R The status— restice x abandoned dry hole inequal inequal producer T liters name by by	Secreson Well name County Unnapped Quedrangle Unnapped N
Mofrey Count Unmapped Quadrangl 13 298 14 The Bange Section Fractional STATISTICS: Well type-Dug Elevation (1 face) Driven below Final depth Ceorge Rugg Counters mass Address Enho, Oregon This record compiled by J.5.V. data secured from the Fillowing sou U. S. Production and Marketing As	and sur- Use ft. dor in: original dr. Address from Despend cres: re-cased cleansd	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Morrow Count Morrow Count Morrow Count 18 29E 14 Tp. Range Section Fractional STATISTICS: Well type-Dug	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped
Mofrey Count Unmapped Quadrangl 13 298 14 Tp. Eange Section Fractional STATISTICS: Well type-Dug Driven below Final depth George Rugg Ompers unme Address Enho, Oregon This record compiled by J.S.V. data secured from the Following sou U. S. Production and Marketing As Date compiled March 1948	and sur- Use of the dormal sur- use of the do	File number (Code: Tp., R., Sec., Sec.) D C B A E F G B W L K J N P Q R Tratus- restic- rest	Secreson Well name Tilo number (Code: Tp., R., Sec., Sec. LOCATION: Unmapped

Schomp			Innex number 0. 55-20E-23-J
Well name			File number (Code: Tp., R., Sec., 2 Sec.
LOCATION:	***************************************		
Gilliam Count	у		D C B A
Condon Quadrangl			E F G E
SS 20E 23 NE of SE pp. Range Section Fractional			N P Q R
p. Range Section Fractional	section		N P Q X
TATISTICS:			
### ##################################	and sur-	Use st	intus- Well status-
Drilled x face) Driven above	ft.	in.	ntus- estic* x strial abandoned setion dry hole
final depth 3981		mun!	cipal - producer x
		"include	s stock wells
E. E. Schomp Minera name	A. A. Origi	Durand	& Son Hers name
Address Hayville, Oregon			Walla Walla, Wushington
Box 53			lling May to August 1947
This record compt: d by E.S.Y.	from De	epaned -cased	-
Driller	ol.	eened	
	_		
ats compiled January 1948		te	1
Material	Thickness (feet)	(feet)	Remarks Casing: 6" to 23"
Top soil	2	2	SWL 2771
Rock and yellow clay	6	8	
Yellow green sandy shale	7	15	
Rock and clay	15	30	
Burd gray rock	19	49	Lost water here
Prokea black rock	1	50	
Gray rock	10	60	<u> </u>
Broken brown rock	1	61	Lost water here
'ard gray rock	10 .	71	
Gray rock	8	80	
Proken brown rock	1	81	Lost water here
Gray rock	7	88	_
Broken brown rock	1	89	Lost water here
Gray rock	22	111	
Brown rock	2	113	
Gray rock	12	125	
Hard white rock	3	128	
Eard blue rock	20	148	
Broken brown rock	2	150	Lost water here
Brown rock (solid)	4	154	
Broken brown rock	2	156	Lost water here
Brown rock (solid)	7	163	
Broken brown rock	4	167	Loat water here
Brown rock	5	172	
Broken brown rock	2	174	Lost water here
Brown sticky shale (caving)	36	210	
Hard gray rock	4	214	
Gray and brown rock	2 6	240	
Black basalt	2	242	
Gray becalt	7	249	
Black basalt	7_	256	
	i	26C	
Gray basalt	4		
Gray basalt	20	280	Same water anamatic
		280 281	Some water, emough to drill with
Black basalt	20		Some water, enough to drill with
Black broken basalt	20	281	Some water, enough to drill with
Black broken basalt Alternate black and gray basalt	20	281 356	Some water, smough to drill with
Black basalt Black broken basalt Alternate black and gray basalt Black basalt	20 1 75 31	281 356 387	Some water, emough to drill with
Black basalt Black broken basalt Alternate black and gray basalt Black basalt Hard gray basalt	20 1 75 31	281 356 387 390	drill with
Black basalt Black broken basalt Alternate black and gray basalt Black basalt Hard gray basalt	20 1 75 31	281 356 387 390	drill with
Black basalt Black broken basalt Alternate black and gray basalt Black basalt Hard gray basalt	20 1 75 31	281 356 387 390	drill with

Scott	_		Index numbe	r a		
Well name			File number (Code: Tp., 1	R., Se	c., ;	Sec.)
LOCATION:				ا و	с в	
Umatilla Count	у			-	7 G	H
Quadrangl	.ө				L K	7
					P Q	R
Tp. Range Section Fractional	section					
STAT LETICS:						
Mell type-Dug Elevation (1 prilled x face)	and sur-	Use st	atua- atic" x	Well	statu	0
DL1Aeu Googe	rt.	111.11	311141	8	bandon	md
Final depth 2051		aun i	gation cipal s stock wells	וק	ry hol	
Estella A. Scott Dwners name	Origi	Durand mal dril	lers nama			
Address Athenn, Oregon			alla Walla, Wa			_
This record complied by U.S.W.			lling Fall	. 1340		
ieta secured from the collowing sou	rces: re	-cased				
Driller	61	еалец	09			
January 1948		••				
Date compiled January 1948	De Thickness		I .			
Material	(feet)		Re	mark s		
Tops soil	15	15	-			
Cemented gravel	10	25				
Hard basalt	25	50				
Hard blue basalt	13	63				
Black basalt	82	145	ļ		_	
Gray basalt	4	149				
Dark basalt	11	160				
Brown hasalt	7	167				
Black bosalt	3	179				
Brown basalt	10	180				
Elack besalt	25	205				
		 	SVL 301			
			Bailed hole			
			30 minutes.	rield	7 g.;	
heard			lnder number 49-	88- 34E-25	- U	
ell pame			File number (Code: Tp., R			ec.)
OCATION:					т т	_
			-	D C	B	A
matille County					+	
matilla County Cendiston Quadrangle			}	E 7		H
endleton Quadrangle	•		}	M I	ĸ	J
endleton Quadrangle	•				ĸ	
endlston Quadrangle	•	<u>-</u>		M I	ĸ	J
rendleton Quedrangle N 242 25 p. Range Section Fractional a	section	Use sti	itus-	M I	x q	J R
	section			M L	. K	J R
rendiston Quadrangle 3 342 25 p. Range Section Frectional s ***TATISTICS:** cell type-Dug Elevation (is face)	and sur-	irria	gation	M L	x q	J R
rendiston Quadrangle N	section and sur- ft.	irria munic includes	ention	M L	. K	J R
	A. A	irrie munic *includes Durand &	ention cipal stock wells Son	Well sb dr	status endone y hole	J R
rendiston Quadrangle N	A. A. Origin	irrig munic includes Durand & ial drill	stock wells Son ere name	Well sharper	status endone y hole	J R
rendiston Quadrangle N	A. A	irrigunic munic includes Durand & pal drill rese Wa	stion ipal stock wells Son ere name lla Walla, Walling 194	Well sharper	status endone y hole	J R
rendiston Quadrangle N	A. A	irrigunic munic includes Durand & pal drill rese Wa	stion ipal stock wells Son ere name lla Walla, Walling 194	Well sharper	status endone y hole	J R
rendiston Quadrangle N 34E 25 p. Range Section Frectional s TATISTICS: ell type-Dug Elevation (ls face) above below inal depth 65! (f. F. Sheard wears name	A. A	irrigunic munic includes Durand & pal drill rese Wa	stion ipal stock wells Son ere name lla Walla, Walling 194	Well sharper	status endone y hole	J R
rendiston Quadrangle N 3/2 25 p. Range Section Fractional is TATISTICS: ell type-Dug Elevation (lefter)	A. A	irrigunic munic includes Durand & pal drill rese Wa	stion ipal stock wells Son ere name lla Walla, Walling 194	Well sharper	status endone y hole	J R
endiston Quadrangle N 3/E 25 p. Range Section Fractional s TATISTICS: ell type-Dug Elevation (1c face) Driven Selve below inal depth 65: (, F. Sheard waars name Address Athens, Oregon this record compiled by F.S.V. ata secured from the Jollowing soun	A. A. Original Potes from Detection	irricanni de includes purand de la drillicese Was of drillicese de cased cased	system ipal stock wells Son era name lla Walla, Wai lling 1944	M L K P Well sb dr pr	status endone y hole	J R
rendiston Quadrangle N 3/2 25 p. Range Section Fractional is TATISTICS: ell type-Dug Elevation (lefter)	A. A. Original Addr	irric munic munic munic munic munic mincludes Durand & nal drill mese Wa so of dril mese	stion ipal stock wells Son ere name lla Walla, Walling 194	M L K P Well sb dr pr	status endone y hole	J R
rediston Quadrangle 3 3/12 25 7 Range Section Fractional state 7 Range Section Fractional state	A. A. Origin Adda Date from Decress: re-	irric munic munic munic munic munic mincludes Durand & nal drill mese Wa so of dril mese	stion input of stock wells son live Dame lla Walls, Vai lling 194, by Ren Casing, S-inc	W L R P Well sbingto	status st	J R
endiston Quadrangle N 3/2E 25 p. Range Section Fractional a TATISTICS: ell type-Dug Elevation (la face) Driven Selve below inal depth 65: (f. F. Sheard waars name Address Athens, Oregon This record compiled by F.S.V. ata secured from the Collowing sour J. S. G. S. Ground-Water Division ate compiled December 1947 Neterial	A. A. Origin Add Date from Decress: re-cle	irriguminicular includes Durand & laid fill rese We sof drill spend cased seamed Depth (reet)	Rent Caeing, 8-inc, 55 Palled 40 Pal	Well sbingto	x status	7 B
endiston Quadrangle N 3/E 25 p. Range Section Fractional a TATISTICS: ell type-Dug Elevation (la face)	A. A. Origin Add Date from Decrese: recie	irriamunic munic m	Resident Section Static Learning Section Secti	W L R P Well eb dr pr whingt:	x garage and one of the control of t	7 B
redicton Quadrangle N 3/E 25 p. Range Section Fractional a TATISTIC5: cell type-Dug Elevation (la face)	A. A. Origin Add Date from Decress: re-cle	irriamunic includes purand & i	pation ipal stock wells son ere name lit Walla, Wai liting 194: by Casing, S-in 35 fest, oper Ballad 40 g.; ft, drawlown	W L R P Well eb dr pr whingt:	x garage and one of the control of t	7 B
redicto Quadrangle N 3/E 25 p. Range Section Fractional a TATISTICS: cell type-Dug Elevation (Is face)	A. A. Origin Add Date from Decrese: recie from Decrese: re- Cle Thickness (feet) 13 5 7	irriamunic municipulation in the municipulat	Resident Section Static Learning Section Secti	W L R P Well eb dr pr whingt:	x garage and one of the control of t	7 B

			Ladez masher none-U
Seibold Well pame	_		File number
			(Code: Tp., R., Sec., + Sec.)
LOCATION:			D C B A
Umatilla Coun			E F G H
Quedrang	10		M L K J
Tp. Range Section Frectional	section		я Р Q В
STATISTICS:			
Well type-Dug Elevation (Drilled x face) Driven above	land sur~	Dae s	tatus- Well status-
Driven above		in	eatio* x ustrial abandoned igntion dry hole
Final depth 3041		2010	icipal producer x
Gus Siebold		. Durand	
Owners name Address Freewater, Oregon	Orig	inal dri	llera name Valla Valla, Vashington
			illing Spring 1945
This record complied by E.S.V. data secured from the Following so			
data secured from the following so	rona: r	e-cased_ leanad	by A. A. Durand & Son
Driller -	_		Walla Walla, Wash.
Date compiled January 1948	-		Spring 1946
Material	Thickness (feet)	Depth (feet)	Remarks
Old well		28	
Coarse gravel	67	95	
Black basalt	10	105	
Porous brown basalt	42	147	
Brown rock		150	
Black basalt	68	218	Crsvice at 218
	1	_	Bottem original hole
	4	-	SWL 171
Log of deepened well:	1	<u> </u>	
Hard black baselt	35	253	
Porous baselt	39	292	
Solid basalt Black basalt	12	304	At 304 water level dropped to 22'
Red basalt	23	308	at 309 struck water, SwL dropped to 401. At 3151 again dropped
Rard black baselt	13	344	to 541
Agia siava sasare			Final SVL 53 [†]
Smith (Frank)			Index maker 149-G 28-22E-36-A
Well pame	•		File number (Code: Tp., R., Sec., Sec.)
LOCATION:			
Gilliam Count	7		D C B A
Arlington Quadrangl	•		E F G H
ZE 2ZE 36 MP1 of MP1 Tp. Range Section Fractional			N P Q B
Tp. Hange Section Fractional	section		
STATISTICS:			
Well type-Dug Elevation (La Drilled 2 fece)	and sur-	Use st	atus- Well status-
helow		1574	strial shandoned gation dry hole x
Final depth 6671			cipal producer stock wells
Frank Smith			
Owners name Address Cecil, Oregon		nal dril	lere pane
		of dri	lling
This record compiled by E.S.W. data secured from the Pollowing cour	from De	pened z	
Durand	ol	-cased	by A. A. Durand & Sen
· 			Walla Walla, Washington
Date compiled Jamary 1948	Des		March 1947
Natorial	Thickness (feet)		Remarks
014 well		645	
Rust and some eand	16	661	
Black beealt and sand	6	667	Bottom of hole, SWL 505'. Pumped dry in 3 minutes.
			rumped dry in 3 minutes.

Skoubo			¥¥-25¥-18-4
Well name			File number [Gode: Tp., R., Sec., 2 Sec.
LOCATION:			
Norrev Co	unty		D C B A
Blalock Island Quadra	ngle		M L K J
An 25E 18 EF of 1 Tp. Range Section Fraction	nu i		F P Q B
Tp. Range Section Fraction	al section		<u> </u>
STATISTICS:			
Well type-Dig Elevation	(land sur-	Use s	tatus- Well status-
Well type-Dag Elevation Drilled r face) Driven above	ft.	40m 1n:2	estic* x shandoped_
Final depth 102'		irr zun	igation dry hole icipal producer x
		*includ	es stock wells
I. Skoubo	Beck Oria		llers name
Address Boardman, Oregon	A	41000_	
	De		illing about 1922
This record compiled by E.S.V. data secured from the following of	from I	eapened_	
Owner		leaned	by
	_		
Date compiled Harch 1948		ets	
Material		(feet)	Remarks
So log available		102	
Owner reports:			
Started in solid baselt	100	100	
Elue clay	2	102	
			First water encountered at
			First water encountered at 72'. 5VL was 4'. This was cased off. Second water encountered at 102'. Final
-			swi 12 to 14'.
		T	
· · · · · · · · · · · · · · · · · · ·			
Smyth Well mase			Index number 126-6 M-213-26 File number [Code: TP P Sec. Sec.
fell name			File number (Gode: Tp., R., Sec., Sec.
COATION:	inty		File number (Code: Tp., R., Sec., Sec.
COATION:			712 number (Gode: Tp., R., Sec., ; Sec.) D C R A E F G B
	e) e		Tile number Tile number
COATION:	e) e		712 number (Gode: Tp., R., Sec., ; Sec.) D C R A E F G B
COLATION: Cillian Cou Arlington Quadran 28 21x 26 SW2 75. Range Section Fractiona	e) e		Tile number Tile number
GOLATION: COLATION: Cillian Country Arlington Quadran JB 21E 26 SW2 D. Range Section Fractiona TATISTICS:	ele l section	Use et	
	ele l section		Table Tabl
	ele l section	irri muni	######################################
	ele l section	irri muni	Table Tabl
	(lana surft.	irri muni *include	Tile number File number (Gode: Tp., R., Sec., Sec. D C R A E F G M M L K J N P Q R stus- stice x stice x diribals stock wells
	(lana sur-ft.	intu irri muni "include Vil burn (nal dril	TILE TUBERS File number (Gode: Tp., R., Sec., Sec. D C R A E F G N M L K J N P Q R Stree Stree abandoned x dry hole cipal stock wells
COLTION: Cillian Cou Afflington Quadran 35 215 26 544 D. Hange Section Fractions TATISTICS: cell type-Dug Klawation Drilled X face) Driven below cinal depth 5951 Joan Krebs Wastilla, Oregon	(lana surft. R. E. Original	irri irri muni "include Vil burn inal dril resa 8	THE TUBE OF THE PROPERTY OF TH
COLTION: Cillian Cou Afflington Quadran 35 215 26 544 D. Hange Section Fractions TATISTICS: cell type-Dug Klawation Drilled X face) Driven below cinal depth 5951 Joan Krebs Wastilla, Oregon	(lana surft. R. E. Original	irri irri muni "include Vil burn inal dril resa 8	THE TUBE OF THE PROPERTY OF TH
COLITION: CITITION CITITION CITITION COLUMN APRILIPATION THE STATESTICS: COLUMN COLUMN	(lana surft. E. E. E. Original Control of the Cont	irri irri muni "include Vil burn inal dril resa 8	TILE TUBERS File number (Code: Tp., R., Sec., Sec. D C R A E F G R M L K J N P Q R Stus- stice z strial dry hole cipal producer s stock wells lers name 12 E. 7th, The Dalles, Oregon
COLITION: CITITION CITITION CITITION COLUMN APRILIPATION THE STATESTICS: COLUMN COLUMN	(lana surft. E. E. E. Original Control of the Cont	intuitri muni minclude Wilburn hal dril tresa 8 e of dri espened	TUTUE 2 TO REAL SECTION OF SECTIO
COLITION: CIllian Country: Cillian Country: Cillian Country: The colimpton Quadran The colimpton Section Fractions The colimpton Section Fractions Country: Colimpton Country: Co	(lana surft. B. B. Original Determination of the Courses: recourses: recou	intuitri muni minclude Wilburn hal dril tresa 8 e of dri espened	TUTUE 2 TO REAL SECTION OF SECTIO
COLITION: CIllian Country: Cillian Country: Cillian Country: The colimpton Quadran The colimpton Section Fractions The colimpton Section Fractions Country: Colimpton Country: Co	(lana surft. E. E. G. Add from De ources: re cl., 1948	in in include Vil turn inal dril tress & o of dri espend -cased eaned te	TUTUE 2 TO REAL SECTION OF SECTIO
COLITION: CIllian Country: Cillian Country: Cillian Country: Cillian Country: Cillian Section Fractions CILLIAN Section Fraction Fraction Fraction Fraction Fraction Fraction Fraction Fraction Fraction Fra	(lana surft. B. B. B. Original Added from Decources: Pt. Decource	in in include Vil turn inal dril tress & o of dri espend -cased eaned te	TILE TUBERS File number (Gode: Tp., R., Sec., Sec. D C R A E F C R M L K J N P Q R Studention Strice x Strice y Strice dynamics Stock wells Lers name 12 E. 7th, The Dellas, Oregon ling by
COLITION: CITITION CITITION CITITION APRILIPATION JR. 21E 26 SVA TO Range Section Fractions THATISTICS: Sell type-Dug	(lana surft. E. E. B. Origi Date from De ources: re cl., 1948	innu irri muni "include Vil turn nal dril tresa 8 e of dri espened -cased eaned te	TILE TUBERS File number (Gode: Tp., R., Sec., Sec. D C R A E F C R M L K J N P Q R Studention Strice x Strice y Strice dynamics Stock wells Lers name 12 E. 7th, The Dellas, Oregon ling by
COLITION: CITITION CITITION CITITION CITITION ARTHORISTS P. Range Section Fractions THATISTICS: Sell type-Dug	(lana purft. E. E. Original from Decourses: recipies of the courses of the course of the c	infination in include Viltara inal dril ireas 8 e of dri espened -cased eaned Depth freet)	TILE NUMBER (Gode: Tp., R., Sec., Sec. D C B A E F O B M L K J N P Q B Strice x strice x strice x strice producer cipal producer 12 E. 7th, The Dellas, Oregon ling Remarks Bottom of bole
COLITION: CITITION CITITION CITITION CITITION ARTHORISTS P. Range Section Fractions THATISTICS: Sell type-Dug	(lana purft. E. E. Original from Decourses: recipies of the courses of the course of the c	infination in include Viltara inal dril ireas 8 e of dri espened -cased eaned Depth freet)	TILE TIME OF VALUE OF
COLITION: CITITION CITITION CITITION CITITION ARTHORISTS P. Range Section Fractions THATISTICS: Sell type-Dug	(lana purft. E. E. Original from Decourses: recipies of the courses of the course of the c	infination in include Viltara inal dril ireas 8 e of dri espened -cased eaned Depth freet)	THE TUBE OF THE PROPERTY OF TH
COLITION: CITITION CITITION CITITION CITITION ARTHORISTS P. Range Section Fractions THATISTICS: Sell type-Dug	(lana purft. E. E. Original from Decourses: recipies of the courses of the course of the c	infination in include Viltara inal dril ireas 8 e of dri espened -cased eaned Depth freet)	THE NUMBER OF SEC. 1 Sec. 2 Sec. 2 Sec. 2 Sec. 3 Sec. 3 Sec. 3 Sec. 3 Sec. 4 Sec. 4 Sec. 4 Sec. 4 Sec. 4 Sec. 5 Sec. 6 Sec. 7 Se
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Smith Canning Company	_		23-32x-10-F
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
<u>Umatilla</u> Coun	ty		R A C R
Pendleton Quadrang	10		X T 4 1
2N 32E 10 SW1 of NW1 Tp. Range Section Fractional	section		H P Q E
STATISTICS:			
Well type-Dug Elevetion (Inc.) Drilled x face) Driven above	land sur- ft.	Uee at	tatus- Well status-
below		1177	gation dry hole
Final depth 665		*include	es stock wells
Smith Canning Company	λ. λ.		å Son Ners mame
Deners name Address Pendleton, Oregon	Origi	lnel dril brese	Valle Wello, Washington
			Illing Jan. 1942 to July 1942
This record compiled by N.S.W.	from De	epened_	_
Drl)ler	e)	bease	by
	_		
Pate compiled January 1948	-	ta	
Material	Thickness (feet)	(feet)	Remarks
Loose gravel	23	23	12j# ensing to 35'
Broken rock	2	25	10° liner in hole set
Baselt rock	?	32	st 635' - 40 foot length.
Sand, gravel and clay	28	60	
Broken brown basalt	38	98	
Bed rock	17	115	Static water level, 138
Rotten brown baselt	10	125	G.P.M. Water level
Porous gray basalt	5	130	584 204° 895 217°
Gray besalt	4	134	723 2301 E13 2401
Red rock	6	140	
Gray conglomerate	9	149	Vater temp. 512°7.
Gray baselt, soft	9	158	
Gray basalt, solid	67_	225	
Red volcanic ash, muddy Red rock	17	258 275	
Brown basalt	30	305	
Hed rock	15	320	
Brown bacalt	42	362	
Gray basalt	23	385	
Brown basalt	17	402	
Grey brealt	27	429	
Black tasalt	25	454	
Gray basal't	143	597	
Brown baselt	38	635	
Gray basalt	30	665	
			Bottom of hole
·			
	_		
	•		
	-		
-			
	- 1	- 1	

Stanfield City			Index number 78-U 4N-29K-32
Well name			File number (Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Umatilla Count	y		E F G H
Umatilla Quadrangl	La		M L K J
4W 29E 32 SW			N P Q R
Tp. Range Section Fractional	section		
STATISTICS:			
Well type-Dug Elsvation (1	and sur-	Use et	tatus- Well status-
Well type-Dig Elsvation (1 Drilled x face) Driven above balow	1 t.	inu	strial abandoned igation dry hole
Final depth 1871		nuni nuni	istrial abandoned igation dry hole icipal x producer x es stock wells
City of Stanfiold Owners name	Jame Origi	s Beebo Inal iril	llers name
Addrese			Hermiston
mbd A same Abr. 17 C W			
This record compiled by N.S.W. data secured from the Following sou	rces: re	e-cesed	— — h v
Mr. N. D. Berd, Mayor, Stanfield			_ ~
Date compile4 November 1947		te	
Material	Thicknes		Remarks
	(feet)	(feet)	1000112
To log available		187	Test pump - 125 g.p.u.
		+	Casing - 10" to begin, then 6". Water stands at -33".
			When pumping & -23' when not pumping.
	1		
		 	
State Highway, Castle Bock Well name LOCATION:			File number (Code: Tp., R., Sec., Sec.)
Horrow County	,		D C B A
Plalock Island Quadrangle			P P C H
4M 24E B SVt of SEt			N P Q R
Pp. Range Section Fractional	section		N P Q R
TATISTICS:	_		
Well type-Dug Elevation (la portion (la po	and sur-	Use st	atus- Well status-
	r.		
final depth		mun1	gation dry hole cipal producer
			s stock wells
State Highway Department	J. J. Origi:	Vetter	lere name Zellah, Washington
Address			
			11ing 1936
his record compiled by 3.8.V. ete secured from the following sour	from Dec	opened	- - ,
State Highway officials	cle	eaned	рà
ate compiled Fahmony 1950	_		
ats compiled February 1948	Det Thickness	Depth	
Material	(feet)	(feet)	Remarks
No data available			

tate Highway, Emigrant Springs	_		Index number 26-U 18-35E-29- Filo number	-B	Steen Well name	-		Index number 22-0 5N-35E-26-L File number
			(Code: Tp., R., Sec.	., ; Sec.]				(Code: Tp., R., Sec., & Sec.
OCATION:			рс	B A	LOCATION:			D C B A
coun			EF	СЯ	Umatilla Cour	ty		E F G H
Dividing Grant and			M L	K J	Unmapped Quadrane	ù•		M I K J
N 15E 29 WW of NE	section		н Р	Q R	Tp. Range Section Fractional	section		N P Q R
PATISTICS:					STATISTICS:			
Brilled x feee)	land mur- ft.	Use ete domes	tio*	status-	Well type-Dug Elevation (land sur- ft.		setic*
Driven above below			mation dry	endoned	Drivenbelow		irr	istrial shandoned dry hole
nal depth		munic includes*	stock wells	oducer	Final depth 103'		*include	icipal producer i ss stock welle
ate Highway Department	R. J.	Straeser	Drilling Company		Earold Steen	AA	. Durand	& Son
ners name Address	Orlgi:	nal drill ress_S.	ers name E. 82nd Street, Port	tland, Oregon	Owners nemma Address Milton, Oregon	Orig Add	inal irli iresa	llers name Walla Walla, Washington
	Dat	e of drll	ling about 1934			De-	e of dr	Illing December 1945
his record compiled by N.S.W.	_ from De	epened	•		This record compiled by N.S.W.		epened_	_
the secured from the following so ghway officials	ources: re	-cased	b y		data secured from the Following ad Driller		e-cesed leaned	
Sural otticiate					Driller	_		
te compiled February 1948	De	to			Date compiled January 1948		1t 0	
Naterial	Thickness (feet)	Depth (feet)	Remarks		Naterial	Thicknes (feet)	s Depth (feet)	Remarks
No data available					Top soil	5	5	Desed 10" to 16"10"
					Sand and gravel	5	10	1
					Gravel and boulders	10	20	
					Broken up basalt boulders	10	30	
					Broken honeycomb rock, green	10	40	
					Green honeycomb rock	20	60	
					Gray basalt	43	103	
								SWL 51
		LT						
							+	
			Index number 46-0					Index number 8-U
tate Bighway, Meacham	_	1	ls-35E-3-E File number	L	Stevens Well mane	_		6N-35E-23-D File number
ell name	_	1	IS-35E-3-E File number (Gode: Tp., R., Sec.	L	Well name	-		6¥-35E-23-D
OCATION:	ity	1	IS-352-3-E File number (Gode: Tp., R., Sec.	B A B A	Well mane	-		63-352-23-D File number (Code: Tp., R., Sec., 2 Sec.
tate Bighway, Meacham ell name OCATION: matille Coun		1	IS-35E-3-E File number (Gode: Tp., R., Sec.	B A G H	Well name LOCATION: Cantilla Coun			63-352-23-D File number (Code: Tp., R., Sec., 2 Sec. D, C B A E F G B
DGATION: matille Coun	i).	1	IS-35E-3-E File number (Gode: Tp., R., Sec. D C E F M L	B A G H K J	Well name LOCATION: Unvillia Coun Unnapped Quadrang	le		Si-35E-23-D File number (Code: Tp., R., Sec., 2 Sec. D, C B A E F G H M L K J
DCATION: matille Coun	r).	1	IS-35E-3-E File number (Gode: Tp., R., Sec.	B A G H	Well name LOCATION: Cantilla Coun	le		63-352-23-D File number (Code: Tp., R., Sec., 2 Sec. D, C B A E F G B
DCATION: DCA	r).	1	IS-35E-3-E File number (Gode: Tp., R., Sec. D C E F M L	B A G H K J	LOCATION: Countilla Coun	le		Si-35E-23-D File number (Code: Tp., R., Sec., 2 Sec. D, C B A E F G H M L K J
	esection	Uso stat	15-13-1-2 File number (Gode: Tp., R., Sec. D C Z F M L N P	3 A G H K J Q B	Well name LOCATION: Unntilla Coun Unnamped Quadrang GH 35E 23 NW2 of NW2 Tp. Hange Section Fractional STATISTICS: Well trpe-Dug Elevation (section	Use st	53-352-23-D File number File number (Code: Tp., R., Sec., Sec. D, C B A E F G B M L K J N P Q R
	ple section	Use stated domesting and income	15-13-1-2 File number (Gode: Tp., R., Sec. D C Z F M L N P tue- tic* well s ebs.	B A G H K J Q B	No.	section	dome intu	Si-35Z-23_D File number
	section land surft.	Use standard domest in and irrigg	15-13-1-2 File number (Gode: Tp., R., Sec. D C Z F M L N P tus- tic* well stion dry pro	B A G H K J Q B	Well type-Dug Elevetion (Well type-Dug face) LOCATION: Countilla Coun	section and surft.	dome intu lrri muni	Size Size
	section	Use star domest invast irrisg munici *includes	15-138-1-2	B A G H K J Q B	Moll name Countilla	section and surft.	dome intu lrri muni	Sinch Sinc
ATISTICS: It type-Dig Driven above below and agent and agent 3881 Late Righway Department bears name	land sur- ft. Origin	Use start domest in risg munici start des Santa de Santa	Tile number File number File number File number File number File number D C Z F M L N P Well stice tice trial stock wells Son Son METS BARS	B A C B K J Q B R Status-Indoned bole ducer x	Moll name LOCATION: Countilla Coun	section Land surft.	dome into lrri muni *include	Size Size
	land surft. A. A. 1 Origin	Use stmi domest invest includes Purand & S nai drille	Tile number File number Flic number Flic number Flic number D C Z F M L N P Lus- tice* trial aba stion dry production	B A C B K J Q B R Status-Indoned bole ducer x	Moll name LOCATION: Countilla Coun	section Land surft. Grigi	dome invu lrri muni *include nal dril ress	Size number (Code: Tp., R., Sec., Sec. D, C B A E F G H M L K J N P Q R The number of the second
OCATION: DATION: DATION: Anapped Quadrang DATISTICS: CATISTICS: CATISTIC	land surft. A. A. 1 Origin Addr	Use star domest in and irrigation in and irrigation in a star in a star in a star in a star irrigation in a star irrigation in a star irrigation irrigatio	Tile number File number Flic number Flic number Flic number D C Z F M L N P Lus- tice* trial aba stion dry production	B A C B K J Q B R Status-Indoned bole ducer x	No.	section land surft. Original	dome intu irri muni *include nel dril ress e of dri	Si-35Z-23_D File number File number (Code: Tp., R., Sec., 2 Sec. Dp C B A E F G B M L K J N P Q R Intus- stic* strial gation X cipal erroducer X stock wells
OCATION: DATION: DATION: DATE Judy and Market Judy and Mark	section land surft. A. A Origin Addr Addr From Determines: re-	Use star domes: in.ust irrige municipal control of the control of	File number File number File number Fode: Tp., R., Sec. D C Z F M L N P Well stice trice stock wells Son ars mane lin Wells, Wathingto	B A C B K J Q B R Status-Indoned bole ducer x	Moll name LOCATION: Countilla Coun	section Land surft. Crist Add Det	dome invu irri muni *include nal dril ress e of dri epened -cesed	Since the second
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ATION: Active Country	land surft. A. A. T. Torigit Additional Particular Par	Use star domest invest invest invise pai drille inciudes case drille pened cased cased saned	File number (Oode: Tp., R., Sec. D C Z F M L N P tue- tic* well a stock well a stock wella stock wella by by	B A C B K J Q B R Status-Indoned bole ducer x	Well name LOCATION: Unstilla Coun Unsapped Quadrang GH 35E 23 W4 of FV4 Tp. Range Section Fractional STATISTICS: Well type-Dug Drilled X face) Driven Shame Final depth 1007 Elmer Stevens Cwners name Address Box 196 Freewater, Cregon This record compiled by N.S.W. data secured from the February 1946 Kateriai Dirt	Section Land surft. Crisis Add Det from Desirces: re cl Da Thickness (feet) 42	dome into irri muni minclude nel dril ress e of dri epened -ceed saned Depth (rest)	Since manuser (Code: Tp., R., Sec., Sec. (Code: Tp., R., Sec., Sec., Sec.) D
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OCATION: actille Country actille Country analysed Quedrang 3 358 3 WM of NM ARISTICS: 11 type-Dug Frectional ATISTICS: 12 type-Dug Frectional ATISTICS: 13 type-Dug Frectional ATISTICS: 14 type-Dug Frectional ATISTICS: 15 type-Dug Frectional ATISTICS: 16 type-Dug Frectional ATISTICS: 16 type-Dug Frectional ANALYSICS: 18 type-Dug Frectional ANALYSICS: 18 type-Dug Frectional ANALYSICS: 18 type-Dug Frectional ANALYSICS: 19 type-Dug Frectional ANALYSICS: 10 type-Dug Frectional ANALYSICS: 10 type-Dug Frectional ANALYSICS: 10 type-Dug Frectional ANALYSICS: 11 type-Dug Frectional ANALYSICS: 12 type-Dug Frectional ANALYSICS: 13 type-Dug Frectional ANALYSICS: 14 type-Dug Frectional ANALYSICS: 15 type-Dug Frectional ANALYSICS: 16 type-Dug Frectional ANALYSICS: 17 type-Dug Frectional ANALYSICS: 18 type-Dug Frectional ANALYSICS: 18 type-Dug Frectional ANALYSICS: 19 type-Dug Frectional ANALYSICS: 19 type-Dug Frectional ANALYSICS: 10 type-Dug Frectional ANALYSICS: 11 type-Dug Frectional ANALYSICS: 12 type-Dug Frec	land surft. A. A. T. Triple and surft. A. A. T. Triple and surft. Add Triple and surft. From Determines: re- gle Thiogness (feet) 12 188 25	Use standons do de la constitución de la constituci	File number (Oode: Tp., R., Sec. D C Z F M L N P tue- tic* well a stock well a stock wella stock wella by by	B A C B K J Q B R Status-Indoned bole ducer x	Well name LOCATION: Unntilla Coun Unmapped Quadrang GH 35E 23 Whi of FMi Th. Range Section Fractional STATISTICS: Well type-Dug Drilled X Face) Driven Show Final depth 1007 Final depth 1007 Finer Stevens Councer name Address Box 196 Freewater, Cregon This record compiled by N.S.W. data secured from th. Collowing son State Engineer Dete compiled February 1946 Naterial Dirt Clay and boulders Clay	Criging Add Date from Desiross: reclaration of the Control of the	dome intu irri muni muni minclude nal dril ress e of dri epened -cesed eaned Depth (rest) 42 225 493	Signature Signature File number (Code: Tp., R., Sec., Sec. D, C B A E F G M M L K J N P Q R The status- stic* striat
ATION: actilis	land surft. A. A. T. Torigit Additional Particular Par	Use standossi in another in riege manuful standossi in another in riege manuful standossi in another in riege manuful standossi in another in a	File number (Oode: Tp., R., Sec. D C Z F M L N P tue- tic* well a stock well a stock wella stock wella by by	B A C B K J Q B R Status-Indoned bole ducer x	Well name LOCATION: Unneapped Quadrang GH 35E 23 NW4 of FW4 Tp. Range Section Fractional STATISTICS: Well type-Dug Drilled X Face) Driven Selow Final depth 1007 Final depth 1007 Finer Stevens Compare name Address Box 196 Freewater, Cregon This record compiled by N.S.W. data secured from the Jollowing son State Engineer Dete compiled February 1946 Naterial Dirt Clay and boulders Clay Sand and gravel	Criging Add Date from Desiross: reclaration from	dome invariant and a control of the	Signature Signature File number (Code: Tp., R., Sec., Sec. D, C B A E F G M M L K J N P Q R The status- stic* striat
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ATION: atilia	land surft. A. A. T. Torigit Additional Particular Par	Use standossi in austria dossi in austria dossi in austria di incides se Durand & : ani drille ress. Val. drille pensed cased	File number (Oode: Tp., R., Sec. D C Z F N L N P tus- tic* well a stor with a stor with a stor wells Son are name tin Wella, Vathingto	B A G H K J Q B Status- minoned hole ducer x	Well name LOCATION: Unneapped Quadrang GH 35E 23 NW4 of FW4 Tp. Range Section Fractional STATISTICS: Well type-Dug Drilled X Face) Driven Selow Final depth 1007 Final depth 1007 Fine Stevens Compare name Address Box 196 Freewater, Cregon This record compti d by N.S.W. data secured from the Jollowing son State Engineer Dete compiled February 1946 Naterial Dirt Clay and boulders Clay Sand and gravel Bine clay and basalt Basalt rock	Criging Add Date From Desirons: (feet) 42 183 268 57 137 270	dome invalue irri auni irr	Signature Signature File number (Code: Tp., R., Sec., Sec. D, C B A E F G M M L K J N P Q R The status- stic* striat
ATION: atilis	land surft. A. A. T. Trist Additional Parts and tree of the surgest of the surgest and tree of the su	Use star domest investigation of the control of the	File number (Gode: Tp., R., Sec. Pp. Code: Tp., R., Sec. Pp. R. Se	B A G H K J Q B R Status- Indoned hole ducer 2 A Sec.)	Well name LOCATION: Unstilla Coun Unsapped Quadrang GH 35E 23 NW4 of FW4 Tp. Range Section Fractional STATISTICS: Well type-Dug Drilled X Face) Driven Show Final depth 10007 Elsevens Councer name Address Box 196 Freewater, Cregon This record compiled by N.S.W. data secured from the following son State Engineer Dete compiled February 1946 Naterial Dirt Clay and boulders Clay Sand and gravel Blue clay and basalt	Criging Add Date from Desiross: recipion (feet) 42 183 268 57 137	dome invariant and a control of the	SUBSE-23-D File number (Code: Tp., R., Sec., Sec. D, C B A E F G M M L K J N P Q R The status- stic* striat shandonad gation X dry hole clpal producer X Remarks Hole b" to start 44 " to botton
ATION: actille	land surft. A. A. T. Trist Additional Parts and tree of the surgest of the surgest and tree of the su	Use star domest investigation of the control of the	File number File number File number Fode: Tp., R., Sec. D C Z F M L N P Well stice trial ston dry processor stock wells by Remarks	B A G H K J Q B R Status- Indoned hole ducer 2 A Sec.)	Well name LOCATION: Unneapped Quadrang GH 35E 23 NW4 of FW4 Tp. Range Section Fractional STATISTICS: Well type-Dug Drilled X Face) Driven Selow Final depth 1007 Final depth 1007 Fine Stevens Compare name Address Box 196 Freewater, Cregon This record compti d by N.S.W. data secured from the Jollowing son State Engineer Dete compiled February 1946 Naterial Dirt Clay and boulders Clay Sand and gravel Bine clay and basalt Basalt rock	Thickness (feet) 183 268 57 137 270 50	domes invusion in the control of the	SUBJECT OF THE NUMBER OF THE PROPERTY OF THE P

Taylor			In to - number 104-M
Taylor Well name	-		File number
LOCATION:			(Code: Tp., R., Sec., & Sec.
	• •		D C B A
Norrow Coun			E F G H
			M F . 1
Tp. Hange Section Fractional	section		N P Q L
STATISTICS:			
### STATISTICS: Well type-Dig	land sur-	Use e	status- Well status-
Driven shows	ft.	in.	status- Well status- mestic* x mustrlal abandomed_
Final depth 321		mu1	iclpal producer x
Bines Prothers			se stock wells
Owners name Address Cecil, Oregon	Orie		llere name
Address Cecil, Oregon	_		Ione, Oregon
This record and day N.S.W.			illing 1942
This record compt. d by N.S.W. data secured from the collowing sou Log signed by Virgil Starr and fur by R.S. Farnett H.S. Rureau of	rces: r	e-cased_ leaned	
by at or beamers, or to bushed or	Land		
Management, Baker, Oragon Date compiled November 1947	 D	ate	
Neterial	Thicknes	s Depth	Remarks
	(feet)	(feet)	
Loose gray sand	45	45	8* casing to -60'
Seft yellow hardpan	15	74	6" casing to ~185'
Hoderately hard brown basalt Rard blue basalt	13	87	
Very hard gray basalt	26	113	
Very hard light gray baselt	9	122	
Foderately hard, brown, porous		127	
Soft, blue clay	141	171	-
Moderately hard black porous basalt	10	181	l g.p.m. water
Very hard gray basalt	111	292	
Moderately hard, blue porous basalt	10	302	14 g.p.m., plus
Soft, green, similar to shale	19	321	
		ļ .	
		-	ļ
no apeon_			lnder number 134-U 28-32E-17-P
ell name			File number (Code: Tp., R., Sec., Sec.)
OCATION:			
matilla County	,		D C B A
nmapped Quadrangle			M T K 1
p. Range Section Fractional s	not ton		N P Q R
p. Range Section Fractional s			
TATISTICS:			
oll type-Dug Elevation (la Drilled x face)	nd sur- ft.	dome:	stic* I
pelos		irri	estion dry hole
inal depth		muni	cipel producer x
. A. Thompson			
Mers name		nal dril: rees	lers name
	Det	of dri	11ing 1938
nis record compiled by H.S.V.			_
	ole	beas	by
. 5. Production and Marketing Admin	- etration		
ate compiled March 1948	Dat		
Material	Thickness (feet)	Depth (feet)	Remarks
Fo data available			
······································			

Till Well name	_		File number
			(Cols: Ti., R., Sec., Sec.)
LOCATION:			D C B A
Umati')a Coun			E F G H
Quadrang	la		и ск ј
Tp. Range Section Fractional	section		N P Q R
FATISTICS:		7100.0	Mall stores
Foll type-Dug Elevation (1 Drilled I face) Driven above below	ft.	don	tatus- Well status- estic* ustrial ebandoned
final depth 385		irr	igetion dry hole
		*Includ	ns stock wells
William Till	A. A	. Durand	& Son llere name
Address Spofford, Oregon	- Add	ireas	Valla Valla, Washington
	-		illing
his record complid by M.S.W. eta secured from the collowing sou	rces: re	-cesed	
riller	c:	leaned	
ete compiled January 1945		ite	Walia Waila, Washington June and July 1945
Material	Thicknes		
	(feet)	(feet)	Remarks
Old dug well Gravel	95	159	Bottom of old wall
Blue clay	86	255	Bottom of old well. Old well bailed 20 g.p.m.
Gravel and sandy clay	45	290	with a drawdown from a static water level of 65' to
Sandy blue clay	55	345	100'. Deepened well (final depth) pumped 45 minutes
Basalt	15	360	1001. Despend well (final depth.) pumped 45 minutes at 157 g.p.m. SWL, 801. Water warm and sulphurous. Progress
Broken bensycomb rock - cavey	15	375	290', bailed 20 g.p.m. for
Black rock - cavey	10	385	15 minutes with drawdown from
minutes with drawaown from 80	o 90'. N	th hole	360', bailed 20 g.p.m. for 20
			alas 30%, carred 50 E.b.p. Arth
a graviour of 10°. With hole	t final d	epth of	ladex number 50-U
a graviour of 10°. With hole	t final d	pth of	Be5', pumped 45 minutes at
a gravious of 10°. With hole 167 g.g.b.	t final d	epth of	ladex number 50-U 1N-32E-6 (Lode: Tp., R., Sec., 2 Sec.)
a graviour of 10°. With hole 167 f.c.b.	at final d	epth of	laner number 50-U 1N-32E-6
a gravious of 10°. With hole 167 g.g.b. 18	at final d	epth of	ladex number 50-U 1N-32E-6 File number (Jode: Tp., R., Sec., 2 Sec.)
a gravious of 10°. With hole 167 graphs in colling County condition Quedrangle 1 278 6 the county	at final d	epth of	ladex number 50-U 1N-32R-6 Filo number (Jodes: Th., R., Sec., 2 Sec.)
a gravious of 10°. With hole 167 F.E.B. DEATION: tatilla County codleton Quedrangle 1 32E 6 Sk of SW 2 Range Section Fractional s	at final d	ipth of	lader number 50-U 1N-32R-6 File number (Jode: Tp., R., Sec., 2 Sec.) D C B A E F G B W L L L J
a cravacyn of 10°. With hole 167 r.c.m. Be a county of the county of th	ection	epth of	Index number 50-U
a gravious of 10°. With hole 167 r.c.B. IS STATION: Satilla County statilla County statilla Questionals STATISTICS: ATISTICS: Statilla S	ection	Use st.	lmier number 50-U 1N-3/2x-6 Fito number [Code: Tp., R., Sec., 2 Sec.] D C B A E F G B W 1 L K 7 N P 2 R
a cravacyn of 10°. With hole 167 r.r.m. Bartina CATION: Satilla County colleton JUM Gudrangle JUM Fractional s ATISTICS: 11 type-Dig X Elevation (la Driven abore below	ection	Use st. dome. ir.u. irrl.	lnder number 50-U ln-92x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W 1 L Z J N P Q R atua- tic* Well status- tic* striat gation dry bols
a drawdown of 10°. With hole 167 r.r.m. But and County at 111 an	ection	Use st. dome. in.u. irrl, mun!	lnder number 50-U 1N-3/2R-5 Filo number (Jode: Tp., R., Sec., 2 Sec.) D C B A E F G B W L L K J N P Q R atus- well status- stic* x ebandoned
s arevaces of 10°. With hole 167 F.E.B. s Station County c	ection ind sur- ft.	Use st. dome. in.u. irrl, muni.	lnder number - 50-U IN-372-6 Filo number (Jode: Tp., R., Sec., 2 Sec.) D C B A E F G B W 1 L K J N P Q R atus- atic x striat dry bla gation producer x s stock wells
a gravation of 10°. With hole 167 F.F.B. B SCATION: Action: A	ection ond sur- ft. Origin	Use st dome in.u. irrl aunininclude.	lnder number 50-U 1N-3/2R-5 Fito number (Jode: TJ., R., Sec., 2 Sec.) D C B A Z F G B W L L K J N P 2 R atua-
a gravious of 10°. With hole 167 F.E.B. SE Pil name CATION: attilla County mileton Quedrangle 1 32E 6 5½ of SV2 . Range Section Fractional s ATISTICS: 11 type-Dig x Elevetion (la face) Driven below mai depth 65° a ser: name	ection ord surft. Original distributions of the control of the c	Use st dome in.u. irrl, muni- include:	lnder number 50-U 1N-3/2R-5 Fito number (Jode: TJ., R., Sec., 2 Sec.) D C B A Z F G B W L L K J N P 2 R atua-
a gravious of 10°. With hole 167 F.E.B. SE Pil name CATION: attilla County mileton Quedrangle 1 32E 6 5½ of SV2 . Range Section Fractional s ATISTICS: 11 type-Dig x Elevetion (la face) Driven below mai depth 65° a ser: name	origin Addr	Use st dome in.u. unininclude. idrill sess of drill	lnder number 50-U 1N-92x-6 Filo number (dode: Th., R., Sec., 2 Sec.) D C B A Z F G B W 1 L Z J N P 2 R total stric x stric dark mells stock wells
a gravatown of 10°. With hole 167 F.E.B. DEATION: attilin Quedrangle J2Z	origin Addr	Use st dome in.u. irrl, muni- include:	lnder number 50-U 1N-92x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W 1 L Z J N P 2 R total stric x stric dark mells stock wells
a gravators of 10°. With hole 167 F.E.B. Batilla County odleton Quedrangle 1 322 6 5 5½ of SV½ Range Soction Fractional s ATISTICS: 11 type-Dig X Elevation (la priven above below above below above below as a secured from the following sour . J. E. Hanna, Fendleton, Oregon	origin Addr Deter from Deter ces: re-	Use st dome dome in.u. uninclude. I drill sees of dril casad casad anad	lnder number 50-U 1N-92x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W 1 L Z J N P 2 R total stric x stric dark mells stock wells
a fravators of 10°. With hole 167 F.E.B. Barrion: County Matilla Alistics Tractional a Aristics Il type-Dug x face) Driven above below mai depth 65' matilla Materiana Materia	original description of the control	Use st dome in.u. uniril multi-multi	lmier number 50-U 1N-3/2x-6 Fito number [Code: Th., R., Sec., 2 Sec.] D C B A Z F G B W 1 L Z J N P 2 R tus- striat gartin gartin cipal grid media s stock wells
a gravation of 10°. With hole 167 F.E.B. CATION: catilla	rection Origin Addr Date from Deeces: rection Deeces Deec	Use st dome in.u. irrl auniticules of dril pened cessod anad e	lnder number 50-U 1N-92x-6 Filo number (Code: Th., R., Sec., 2 Sec.) D C B A Z F G B W 1 L Z J N P Q R The status- tio x stria stria stria producer x stria producer x stria producer x stria producer x
a fravators of 10°. With hole 167 r.r.m. m Carron: County	original description of the control	Use st doment of the doment of	lmier number 50-U 1N-3/2x-6 Fito number [Code: Th., R., Sec., 2 Sec.] D C B A Z F G B W 1 L Z J N P 2 R tus- striat gartin gartin cipal grid media s stock wells
a gravation of 10°. With hole 167 F.E.B. CATION: catilla	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravation of 10°. With hole 167 F.E.B. CATION: catilla	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravious of 10°. With hole 167 F.F.B. DEATION: catilla County condition Quedrangle 1 32Z 6 Si of SVi Decition Frectional s ATISTICS: 11 type-Dug X Cace) Driven above balow below mai depth 65° a AMTISTICS: 12 To The Cace) Driven above balow below 14 Teach Cace) Driven below 15 Teach Cace) Driven below 16 Teach Cace) Driven above balow below 17 Teach Cace Teach C	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravious of 10°. With hole 167 F.F.B. DEATION: catilla County condition Quedrangle 1 32Z 6 Si of SVi Decition Frectional s ATISTICS: 11 type-Dug X Cace) Driven above balow below mai depth 65° a AMTISTICS: 12 To The Cace) Driven above balow below 14 Teach Cace) Driven below 15 Teach Cace) Driven below 16 Teach Cace) Driven above balow below 17 Teach Cace Teach C	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravious of 10°. With hole 167 F.F.B. DEATION: catilla County condition Quedrangle 1 32Z 6 Si of SVi Decition Frectional s ATISTICS: 11 type-Dug X Cace) Driven above balow below mai depth 65° a AMTISTICS: 12 To The Cace) Driven above balow below 14 Teach Cace) Driven below 15 Teach Cace) Driven below 16 Teach Cace) Driven above balow below 17 Teach Cace Teach C	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravation of 10°. With hole 167 F.E.B. CATION: catilla	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.
a gravation of 10°. With hole 167 F.E.B. CATION: catilla	original description of the control	Use st doment of the doment of	lnder number 50-U 1N-3/2x-6 Filo number (Jode: Th., R., Sec., 2 Sec.) D C B A Z F G B W L L Z J N P 2 R Tell Strial debandoned garion dry hole reducer x strial dry hole lers name Remarke SvL 62' Pumps 1 g.p.n.

			Index number 93-H				Index number none-U
Tucker Well name	-		ZN-27E-20-E Filo number	Tubbs Well mage			File number (Code: Tp., R., Sec., Sec.
LOCAPTON			(Code: Tp., R., Sec., 2 Sec.)	LOCATION:			
LOCATION:	ty		D C B A	Unatilla	County		D C B A
Norrow Count	•		E F G H		drangle		MLXJ
26 272 20 SE of ME			N P Q R				N P Q R
Tp. Range Section Fractional	section			Tp. Renge Section Frac-	section		
STATISTICS:				STATISTICS:			
Well type-Dug Elevation (1 prilled x face)	land eur- ft.		stic*	Drilled I face)	ton (land sur-	d one	atus- Well status- stic* x strial abandoned
Driven above below		irri	gation x dry bole	Drivenabovebelow Final depth193'		irri	getion dry bole
Final depth 365'		*include	es atock wells			*include	s stock wells
Ed Tucker Owners name	Origi	and Ande	lers pame	Clarence Tubbs	Orto	. Durand inal dril	lers mama
Address Division Street	- Add	Took	Thitmen St., Walla Valla, Wash,	Address Adams, Oregon			Walla Walla, Washington
Valla Valla, Vashington	-		lling finished Jan. 1948	N S		te of dri sep ened	lling sandary 19
This record complicable M.S.W. date secured from the collowing sou	from De	epened -cssed .eansd		This record complied by N.S data secured from the sollow	ing sources: r		
Driller			_ ",	U. S. G. S. Ground-Water Di			
Date compiled Jenuary 1948	De	to		Date compiled January 19	ue D	. t a	
Material	Thickness (feet)	Depth (mat)	Remarks	Naterial	Thicknes (feet)	s Depth (feet)	Romarks
Dirt	10	10	Casing: 10" to 53'	Old well	89	89	
Gravel	12	22		Bassit, hard	26	115	
Scab rock	13	35		Basalt, porous	30	145	
Black rock	20	55		Basalt, bord SVL 35	48	193	
Brown rock - clay senss	35	90				 	SVL 35' - 18 Jan. 1944.
Slork rock	14	104	-			-	bottom - perforated 547 - 577 681 - 741
Brown rock, clay in seams	23	127				<u> </u>	Bailed 24 g.p. z. for 40
Brown rock	99	233				1	min. with 128' drawdown recovered in 1 hour.
Prown rock	4	237	SWL 2501				
Flack rock	12	249	Pumped 200 g.p.m. for 4		· '	_	
Red rock (seep of water)	4	253	hours - pump at 3001.				
Gray basalt	45	298	Drawlown to 3004	Union Pacific, Barnhart #1			lndex number 63-U 2N-31E-15-L
Brava rock (water bearing)	52	350	Yield held at 200 g.p.m.	Wall name			File number (Code: Tp., R., Sec., Sec.
Cloy	1 2	352		LOCATION:			D C B A
Gray basalt	13	365		Unatilla	County		Z 7 G H
		-			adrengle		M L K J
			Index number 83-U	2N 31E 15 KE4	of SWitional aection		N P Q R
Umatilla City #1 Well name	-		5M-28E-17-L File number	STATISTICS:			
LOCATION:				Well type-Dug Eleve	tion (land sur-	Une at	
Umatilla Count	ty		D C B A	Drilled X face) Driven above	ft.	dom:	estic* ustrial x abandoned_
Umatilla Quadrangi			E F G H	Final depth 161; below		mun:	igntion dry bole icipal producer x
5# 26% 17 ME of SE			N P Q R	Union Pacific Railroad		. Durand	
Tp. Range Section Fractional	980 £ 10 B			Owners name Address Cmaha, Hebraska	Orie	inal iri	llers name Walla Walla, Washington
STATISTICS:				American American and Colores		te of dr	
Well type-Dug Elevation () Drilled x feee)	land mur- ft.		et10 •	This record complied by M.S	.V. from D	eapened_	
Driven shove below		irr	estrial shandoned dry hole	data secured from the Follow Driller and U. P. Water Serv		e-cased_ leaned sker	by
Final depth 1331		*include	cipal x producer x	Willies Come U. F. Waver Serv			
City of Unstille	क्तान	nal dr	llers name	Date compiled January 19		ete	
Address				Material	Thicknes (feet)	(feet)	Remarks
	_	e of dr	illing	Dirt and gravel	10	10	
This record compiled by H.S.V. data secured from the Following son	TOBB: TO	-cased_	<u> </u>	Broken basalt rock	18	28	
City officials	97	eaned		Hard gray basalt	5	33 78	
Data compiled December 1947	De	ıta .		Gray basalt Porous rack and shale	45	78 99	
Material	Thickness (feet)		Remarks	Hard gray basalt rock	56	155	
No log available	(Iset)	133		Porons rock and scapeta		161	
	1	1	Pumping well — reportedly tested 50 g.p.m. in 1935. Now used as an auxiliary				SVL 31.
			only.				No pump test results available but is numbed at 40 c.r.m.
							in practice.

Umwtilla City #2 Woll name			Index master 84-U 5N-26E-17-J File street		Umatilis City #3	_		Index number 85-U 58-28E-19-A File number
LOCATION:	unty		(Code:, S., Sec., Sec.) D C B A E F G H	<u> </u>	LOCATION: Umatilla Coun	ty	,,	(Code: Tp., R., Sec., S
Upotilia Quadra			M L K J		Umntilla Quedrang 5E 26E 19 NE of NE Tp. Range Section Fractional			E F G M L K N P Q
STATISTICS:			*	-	TATISTICS:			
Well type-Dug Elevation Drilled x face) Driven below	(land sur- ft.	in:	rtatus- mestic* unstrial sbandoned ligation dry hole		Drilled x Driven Driven Driven Driven Driven Driven Driven Delow	land sur- ft.	dom in: irr	tatus- matic* mstrial sbandone igation dry hole
Flual depth 590'		nui inclus	icipal X producer X les stock wells	'	'inal depth 785'		nun includ	iclpal x producer es etock wells
City of Umntilla Owners name Address	Ori	dress	llors name endleton, Oregon	6	City of Unetille There neme Address	Origi	lress	n Hars name 319 Pittock Block, Portland Hllins November 19, 1947
This record compiled by \$.5.V., data secured from the collowing a Verbal log report by the driller	from I	Daepened_ re-cased_ :leanad		i i	This record complicate N.S.W. ata secured from the collowing so	_from De urces; re		_
date from city officials and Sta of Sealth Date compiled July, Dec. 1947		ete		פ	ata compilod December 1947	De		
Material	Thickne	se Depth (feet)	Remarks		Material	Thickness	s Depth	Ragarks
Soil and gravel	(Feet)	18	En hole, Flow of 125			(feet)	(feet)	Casing used:
Solid rock about	580	70	g.n.m. encountered.		Clay and top soil Grevel and boulders	10	27	17C1 of 16"
a sout	700	1-	By Levis		Sand	11	38	63' of 10"
According to Walter Bullard,	C ty Recor	der, thi			Oravel	132	170	174' of 8*
A pump test by W. W. Hewton,	Rankin Equ	ipmont C	oupany of Yakima, Washington		Rock	175	345	
January 25, 1946, shows a st about 30° g.p.m. with a draw	atic level	to be -1	2 And the well good for		Blue clay	28	373	
Records in the files of the	State Dert.	f Heal	th carry s notation that this		Broken rack	42	415	SWL 1151. Drawsown 901
well in 535 deep and that t estimated at 50 g.p.m.	wo arterian	110MP A	ere penetrated. The largest is	[kock	90	505	Tiels approximately 1000
			states flow of about 80 g.g.s		Clay	30	535	g.p.s. Temp. 71°F.
10" hole bedrock into bedroc	<u>2 101 to 44</u>	<u>: : 2" h</u>			Rock	215	750	
to -535' bedrock. 8" caeing	from surfa	c tc -6	5 .		Sandy formation	5	755	
				1	Rock	30	785	
nion Pacific, Cnyuse #1 old name CATION: mathliaCou	nty		File number (Code: Tp., R., Sec., Sec.) D C B A Z F G H	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ulon Pacific. Field Station	-		Index number 89-U LU-28E-03 File number (Code: Tp., R., Sec., & Sec.
Pendleton Quadrang ME	į		M L X J N P Q R	Us	CATION: natilla Count natilla Quadrangl	-		D C B
######################################	land sur-	Use st	etio*		2612 23 1742			N P Q
Driven above halow		irri	strial x shandoned gation dry hole clear producer x a stock wells		ATISTICS: Dil type-Dug Elevetion (1 face) Driven above	and sur- ft.		stic* strial_x abandoned
nion Pacific Railroad where name Address Omaha, Nebraska	Origi	ress	lere name Valla Valla, Washington		nal depth 2751 below	 .	zun i	gation dry hole cipal producer s stock wells
his record compiled by N.S.W. ata secured from the collowing so	from De urces; re	e of dri	lling June 1941	ŌN	ners name Address Omaha, Nebruska	Addı	es of dri	lers pane
oriiler ate compiled January 1948					is record compil d by U.S.V. ts sacured from the following soul . Cole, U. P. Seclopist	from Dee	pened cased	py
Material	Thickness (feet)		Remarks		,,,,	_		
Gravel	15	15	8" casing seated at 40°	Da -	ts compiled October 1944	Det		
Eard gray bosalt	35 _	50			Material	Thickness (feet)	Depth (feet)	Remarks
Porous brown busalt	35	85			Sand	5	5	First water at - 701
			Static water level 41. Dynamic water level 301.		Gravel	65	70	First water at -70'. Stood at -47'
			Tests 30 g.p.m.		Hard yellow clay	7D	140	
					Hard blue clay	100	24C	Solis footing at -2051
					Solid rock	35	275	Vater level changed from _47' to _95' when well was cased to _205'.
		ļ		-				Janes 10 -2031,

NOTE: THE PERSON OF THE PERSON

			lnder number 155-Un 18-352-36-N
Union Pacific, Kamela Well name		1	File number
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Union County			E F C H
Unmapped Quadrangle			M L X J
13 35E 36 SW1 of SW1 Tp. Range Section Fractional s	ection		N P Q R
STATISTICS:			
Well type-Dug Elevation (la prilled x face)	nd sur-	Use sta domes	tus- Well status-
Driven ADDVS			
Final depth 996	= .	munic includes	mation dry hole X ipal producer stock wells
		Durand &	
Union Pacific Railroad Owners name	0=1 e1n	al drill	ers name
Address Omaha, Nebraska			iing July 1944 to Jnn. 1946
This record compiled by W.S.W.			
This record compiled by M.S.V. data secured from the collowing sour	-61 :460.	cased_	- bv
Driller	**-		
Date compiled January 1948	Dat		
Naterial	Thickness	Depth	Remarks
	(feet)	(feet)	Casing 20" seated at 50'8"
Brown hardpan clay	49	49	Casing 20" seated at 50'c" Casing 16" seated at 141'4"
Plack basalt	22	71	Well abandoned
Very hard basalt	8	73 81	At 633 foot depth 3ML was
Mlack basalt			well dry in 12 minutes
Soft black basalt Black basalt with streaks	10	91	and there was no recovery
of black shale	10	101	Final SWL in despened well was 264.5 and well bails
Black basalt	12	113	dry
Porous brown rock and clay	32 12	145	
Black basalt	38	195	
Red rock	10	205	
Black basalt	60	265	
Clay and basalt Rard red rock	50	415	
Hard black rock	9	424	
Hard brown rock	15	439	
Hard black rock	15	454	
Broken brown rock	6	460	
Hard brown rock	7	467	
Brown rock with clay seams	16	483	
Red rock with clay coams	10	493	
Brown rock with clay seams			
Perous brown rock with some cl	15	508	
Porons gray besalt		-	
		508	
Red rock with some clay	ау 23	508 531	
Red rock with some clay Porous clay basalt	ay 23 5	508 531 536	
	ay 23 5	508 531 536 551	
Forous clay basalt	5 15 65	508 531 536 551 616	
Porous clay basalt Mard black rock	5 15 65	508 531 536 551 616 619	
Forous clay besalt Mard black rock Hard gray rock	5 15 65 3	508 531 536 551 616 619 627	
Forous clay basalt Mard black rock Hard gray rock Broken black rock	5 15 65 3 8 5	508 531 536 551 616 619 627 632	
Forous clay basalt Mard black rock Bard gray rock Broken black rock mard gray baselt	5 15 65 3 8 5 26	508 531 536 551 616 619 627 632 658	
Forous clay basalt Mard black rock Hard gray rock Broken black rock Hard gray baselt Gray baselt with some clays	5 5 15 65 3 8 5 26 9	508 531 536 551 616 619 627 632 658 667	
Forous clay basalt Mard black rock Hard gray rock Broken black rock mard gray baselt Gray basalt with some clays Hard blue rock with some clays	4y 23 5 15 65 3 8 5 26 9	508 531 536 551 616 619 627 632 658 667 676	
Forous clay basalt Mard black rock Bard gray rock Broken black rock mard gray baselt Gray baselt with some clays Hard blue rock with some clay Hard blue rock	4y 23 5 15 65 3 8 5 26 9	508 531 536 551 616 619 627 632 658 667 676	
Forous clay basalt Hard black rock Hard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock with some clay Eard blue rock Hed rock Hard gray rock Hard gray rock Hard gray rock with some clay	4y 23 5 15 65 3 8 5 26 9 9	508 531 536 551 616 619 627 632 658 667 676 693 762	
Forous clay basalt Mard black rock Bard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock with some clay Bard blue rock Bed rock Hard gray rock	5 15 65 3 8 5 26 9 9	508 531 536 551 616 619 627 632 658 667 676 693 762 768	
Forous clay basalt Mard black rock Hard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock with some clay Hard blue rock Hard gray rock Hard gray rock Hard gray rock with some clay Froken baselt with sticky red clay mixed in Gray baselt mixed with clay	47 23 5 15 65 3 8 5 26 9 9 17 69	508 531 536 536 551 616 619 627 632 658 667 676 693 762 768 770	
Forous clay basalt Mard black rock Bard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock with some clay Bard blue rock Bard gray rock Hard gray rock Hard gray rock with some clay Froces baselt with sticky red clay sixed in	47 23 5 15 65 3 8 5 26 9 9 17 69 6	508 531 536 531 536 551 616 619 627 632 658 667 676 693 762 768 770 773	
Forous clay basalt Hard black rock Hard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock with some clay Hard blue rock Hard gray rock Hard gray rock Hard gray rock with some clay Froken basalt with sticky red clay mixed in Gray basalt mixed with clay	47 23 5 15 65 3 8 5 26 9 9 17 69 6 2	508 531 536 536 551 616 619 627 632 658 667 676 673 762 768 770 773 793	
Forous clay basalt Hard black rock Hard gray rock Broken black rock Hard gray basalt Gray basalt with some clays Hard blue rock with some clay Eard blue rock Bed rock Hard gray rock Hard gray rock with some clay Frokes basalt with sticky red clay mixed in Gray basalt mixed with clay Gray basalt sixed with soull account of clay Gray basalt - some clay	47 23 5 15 65 3 8 5 26 9 9 17 69 6 2 2 3 20 14	508 531 536 551 616 619 627 632 658 667 676 693 762 728 770 773 793 807	
Forous clay besalt Hard black rock Hard gray rock Broken black rock Hard gray beselt Gray baselt with some clays Hard blue rock Hard blue rock Hard prock Hard gray rock Hard gray rock Hard gray rock vith some clay Frocen baselt with stoky red clay mixed in Gray baselt mixed with clay Gray baselt sixed with annul amount of clay Gray baselt	47 23 5 15 65 3 8 5 26 9 17 69 6 2 3 20 14	508 531 536 551 616 619 627 632 658 667 676 693 762 770 773 793 807 833	
Forous clay besalt Hard black rock Hard gray rock Broken black rock Hard gray baselt Gray baselt with some clays Hard blue rock Hard blue rock Hard prock Hard gray rock Hard gray rock Hard gray rock with some clay Froces baselt with sticky red clay sixed in Gray baselt sixed with annul amount of clay Gray baselt sixed with gray baselt sixed with sixed with	47 23 5 15 65 3 8 5 26 9 9 17 69 6 2 2 3 20 14 26 6	508 531 536 551 616 619 627 632 658 667 676 693 762 788 770 773 793 807 833	

			a band oned
			Final SWL 254.51. Well
			Bottom of hole
Gray baselt, some clay	68	996	
Gray basalt	15	928	
Brown rock	9	913	

				54.51. Well
			a band oned	
				_
Until Book file Weerner			Index number	r 97-H N-25 E-3-P
Union Pacific, Messner Well name	-		File number (Code: Tp.,	
OCATION:				D C B A
Norrow Count	У			E F G H
Blalock Island Quadrangl	.0			A T K 2
4W 25E 3 SEi of Swi p. Range Section Frectional				N P Q R
STATISTICS:				
Sall type-Dug Elevation (1	and sur-			Well status-
Drivenebove	ft.	10 00	strial x	abandoned
Final depth 162		nunic	: ipa.i	producer -
		'includes	atock wells	
Union Pacific Railroad	Georg	e Scott		
Omaha City, Nebraska	Origi:	nal irili reas	ers mame Milton, Ore	goa
-			ling 1916	
754				
This record compiled by 11.5.W. late secured from the Collowing Sou	TLC68: L9	-cased	- 	
Union Pacific Bailroad Officials	c1	named	by	
Date compiled February, 1948	De	te		
Material	Thickness	Depth	R	merks
PRESENT	(feet)	(feet)		
No log available		162	Casing: 12	to 49*
·				
			Incex number	43-0
Union Pacific, Giobon #1	_		31	6-36E-31-C
Well name			File number (Code: Ty.,	R., Sec., 2 Sec.)
LOCUMENT.				
LOCATION:				D C B A
LOCATION: Umatilla Goun	ty			
				D C B A E F G H
Unwapped Quadrang	10			D C B A E F G H
Unsatilla Coun Unsapped Quadrang	10			D C B A E F G H
Unexpped Quedrang 3B 36E 31 XZ4 of JV4 Tp. Range Section Fractional	10			D C B A E F G H K L K J
Unwapped Quadrang	10			D C B A E F G H
Unmapped Quadrang 38 36E 51 KE4 of MY TD. Range Section Fractional	section	Use at.	atue-	D C B A E F G H
Dentilla Count	section	d one	etic*	D C B A E F G H K L K J N P Q R
Dentilla Count	section	dome inuu irri	etic* strial x gation	D C B A E F G M E L K J N F Q B
Deatilla Count	section	dome insu irri muni	strial x gation	D C B A E F G H F L K J N P Q B Tell status- abandoned dry hole producer I
Dentilla Count	section	dome intu irri muni *include	etic* strial x gation cipal s stock wells	D C B A E F G H F L K J N P Q B Tell status- abandoned dry hole producer I
Deatilla Count	section	dome intu irri muni include	strial x gation cipal s stock wells	D C B A E F G H F L K J N P Q B Tell status- abandoned dry hole producer I
Dentila Count	land sur- ft.	dome intu irri muni *include Durani & nel dril	etic* strial x gation cipal s stock wells Sen	D C B A E F G M K L K J N F Q B Tell status- shandoned dry hole producer I
Deatilla Count	land sur- ft.	dome invu irri muni include Durani & nel dril reas	etic* strial x gation cipal s stock wells Sen lers name Walla Walla.	D C B A E F G H F L K J N P Q B Tell status- abandoned dry hole producer I
Unexpped Quadrang 18 36E 51 E24 of UN2 Tp. Range Section Fractional STATISTICS: Nell type-Dug Elevation (Drillad race) Driven above below Final depth 80' Union Pactfic Railroad Owners name Address Omana, Sebraka	section land surft. A. A. Original	dome intu irri muni include Durani & nal dril ress e of dri	etic* strial x gation cipal s stock wells Sen lers name Walla Walla.	D C B A E F G M K L K J N F Q B Tell status- shandoned dry hole producer I
Unexpped Quadrang 18 36E 51 E24 of UN2 Tp. Range Section Fractional STATISTICS: Nell type-Dug Elevation (Drillad race) Driven above below Final depth 80' Union Pactfic Railroad Owners name Address Omana, Sebraka	le section land surft. A.A. Original Additional Determination of the form Determination of the form o	dome intu irri muni include Durani & nal dril reas e of dri epaned	etic* strial x gation cipal s stock wells Sen lers name Walla Walla.	D C B A E F G M K L K J N F Q B Tell status- shandoned dry hole producer I
Dentila Count	le section land surft. A.A. Original Additional Determination Determination of the control of t	dome intu irri muni include Durani & nal dril ress e of dri	etic* strial x gation cipal s stock wells Sen lers name Walla Walla.	D C B A E F G M K L K J N F Q B Tell status- shandoned dry hole producer I

Material	Thickness (feet)	Depth (fest)	Remarks
Gravel and boulders	12	12	8" casing to 32"
Gement gravel with bad crewice	12	24	5" to 561
Blue basalt boulders	2	26	ó" hole to rottom
Caving scale basalt	3	29	
Gray basalt	2	31	SVI 81
Elack basalt, houlders	22	53	
Black basalt, soild, hard	4	57	
Black basalt with bad crevices	9	65	
Hard gray baselt	5	71	
Honeycomb black basalt	9	80	Water bearing. Bottom of

LOCATION:			Index number 193-Un 38-395-4-M Film number	Union Pacific, LaGrande ∳2 Well name	_		Index mumber 154-Un 38-38E-5-# File number
			(Code: Tp., R., Suc., Sec.)	****			(Code: Tp., R., Sec.,
Caios Cour			D C B A	LOCATION:			D C B
			E F C H	Union Cour	ty		E F G
Unmapped Quadrane			M L K J	Unmapped Quadrans			M I K
75 Range Section Fractional	section		N P Q R	Tp. Range Section Fractional			H P Q
STATISTICS:				STATISTICS:			
dell type-Dug Elevation (Drilled x face)		Use at	atic*	Well type-Dug Elevation (land aur-	Use s	tntus- Well statu: catic*
Drivenabove below		177	istrial x abandoned igation dry hole	Drivenebove		lnu irr	lgation abandone
'inal dapth 1557'		mun! "include	cipal producer x	Final depth 15361		anun.	iclpal produces as stock wells
Union Facific Hailroad		knows	llere name	Union Pacific Railroad	Raseo	e Nose	
Address Omnha, Mebraska		dress	1910 Peline	Owners name Address Omana, Rebranka	L PLIE	iresa	llers name Los Angeles, Callfornia
	· De	te of dri	111ing Jan. 25, 1928		Da	te of dr	illing Aug. 1941 to Feb.
	from De	eepened_	<u> </u>	This record complia by M.S.W. data securad from the collowing so	from D	eepened	<u>x</u>
ata securad from the collowing so	c)	e-cased leaned	by A. A. Durand & Son		urces: r	e-cased	by A. м. Durand & So.
Wr. Cole, U. P. Geologist and other March 1948	er ollicial		Walla Walls, Wash.	Mr. Metsker, U. F. Water Service	Foremen -	Walln	Wolls, Washington
ate compiled Forenber 1944	_ Di	nto	1945	Date compiled Harch 1948	De	ata_fi	nished January 1945
Naterial	Thicknes		Remarks	Esterial	Thicknes	s Depth	Remarks
Gravel nor boulders	(feet) 200	200	Flows at rate of 75 t.p.m.		(feet)	(Teet)	*****
Yellow clar	123	323	to too or (,p.m.	Soil	 ^ -	1 6	
Fine wash gravel	123	+-		Gravel and boulders	16	22	+
fallow clay	+	610	 	Oravel, boulders and clay	158	190	
Flue clay	273	845	 	tellow clay	39C	570	
Rock	235	996	Whiter here	Pive clay	370	740	
Clay	110	1100	WINDER HERE	Bosalt boulders in clay	22	360	
Rock	224	_		Plue clay	38	230	
	+	1324		Paralt and cloy	6	9)6	
Blue clay	15	1 3 3 3 3		Plack thealt	174	1170	
Basalt rock	40	1379	Water hore	Barult rad sec clay	35	1198	
Blue clay	20	1399		Res clay	112	1310	
Red rock	155	1554	Water here	Red backlt	25	1335	
Gravel	3	1557		Plack basalt, very nard	71	1403	
			Porton of hole	Brown basalt	41	1450	
				Black baselt	7C	1490	Pottom of original well
				1955 as follows:			We'l deepened by Durand
			Index number 98-H				
Inion Pacific, Hunley #1	-		43-273-20-M	Black basalt, mard	3-	1497	
			[Gode: Tp., R., Sec., 2 Sec.)	Plack basalt	10	1509	
CATION:			D C B A	Prown basalt	15	1524	
orrow Count	;у		E F G H	Frown basalt (nard)	12	1536	
matilla Quadrangl			H T K 1				Bottom of hole
N 27E 20 IV of SW	section		N P Q R	Chains record: 18° from 0' to	1016! 1335!		
				12" liner to 15		ļ	
				Mater temp, 78°F Pressure a flow was 4 g.p.m. encountered	dt 13301.	At 1395	flow had increased to 17
ATISTICS:		Use sto	stic*	g.p.z. Flow continued increase foot level.	ing to 966	g.p.m.	during drilling to the 149
ll type-Dug Elevation (1			strial x shandoned x				
11 type-Dig Elevation (1 Drillsd x face) Driven above	land sur- ft.	insu	mation dry hole			20 1042	
11 type-Dug Elevation (1 Drillad x face) Driven above below		insus irrig	gation dry hole	Flow record: At 1490' - 300 g.	p.m. Feb.	2. 1943	i e
11 type-Dig	ft.	incus irria munic munic mincludes	gation dry hole	1490' 360 g. 1490' 171 g. 1490' 171 g.	p.m. Apr. p.m. Nov.	12, 1943 1944 8. 1944	
11 type-big	Georg	intus irrig munic *includes ge Scott nal drill	gation dry hole ripal producer stock wells	1490 190 6. 1490 171 6. 1490 171 6. At 1523 334 6.	p.m. Apr. g.m. Nov. p.m. Dec.	2, 1943 1944 8, 1944 12, 1945	
	Georg Origin	intus irrig munlo sincludes ge Scott nel drill ress	gation dry hole ijpal producer stock wells lers nams Milton, Gregon	147.1 /50 /5. 147.1 /171 /5. 1470.1 /171 /5. 1470.1 /171 /5. 14152.1 /171 /5. 1521.2 /55 /5. 1531.1 /400 /5. 1530.2 /55 /5.	n. Apr. n. Kov. n. Kov. n. Jec. n. Jan. n. Jan. n. Jan.	2, 1943 1944 2, 1945 3, 1945 3, 1945 9, 1945 2, 1945	
Il type-Dug Elevation (1 Drillsd x face) Driven above below mal depth 165' nion Pacific Railrond ners name Addrass Umaha, Sebraska	Georg Origin Add:	incus irrig munic sincludes se Scott nal drill rees of dril	gation dry hole ripal producer stock wells	1470' 190 g. 191	n. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 1944 2, 1945 3, 1945 19, 1945 2, 1945 1, 1945	
oll type-Dag Elevation (1 Drillad x face) Driven above below anal depth 165' (mion Pacific Railrond mers name Addrass Omaha, Sebraska	Georg Origin Add: Date from Decirces: re-	industries se Scott nal drill ress of drill repend cased	gation dry hole producer stock wells lers name Hilton, Oregon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	n. Apr. n. Kov. n. Kov. n. Jec. n. Jan. n. Jan. n. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dug	Georg Origin Add: Date from Decirces: re-	intus irrig munic munic mincludes ge Scott nai drill resa a of dril epened	gation dry hole ijpal producer stock wells lers nams Milton, Gregon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dug Elevation (1 Drillad x face) Driven above below nal depth 1651 nion Pacific Railroad ners name Addrass Cmaha, Nebraska is record compiled by U.S.W. ta secured from the collowing sou	Georg Origin Add: Date from Decirces: re-	industries se Scott nal drill ress of drill repend cased	gation dry hole producer stock wells lers name Hilton, Oregon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dug Elevation (1 Drillad x face) Driven above below nal depth 1651 nion Pacific Railroad ners name Addrass Cmaha, Nebraska is record compiled by U.S.W. ta secured from the collowing sou	Georg Origin Add: from Detrices: re- cle	inverse inverse inverse inverse includes in the includes in the includes in the include in the inverse includes inverse in	gation dry hole producer stock wells lers name Hilton, Oregon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Drilled X face) Driven above below b	Georgi Origi Add: Date from Des	inverse invers	gation dry hole producer stock wells lers name Hilton, Oregon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
nli type-Dig Elevation (1 Driven above below nal depth 165! Inion Pacific Railroad Iners name Addrass Omaha, Mebraska its record compiled by J.S.W. ta sacured from the Jollowing sou nion Pacific Railroad Officials te compiled February 1948	Georg Origin Add: Dat: from Desirces: re- che	inverse invers	metion dry hole ipal producer s stock wells lers name Milton, Oregon lling 1915 by Remarks Yell used till 1945 and	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dug	Georg Origin Add: Dat: from Desirces: re- che	inverse invers	Remarks Well used till 1945 and abandoned because \$2 well yeided experiences with the second secon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dig Elevation (1 face) Drilled x face) Driven above below nal depth 165! nion Facific Eailrond ners name Addrass Omaha, Sebraska is record compiled by J.S.V. ta secured from the following sound on Facific Railroad Officials ta compiled February 1948 Naterial	Georg Origin Add: Dat: from Desirces: re- che	inverse invers	Remarks Well used till 1945 and abandoned because \$2 vell	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	
Il type-Dig Elevation (1 face) Drilled x face) Driven above below nal depth 165! nion Facific Eailrond ners name Addrass Umaha, Sebraska is record compiled by J.S.V. ta secured from the following sound on Facific Railroad Officials ta compiled February 1948 Naterial	Georg Origin Add: Dat: from Desirces: re- che	inverse invers	Remarks Well used till 1945 and abandoned because \$2 well yeided experiences with the second secon	147.1 /50 /5. 1470.1 171 /5. 1470.1 171 /5. 14 1523 334 /5. 1522 355 /5. 1531 400 /5. 1536 455 /5. 1536 256 /5. 1536 25 /5.	m. Apr. .m. Aov. .m. Dec. .m. Jan. .m. Jan. .m. Jan. .m. Jan. .m. Jan.	2, 1943 944 2, 1945 3, 1945 9, 1945 2, 1945 11, 1945 2, 1945	

Union Pacific, Neachan			Index number 48-U 18-35Z-3-F
TOD AND			(Gode: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Umatilla Count	7		E F G H
Unmapped Quadrangl	•		M T X J
18 35E 3 SET of SW2 Tp. Range Section Fractional	section		N P Q R
.,			
STATISTICS:			etus- Vell status-
Wall type-Dug Elevetion (1: Drilled Tace)	ft.	Use at doma	atica abandoned abandoned
Drivan above below		irri	gation dry hole
Final depth 2791			cipel producer z
Union Pacific Railroad	A. A.	Durand	à Son lera name
Owners name Address Onaha, Hebraska	Origi Add	nel dril	lera mame Walla Wella, Washington
			lling Vinter 1943-44
This record complicable 3.5.W. data secured from the collowing sou	from De	epened_	_
data secured from the collowing sou	rces: re	-cesed	
Mr. Cole, U. P. Geologist			
Date compiled October 1944	De	te	
Material	Thickness	Depth	Remarks
	(feet)		Artesian flow 25 g.p.m.
Top soil	3	3	Pumps 314 g.p.m.
Top soil and boulders	10	13	Bottom 20" casing st -11,5"
Black basalt	10	28	Small state 520 at -28
Black basalt with clay seams	16	44	Small state 820 at -20
Black basalt	2	46	
Bine clay		60	Water raised to top of pipe
Lava sand	14		
Disintegrated laws and clay	,	63	Flow 22.5 g.p.m. at -63' Flow 35 g.p.m. at -68' later decreased to 25 g.p.m.
Lava sand	12	75	later decreased to 25 g.p.m.
Black basalt, solid	5	.80	
Black besalt, seame	5	85	
Black baselt, solid	10	95	
Bleck baselt, seams	3	98	
Black basalt, solid	10	108	
Gray bassit, solid	8	116	
Gray baselt mixed with laws	6	122	<u> </u>
cinders and blue clay		122	
Black basalt sixed with lava	5	127	Bottom 16 ⁿ emsing at -125.1
Black basalt, some lava cinders		107	Bottom to this ing at -123.1
mixed thru rock	19	146	
Black basalt, wery hard	31	177	
Black rock mixed with blue clay	12	189	
Basalt - hit small crevice	80	200	
fitted with blue clay at -2191	88	277	
Shattered basalt and blue clay		279	
			Hole started caving at -279'. Final depth hole
			when cleaned out after pumping test, -278',
		-	Pumps 314 g.p.m. in practice with pumping head
			of -24,41.
		_	
		ļ	
		<u> </u>	
		<u> </u>	4
		<u> </u>	
		<u> </u>	
		I	

Union Pacific, Munley ∳2			Index nomb	er 45-271	E-20-	н	
Well name			file number (Code: Ty.,				
LOCATION:							_
Horrow County	y			D	C.	В	
Umatilla Quedrangle				E	,	G] H
48 278 20 BW of SW				N F	L P	ď	R
Tp. Range Section Fractional	⇒ec €10ft			_		<u> </u>	
STATISTICS:		_					
Well type-Dug Elevetion (1st prilled x face)	end sur-	de at	stic*		11 =		
Hell type-Dug Elevation (10 prilled x priven above below		irri	strial x		dry	hol	<u>-</u> -
Final dapth 457'			cipal s stock well		pro	1uca.	
Union Pacific Railroad	A. A.	Durand &	Son lers name				
Addrese Onaha, Bebraska	Ad	dresa	Valla Valla,	Vash	lngt	on.	
			lling Oct.	1944	to J	nne	1945
This record complied by E.S.W. deta secured from the following sour	from D	e-cased	_				
State Engineer	¢	leansd	p <u>a</u>				
Post consider Fahrmany 1948	-	-14					
Date compiled February 1948		s Depth		lan1			_
Naterial	(feet)	(feet)	······	lome rk			
Black sand	145	145	Hols diame	ter 1	2*		
Coarse sand and gravel	170	309					-
Gray basalt Baselt and clay	139	309					
Gray busalt	. 13	383					_
Dark gray rock	5	388					
Gray basalt	69	457	Bottom of				
	İ		encountere when drill	ing c	omol	eted	V8.0
			43'. Draw	down	9'a	t 30	10 g
			in 3 hr. a	<u>nd 37</u>		• •	
			in 3 hr. a acasonal v lndex numbe	r - :	5<-0	note	d.
			seasonal v	r — :	100 5<-U	note	· · · ·
Well name			lndex number 2.	r — :	100 5<-U	note	5ec.
Well name LOCATION: Umatilla County			lndex number 2.	r :	5<-JJ -7-H	note	5ec.
Well name LOCATION: Umatilla Gounty Pendlaton Quadrangle	•		lndex number 2.	r - :	5<-U -7-H Sec.	note B	5ec.
	•		lndex number 2.	r - :	5<-U -7-H Sec.	B G	Sec.
Pendleton Quadrangle 28 322 7 SW4 of SW4 TD. Range Section Fractional :	•		lndex number 2.	Pariat	55<-U	B G K	A H
Well name LOCATION: Cmatilla County Pendleton Quadrangle ZE 3ZE 7 FWi of SWi TD. Range Section Fractional is STATISTICS:	section	Use et	lndex numbe 2 File number (Code: Tp.,	PRINTING DE EMM	55<-U	B G K	A H J R
Mell name	section		lndex numbe 2. File number (Code: Tp.,	Pariat	Soc. C P aban	B G K Q	A H J R
Well name LOCATION: Umatilla County Pendleton Quadrangle Ty: Range Section Fractional a STATISTICS: Well type-Dig Elevetion (in face) Drilled E face) Driven below	section and sur-	irri muni	lindex numbe 2 File number (Code: Tp., stus- etic* strial x gation cipal	r -: : N-32E. R., : D E M N	c r	B G K	A H J R
Mell name	and eur-	irri muni *include	lindex number 2. File number (Code: T).,	r -: : N-32E. R., : D E M N	Sec. C P L start dry	B G K	A H J R
Well name LOCATION: Umatilla County Pendleton Quadrangle The Range Section Fractional of Fraction Pacific Failmand	section and eur- ft. G. S. Origi	irri muni *includa Scott	stus- circa strial x gation cipal s atock wells	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Well name LOCATION: Umatilla County Pendleton Quadrangle The Range Section Fractional of Fraction Pacific Failmand	end eur- ft. G. S. Orig: Add	irri nuni *includa Scott Inal dril	stus- cice strial x gation cipal s atock well- lers name Kain St., M	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Mell name LOCATION: Cmatilla County Pendleton Quadrangle ZE 32E 7 FWi of SWi Typ. Range Section Fractional is STATISTICS: Mell type-Dug Elevetion (in face) Driven shows below Final depth 1881 Union Facific Enilroad Owners name Address Cmahs, Nebrasks	e ection and eurft. G. S. Orig: Add	irri muni *includa Scott inal dril. irees te of dri	stus- circa strial x gation cipal s atock wells	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Mell name LOCATION: Cmatilla County Pendleton Quadrangle ZE 32E 7 FWi of SWi Typ. Range Section Fractional is STATISTICS: Mell type-Dug Elevetion (in face) Driven shows below Final depth 1881 Union Facific Enilroad Owners name Address Cmahs, Nebrasks	section and eur- ft. G. S. Orig: Add	iniu irri muni *includa Scott inal dril lrees te of dri	stus- strial x gation cipal s atock wells lors name Main St., H lling 1916	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Meli name LOCATION: County	section and eur- ft. G. S. Orig: Add	irri zuni *includa Scott inal dril irees te of dri'	stus- strial x gation cipal s atock wells lors name Main St., H lling 1916	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Mell name LOCATION: County	0. S. Original And Part of the Color of the	iniu irri muni *includa Scott inal dril lrees te of dri	stus- strial x gation cipal s atock wells lors name Main St., H lling 1916	P S S S S S S S S S S S S S S S S S S S	Soc. C T L p	B G K Q	A H J R
Mell name County County	section b. S. Orig: Add from Deces; re	irri zuni *includa Scott inal dril irees ie of dri espened cased eaned	atua- etic* strial x gation cipal a atock wellar stronger with the	P S S S S S S S S S S S S S S S S S S S	Sec. C. T. L. Bacanata	B G K Q	A H J R
Meli name Location: County	ond our-ft. O. S. Original Additional Data from Deces: cl	irri zuni *includa Scott inal dril irese te of dri sepened cased eaned	stus- strial x gation cipal s atock well lors name Nain St., H lling 1916 by R Role diamet	P 32F. R	Sec. C T L P abar abar prod	B G K Q Q Section hold hold hold hold hold hold hold hold	A H J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SVI TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in face) Driven below below Final depth 1881 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officiale Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	stus- cic* strial x gation cipal s atock well lors name Nain St., H lling 1914 By R Rale diamet 75 drawaw 550 K.P.M.	P N-32E	Sec. C P Il st abar dry prod o teled 1:	B G K Q Q	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SVI TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in face) Driven below below Final depth 1881 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officiale Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	stus- etic* strial x gation cipal s atock wells by Role diameter 75' drawser	Purple Pu	c C C P P Sec.	B G K Q Q STEER ST	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SVI TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in face) Driven below below Final depth 1881 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officiale Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	atua- etic* strial x gation cipal s atock wells lers name Main St., M lling 1914 by R Role diamet 75° drawlow 500 g.p.m.	Purple Pu	Soc. C C P abary prod	B G K Q Q STEER ST	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SVI TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in face) Driven below below Final depth 1881 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officiale Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	atua- etic* strial x gation cipal s atock wells lers name Main St., M lling 1914 by R Role diamet 75° drawlow 500 g.p.m.	Purple Pu	Soc. C C P abary prod	B G K Q Q STEER ST	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SV of TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in Driven below Final depth 1880 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officials Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	atua- etic* strial x gation cipal s atock wells lers name Main St., M lling 1914 by R Role diamet 75° drawlow 500 g.p.m.	Purple Pu	Soc. C C P abary prod	B G K Q Q STEER ST	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SV of TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in Driven below Final depth 1880 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officials Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	atua- etic* strial x gation cipal s atock wells lers name Main St., M lling 1914 by R Role diamet 75° drawlow 500 g.p.m.	Purple Pu	Soc. C C P abary prod	B G K Q Q STEER ST	A H J J R
Meli name LOCATION: Umatilla County Pendleton Quadrangle 228 322 7 EV of SV of TD. Range Section Fractional a STATISTICS: Well type-Dug Elevetion (in Driven below Final depth 1880 Union Facific Esilroad Deners name Coaha, Nebraska This record compiled by E.S.V. late secured fron the Collowing sour State Engineer and U. P. Officials Date compiled February 1948 Material	section b. S. Orig: Add from Deces; re	scott inal dril inces te of dri espened -cased eaned tte	atua- etic* strial x gation cipal s atock wells lers name Main St., M lling 1914 by R Role diamet 75° drawlow 500 g.p.m.	Purple Pu	Soc. C C P abary prod	B G K Q Q STEER ST	A H J J R

land sur- Uses ft. d i i incl Original i Address	Indes stock wells and & Sou Iriliers name Walla Valla, Vasbington drilling Oct, 1941 to July 1942 ed
land our Use of the land of th	e status- constite* In P Q E Woll status- domestic* Industrial z obandoned dry nole producer z ludes stock wells out & Sock Tillers name Valla Valla, Vasbington drilling Oct, 1941 to July 1942 ed
land sur- Uses ft. d incl A.A. Dere Original 1 Address Date of from De pane urcae: re-case cloaned	working work with a status of the status of
Land sur- Uses ft. d ft. d incl A.A. Exce Original 1 Address Pate of from De pane cloaned Date Date	e status- domestic
land sur- Use fr. d fr.	e status- domestic* Inaustrial
A. A. Dure original i Address Date of from De pane urcas: re-case cleaned Date Date	Indes stock wells and & Sou Iriliers name Walla Valla, Vasbington drilling Oct, 1941 to July 1942 ed
A. A. Dure original i Address Date of from De pane urcas: re-case cleaned Date Date	Indes stock wells and & Sou Iriliers name Walla Valla, Vasbington drilling Oct, 1941 to July 1942 ed
A. A. Dure original i Address Date of from De pane urcas: re-case cleaned Date Date	Indes stock wells and & Sou Iriliers name Walla Valla, Vasbington drilling Oct, 1941 to July 1942 ed
Pate of from De pena urcas: re-case clumad	Walla Walls, Washington drilling_Oct, 1941 to July 1942 ed
Pate of from De pena urcas: re-case clumad	Walla Walls, Washington drilling_Oct, 1941 to July 1942 ed
from De appendurces: re-case closued	od ed
Date	ed d by
Date	d
Thickness Dep	
Thickness Dep	
(feet) from	th Remarks
	t) Kumara
7 - 1	1
7 1	
· o	
3 21	
8 29	
14 45	Small quantity of water
3 46	
14 60 seams	
15 75	
10 85	
16 10	
2 10	
n 24 12	
11 13	
43 18	
15 20	
7 21	
7 21	
11 22	 -
7 23	-
26 26	
19 28	
7 28	27 Vater bearing
T ==	Bottom of nole
	SWL 65', Tested 638 g.p.m. with 17' drawdown. Casing
7	with 17' drawdown. Casing 12" seated at 20' 10" and
	10" seated at 54' 10".
1	

<u> </u>			Index cumber 82-U
Union Pacific, Umstilla			57-287-18-H
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Umatilla Count	7		K P G He
Umntilla Quadrangle	a		H L E J
Tp. Range Section Fractional	201120E		R P Q R
STATISTICS:			
Well type-Dug Klevation (1. Drilled Tase)	and sur- ft.	dom-	SIL 1-3
Drivenabove		inau lri i	strial abandoned gration dry hole cipal producer t
Final dapth 1921	 ,	include include	cipal producer x a stock wells
Union Pacific Railroad	George	Scott	
Owners name Address Omana, Bebraska	Origin Addi	nal dril reco	lers rame Main St., Milton, Oregon
	Det	e of dri	lling June to August 1915
This record compiled by E.S.V. data secured from the relieving sou	from Dec	pened_	-
	cles; re-	ensed_	
Union Pacific Railroad Officials			
Date compiled February 1948	Dat		
Neterial	Thickness (feet)		Remarks
		40	Surface water at 40'
		55	Light flow in bedrock at 55
		77	Vary hard
		80	weak flow
	ļ	114	nard rock
		120	Solid rock
	ļ	137	Solid rock
		150	Solid rock
		152	Soft porous rock
		170	Loose basalt
Disintegrated water bearing	-		
Lock	22	192	Bottom of hole
			Index number - 129-U
U. S. Forest Service, Uklah Well name	-		55-31E-14-E
			(Code: Tp., R., Sec., Sec.)
LOCATION:			D C B A
Umatilla Count			E F G H
Unmapped Quadrangl 5S 31E 14 SW4 of EW4	.0		K L K J
Tp. Range Section Fractional	section		N P Q R
STATISTICS:			
	and sur-	Usa st	Atus- Toll status-
Well type-Dug Elevation (1 Drilled x face) Driven above below	ft.	dome inun	stic* I shandored
Final depth 400°		ann i	cipal producer
		"include	s stock wells
U. S. Porest Service Owners name	Ortet	Durand a	lara nama
Address	- Add:	T988	Malia Walla, Washington
	-	of dri	lling
This record compiled by E.S.W. data secured from the following sou	rcss: re-	-сазец	<u>-</u>
U. S. Forest Service Officials	cle	60000	by
B	_		
Date compiled March 1958	Thickness		
Keterial	(feet)	(feet)	Remarks
No log avallabla			
Forest Service notes on file			
		400	
Casad to 350'. Notes indicate that formations apparently	1	<u> </u>	
are clays and sand with sand in bottom. Pumps log.p.m.			
	1	ı	1

			Index number 14-U	lnder number none-U
Well name			58-35E-1-E	Yait †1 Well hame [Code: To. R., Sec., 2 Sec.]
			(Code: Tp., R., Sec., Sec.)	
LOCATION: Umatille County	,		D C B A	LOCATION: D C B A Umatilla County
Unmapped Quadrangle			Z 7 G H	0.14-1-10
5# 35% 1 SV of FV			M L K J	2E 28E In Service Canyon
Tp. Range Section Fractional s	ection.		F P Q R	Tp. Range Section Fractional section
STATISTICS:				STATISTICS:
Well type-Dug Rlevation (legarithm face)	and sur- ft.		etic*	Well type-Dug Elevation (land sur- Use status- Well status- foce) ft. domestic* x
Driven above below		irri	strial x abandoned gation dry hole	Driven above innustrial abandoned below irrigation dry hole
Final depth 528'		nuni include	cipal producer x	Final depth 400' nunicipal producer x *includes stock wells
Utan Canning Company		Durand		Joe Vaic C. E. Levis Owners name Original drillers name
Owners nave Address Freewater, Oregon	OT1 g1	rees	lars name Walle Walla, Washington	Owners name Address Pine City, Oregon Address Fendleton, Oregon
	Det	e of dri	111ng Nov. 1944 to Feb. 1945	Dete of drilling 1920
This record complied by E.S.W. data secured from the following sour	from De	epened -cesed	-	This record compited by H.S.V. from Despensed data secured from the collowing sources: re-cased
Driller	e1	eaned	ру	Verbal report by the driller
	-			1.2.20/4
Date compiled January 1948	Thickness	Depth		Date compiled July 1947 Date [Thickness Depth]
Natorial	(feet)	(Feet)	Remarks	Material (feet) feet)
Gravel and boulders	20	20	Hole 16" to bottom	Levis reports sand in botton
Grevel	25	30 55	16" OD casing set to	but rock above 400 Good volume of water encountered around 200°.
Clay and gravel	9	55	, x07: J	
Tellow clay and gravel	28	92		
Solld black basalt	15	107	Fump test 24 hrs. continuous	
Black baselt and blue shale	7	114	SWL 49 Main pumping point	
Black basalt	4	118	as follows:	
Gray & brown basalt & blue sha	le 7	125	Pressic V.L. G.P.M.	
Gray baselt and blue shale	20	145	70' 1029	
(blue Oray red & brown basalt & shale) 11	156	731 1040	
Oray & brown basalt with blue	lay 2	158	7951 1265	
Black basalt Black & red basalt with little	28	186	81' 1350	Vais ∮2
yellow clay	7	193		Well name File number (Code: Tp., R., Sec., Sec.)
Black basalt		198		LOCATION:
Black baselt and blue shale Black and red basalt with	7 8	205		Unatilia County E 7 G H
pellow clay	8	213	-	Quadrangle M L X J
Elack basalt with little clay	7	228		Tp. Range Section Frectional section Vais \$1.
Herd black basalt	5	233		
Gray basalt	52	285		STATISTICS:
Herd blue baselt	7	292		Well type-Dig
Hard gray basels	109	401		Driven ebove investrial abundoned to irrigation dry hole producer I municipal producer I
Ward black basalt	36	437		includes stock wells
Herd grey basalt	31	408		Joe Teis C. E. Levis Omers name Original Trillers name Address Pine City, Oregon Address Pendleton, Oregon
Soft and nard black baselt	60	528		
				Date of drilling
				This record compiled by I.S.V. from Despended data secured from the following sources: re-cased
				Verbal report by the driller
				Date compiled July 1947 Date
	_			Naterial Thickness Depth Remarks
				Yo log made ebout 200 Lewis reports that this
				so log made court 200 Levis reports that this veil right that this it been cased properly.
				11 0000 0000 1100001
	_			
				1

Weagbo			Index number 182-M 45-255-7-P File number	Ward Well name			Index number 86-U 3N-28E-8-P File number
			(Code: Tp., R., Sec., Sec.)	WOLL HADO			(Code: Tp., R., Sec., Sec.
LOCATION:			D C B A	LOCATION:			D C B A
Norrow Co	unty .		E F G H	Omatilla	County		E F G H
Biniock Island Quadra	ngle		M T K 1	Umatilla Quas	drangle		
4N 25E 7 SE of S	s v }		├ ┈┠┈┠┈┢ ┯┥	37 26% 8 SE; of			N L X J
Tp. Range Section fraction	al section		N P Q B	Tp. Range Section Fract	lonal section		N P Q B
STATISTICS:				STATISTICS:			
Well type-Dug Elevation prilled F fece)	(land sur-	Uae et	atus- Well status-		ion (land sur-		
Drivenabove	ft.	ina	strial shandoned	Drilled x face) Driven sbore	ft.	in.	estic"strislsbandoned_x
'inal depth 83'		mun;	gation dry hole cipal producer	Final depth 1000'		irr:	igation dry hole icipal producer
		"include	s stock wells		··· · · · · · · · · · · · · · · · · ·		os stock wells
W, Vango	¥1111	am Ille	lers name			E. Ward	
Address Boardman, Oregon	Add:		Portlend, Oregon	Owners nama Aldress		ginal dril ddress	lists hame
	Det	a of dri	lling Spring 1947			ete of dri	illing 1905 to 1910
This record compiled by H.S.W.	from De	epened_		This record complied by 3.5.3		Deopened .	
ats secured from the collowing	sources; re	-cesed	by	data secured from the Collowin	ng sources:	re-cased_	 ku
Owner				Mr. Malcolm, Echo, Oregon, an other local citizens	nd several	creamed	by
					_		
ate compiled Herch 1948	Da ¹			Date compiled July 1947		Date	
Meterial	Thickness (feet)	(feet)	Remarks	Matorial	(feet)	ss Depth (fest)	Remarks
Soil and clay	13	13	Casing: 6" to 13"	This well was drilled in about funds for the drilling were d	it 1901 to 191	O theer th	cirection of Mr. C. E. Ward.
Solid rock with hera and	57	70		the whole undertaking being a	pioneeria; v	onfure	e well was lost and has
				presumably been long since on that an abundant flow of arte	sian water wa	s incounte	fed before the well was lost.
Seft green rock	13	83		The writer mas discussed the of Cmatilla County, including	history of th	is well •:	in man / of the older resident:
		 	Bottom of bols	time the arterian water was e	ncountered.	Acdordina	to Mr. Helcom the artesian
		<u> </u>	Well began flowing at about 75 - increasing to 80.	water was encountered at a de loss of all water. It is pre	sused that a	crevice wa	encountered as the water
			Ho rate of flow or pressure	could be heard roaring below. Many wagon loads of rock were	dumped in th	e sole in	unsuccessful effort to plus
			measurements made, but pressure insufficient to	the crevice. The well was ev Several layers of gravel and	entually plug clay, includi	get near t ng beds of	he surface and abandoned. "white alkali" were en-
			service domestic Vater system without mechanical	countered (presumably interte	dded with bas	al(s) to t	He 5/0 foot level, below which
			boost.	and a mid blue lock lordati	rd rue co	q to 0 th	4 110+61
	1						
(artier			ludex number 188-M	Varies			ladex number 163-U
faguer ell name			luder number 188-M 451-25E-18-K File number (Onder Tp., R., Sec., Sec.)	Varret. Well name			Index number 169-U 1N-91E-8 File number Gode: Tp., R., Sec., Sec.
dagner ell name			#11-25E-18-K File number (Code: Ty., R., Sec., Sec.)				1N-21E-8 File number (Code: Tp., R., Sec., 2 Sec.)
OCATION:	inty		4:1-25E-18-E File number (Code: Tp., R., Sec., Sec.)	Well name	County		IN-DIE-8 Fite number (Code: Tp., R., Sec., 2 Sec.)
OCATION: COTTON COU			#::-25E-18-K File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F C H	Well name LOCATION: Castilla	County		12-71E-6 File number Code: Tp., R., Sec., Sec. D C B A E F C H
OCATION: forrow Cou Blelock Island Quadrat 25 19 NW of SE	ngla	_	#: -25E-18-K File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	Well name LOCATION: Castilla			IX-91E-8 Fite number (code: Tp., R., Sec., Sec., D C B A E F G H M L X J
OCATION: Correy Cou	ngla		#::-25E-18-K File number (Code: Tp., R., Sec., 2 Sec.) D C B A E F C H	Well name LOCATION: Cmatilla Ferfleton qued	rangle		12-71E-6 File number (Code: Tp., R., Sec.,
	ngla		#: -25E-18-K File number (Code: Tp., R., Sec., Sec.) D C B A E F G H M L K J	No 11 name LOCATION: Cmatilla Cmatil	rangle		IX-91E-8 Fite number (code: Tp., R., Sec., Sec., D C B A E F G H M L X J
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	(feet) (fee	74 6* hole	from 0 - 16'.]	Conglomerate		350	350	
To log available	 	74 6" hole 5" hole Well fl	from 16 to 741.] '	Pasalt		316	666	Bottom of hole, Water encountered in soit homey-
	 	Vhen fi	rst drilled, this we	1				<u> </u>	comb baselt. Good stand in
		for 3 d	owed to flow uncappe lays, Under this	ed.					hole, but only a good domestic well.
		Pool we	tance, the Briggs &				<u> </u>	<u> </u>	
		After t	this well was capped ald restricted, flow				<u> </u>	+	-
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Wattenbursher			nmber 156-U 25-27E-34-B		Vaber				Index number — 67-U 118-302-4
Wattasburgher Well name		File aur	2H-27E-34-H	<u></u>	Well name				1H-301-4 File number (Code: Tp., R., Sec., 2 Sec.
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Mell name LOCATION: Unatilla Count Duntilla Quadrangi 28 272 34 5½ of 5½ Tp. Runge Saction Fractional STATISTICS: Well type-Dug Driven above below Final depth 72! Len Wattenburgher Corners name Address Rcho, Oregon This record compiled by E.S.V. data secured from the following soc	land sur- U ft. C. E. Le Original Addres Free Dasp	File aum (Code: T	Z2-78-34-B Z2-78-34-B D C B A E F O B M L K J N P Q R Well statua- abandoned dry bole- produces X		Well name Location: Unatilla Unatilla Tp. Range Section STATISTICS: Well sype-Dug Drilled x Driven Final depth_not knaya Conningham Sheep Componence name	Quadrangle Fractional Elevation (1 fees) above below etan, Oregon	section Land surft. Original Additional Date of the Control of th	dome line irri muni irri muni irri muni irri muni include incl	Table number File number (Code: Tp., R., Sec., g Sec.
Duntilla Count	land sur- U ft. C. E. Le Original Addres Free Dasp	File aum (Code: T	Z2-78-34-B Z2-78-34-B D C B A E F O B M L K J N P Q R Well statua- abandoned dry bole- produces X		Well name LOCATION: Unatilla Unatilla IF JOE 4 Tp. Range Section STATISTICS: Well type-Dig Drilled x Driven Final depth not known Cunningham Sheep Compounces name Address Pendi	Quadrangle Fractional Elevation (1 fees) above below ston, Oregon by S.S.V.	section Land surft. Original Additional Date of the	dome in: in: include final dri ddrese ate of dr beepend ce-csed bloamed Walla	Table Number File number (Code: Tp., R., Sec., Z Sec. D C B A E F O H M L K J N P Q R tatus- setic T abandoned Z dry bole icipal producer es stock wells liters name
Mell name Location: Unatilla Count Duntilla Quadrangi 28 272 34 5½ of 5½ Tp. Range Section Fractional Oparismos: Well type-Dug Driven above below Final depth 72' Len Vattenburgher Owners name Address Robo, Oregon This record compiled by E.S.V. data secured from the following soc	land sur- U ft. C. E. Lie Original Addres Pate of	File aus (Code: T (Co	Z2-78-34-B Z2-78-34-B D C B A E F O B M L K J N P Q R Well statua- abandoned dry bole- produces X		Well name LOCATION: Unatilla Unatilla IF JOE 4 Tp. Range Section STATISTICS: Well type-Dig Drilled x Driven Final depth not known Cunningham Sheep Compounces name Address Pendi	Quadrangle Practional Elevation (1 fees) above below stor, Oregon by S.S.V. Tollowing sou	section Land surft. Original Add Defrom Durces: r	domelone domelone domelone de la constanta de	THE DUE TO THE PRODUCT OF THE PRODUC
Mell name LOCATION: Dentilla Count Dentilla Quadrangl 28 278 34 5t½ of 5t½ Th. Range Section Fractional STATISTICS: Well type-Dag Drilladg Case Driven above below Final depth 72' Len Wattenburgher Owners name Address Roho, Oregon This record compiled by E.S.V. data secured from the collowing son Verbal report by the driller	land sur- U ft. C. E. Le Original Addres free Daspe	File aum (Gode: T	Z2-78-34-B Z2-78-34-B D C B A E F O B M L K J N P Q R Well statua- abandoned dry bole- produces X		Well name LOCATION: Unatilla Unatilla IF JOE 4 Tp. Range Section STATISTICS: Well type-Dig Drilled x Driven Final depth not known Cunningham Sheep Compounces name Address Pendi	Quadrangle Practional Elevation (1 fees) above below stor, Oregon by S.S.V. Tollowing sou	section tand surft. Original Surface	domains in the second of the s	THE DUE TO THE PROPERTY OF THE
Mell name LOCATION: Describing Country Describing Country The Range Section Fractional STATISTICS: Well type-Dug	land sur- U ft. C. E. le Original Addre Pare Clear Free Daspe Tree Clear Thickness Data	File aum (Gode: T	Z3-77-34-B Z3-77-34-B D C B A E F O B M L K J N P Q R Wells Wells		Well name LOCATION: Unatilla Unatilla IF JOE 4 Tp. Range Section STATISTICS: Well type-Dig Drilled x Driven Final depth not known Cunningham Sheep Compounces name Address Pendi	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., S
Mell name Countrols: Count	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aus (Gode: T (Go	ZZ-ZT-J4-B ZZ-ZT-J4-B Nor Dp. R., Sec., Sec. D C B A E F 0 B M L K J N P Q R Well statua- abandoned dry hole— produces— 1916 Remarks		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service
Mell name Countrols	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Gode: T (Go	Z2-78-34-B Z2-78-34-B D C B A E F O B M L K J N P Q R Well statua- abandoned dry hole- produces X Carrier of the control of the contr		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Table number File number (Code: Tp., R., Sec., Z Sec., D C B A E F O H M L K J N P Q R tatus- setic
Well name LOCATION: Unntills Count Unntills Quadrangl TF, Range Section Fractional STATISTICS: Well type-Dug Driven above below Final depth 72! Len Vattenburgher Corners name Address Rcho, Oregon This record compiled by F.S.V. data secured from the collowing soo Verbal report by the driller Date compiled July 1947 Material All hard rock for a total	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Code: T (Co	Z2-78-34-B Z2-78-34-B D C B A E F O H M L K J N P Q R Well statua- abandoned dry hole producer g En 1916 Remarks Artesian flow end at 15 g.p.s. Vel Coller jewes level on hele coller jewes to a hele dry sole produce of the coller jewes level on the coller jewes to a hele dry above the coller jewes level on the coller jewes level on the coller jewes to a hele		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service
Well name LOCATION: Unntills Count Unntills Quadrangl TF, Range Section Fractional STATISTICS: Well type-Dug Driven above below Final depth 72! Len Vattenburgher Corners name Address Rcho, Oregon This record compiled by F.S.V. data secured from the collowing soo Verbal report by the driller Date compiled July 1947 Material All hard rock for a total	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Code: 7 (Co	Z2-78-34-B Z2-78-34-B D C B A E F O H M L K J N P Q R Well statua- abandoned dry hole producer g En 1916 Remarks Artesian flow end at 15 g.p.s. Vel Coller jewes level on hele coller jewes to a hele dry sole produce of the coller jewes level on the coller jewes to a hele dry above the coller jewes level on the coller jewes level on the coller jewes to a hele		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service
Well name LOCATION: Unntills Count Unntills Quadrangl TF, Range Section Fractional STATISTICS: Well type-Dug Driven above below Final depth 72! Len Vattenburgher Corners name Address Rcho, Oregon This record compiled by F.S.V. data secured from the collowing soo Verbal report by the driller Date compiled July 1947 Material All hard rock for a total	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Code: T (Co	Z2-78-34-B Z2-78-34-B D C B A E F O H M L K J N P Q R Well statua- abandoned dry hole producer g En 1916 Remarks Artesian flow end at 15 g.p.s. Vel Coller jewes level on hele coller jewes to a hele dry sole produce of the coller jewes level on the coller jewes to a hele dry above the coller jewes level on the coller jewes level on the coller jewes to a hele		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service
Mell name LOCATION: Umatilla Count Demailla Quadrangl 28 272 34 54 of 542 o	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Code: T (Co	Z2-78-34-B Z2-78-34-B D C B A E F O H M L K J N P Q R Well statua- abandoned dry hole producer g En 1916 Remarks Artesian flow end at 15 g.p.s. Vel Coller jewes level on hele coller jewes to a hele dry sole produce of the coller jewes level on the coller jewes to a hele dry above the coller jewes level on the coller jewes level on the coller jewes to a hele		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service
Mell name Countrols	land sur- ft. C. E. le Original Addre Free Daspe Free Daspe Licet) ff	File aum (Code: T (Co	Z2-78-34-B Z2-78-34-B D C B A E F O H M L K J N P Q R Well statua- abandoned dry hole producer g En 1916 Remarks Artesian flow end at 15 g.p.s. Vel Coller jewes level on hele coller jewes to a hele dry sole produce of the coller jewes level on the coller jewes to a hele dry above the coller jewes level on the coller jewes level on the coller jewes to a hele		Well name LOCATION: Unatilla Unatilla IF 302 4 Tp. Range Section STATISTICS: Well type-Dug Drilled x Driven Final depth not knawn Cunningham Sheep Compowers name Addrone Pendil This record complicate date escured from the Company officials Date compiled Jn.	Quadrangle Fractional Elevation (1 fees) above below etcn, Oregon ay S.S.Y. Following sou	section tand surft. Original Surface	domains in the second of the s	Tile number File number (Code: Tp., R., Sec., Sec., Sec. D C B A E F O B M L K J N P Q B Tatus- setic X service

Walls Springs			Index number 102-M 2N-251-28-D	Index number 2-U
Well name	<u> </u>		File number (Code: Tp., R., Sec., Sec.)	West File number Well name (Code: Tp., R., Sec., Sec.
LOCATION:				LOCATION: D C B A
Morrow County	. v		D C B A	Umntilla County E F G H
Blalock Island Quadrangle			Z F G H	Unmapped Quedrangle M L K J
	•		M L K J	6H 35B 16 EW N P Q R
p. Range Section Frectional	hection		N P Q R	Tp. Range Section Fractional section
TATISTICS:				STATISTICS:
ell type-Dug Elevation (le	and sur- ft.	Ume ste		Well type-Dug Elevation (land sur- Use status- Fell status- face) ft. domestic*
Drivenabove		insus	striel abandoned	Driven above invastrial abandoned below irrigation x dry hole
inal depth 4231 below		munic	gation dry hole	Final depth 171 municipal producer
			e stock wells	
1 Ners hane	Origin	lichoson nal irili	lers name	P. T. and Manny Oliver Owners name Original drillers name
Address drllled originally for t	he addr	rees	lone, Oregon	Address Freewater, Oregon Address
Wells Springs Oll and Gas	Co. Date	e of dril	11ing1931	Date of drilling Oct Dec. 1945
his record complicably E.S.V. ats secured from the spilowing south	from Dec	epened	-	This record complied by E.S.W. from Deepened data secured from the obligations sources: re-cased
Driller	c le	eaned		oleaned by
printer	_			
ste compiledGctober 1947	_ Dat			Date compiled February 1948 Date
Material	Thickness (feet)		Remerks	Vaterial Thickness Depth (feet) Remarks
Course, clear same	40	40	6" hole from ±0' on to	Dirt 20 20 Hole diameter: 8"
Basalt	139	179	bottom.	Quick sand 10 30
Hard blue basalt	33	212		Coarse gravel 10 40
	6	218		Loose gravel 15 55
Contag and seamy basalt	19	237		Cement gravel 21 76
Norder green rock	1		-	, go
Gray basalt	11	248		Doose graves
Soft and green rock	9	257		VIA)
Hard gray basalt	9	266		graves at a death of 261 SWI at developing of drilling was
Soft black rock	24	290		Water lirt encountered at a most of record at 'd'. A seasonal voriation 20'. Ski at hegitaing of 1947 season reported at the 'd'. A seasonal voriation in the water level reported with level lower during whiter souths. Maximum rate of yield in 1947 was 180 g.p.m.
Brown honeycomb	1	291		rate of yield in 1947 was 180 g.p.p.
Soft black rock	10	301		
Hard black rock, shelly	19	320	Hore water and gas	`
Crevices and boulders	31	351		Index minber 190-M Wileon 49-24E-19-M
Medium hard black rock	9	360	dore water et -399'	Well name File number (Code: Tp., R., Sec., Sec.
Hard gray	43	403		LOCATION:
Boulder formation, caving	14	417		No. Trans.
	3	420		Black toland Outstand
Hard blue besalt				
Hard blue besalt Boulder formation	3	423	Bottom of hole	
Boulder formation This was a flowing suring to b	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section
Boulder formation This was a flowing spring to be thereof. Flow green casing means	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section
Boulder formation This was a flowing suring to b	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section N P Q D STATISTICS:
Boulder formation This was a flowing spring to be thereof. Flow green casing means	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section N P Q STATISTICS: Well type-Dug
Boulder formation This was a flowing spring to be thereof. Flow green casing means	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug
Boulder formation This was a flowing spring to be thereof. Flow green casing means	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug Elevation (land sur- Use status- to donestic* x Drivan above invustrial abandoned
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dag Elevation (land surdomestics to the face) ft. domestics to the face) ft. domestics to the face investigation dry hole irrigation dry hole municipal producer Temporal to the face to
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug Elevation (land sur-Diversion of the content o
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dag Elevation (land surdensite to the status-face) ft. domestic to the status-face) ft. domestic to the status-face investing to
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug Elevation (land sur-Diversity of the product o
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dag Elevation (land surdensation to the face) ft. domestic to the face) ft. domestic to the face) ft. domestic to the face investight to the face to
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug
Soulder formation This was a flowing spring to be thereof. Flow green casing measurement water - 80° y.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdemails of the control of t
Boulder formation This was a flowing spring to be thereof. Flow gree casing mea	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICS: Well type-Dug
Soulder formation This was a flowing spring to be thereof. Flow green casing measurement water - 20°7.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks
Soulder formation This was a flowing spring to be thereof. Flow green casing measurement water - 20°7.	3 regin with a	and well	was drilled in the center	Tp. Range Section Fractional section STATISTICG: Well type-Dag Elevation (land sur- Ose status- domestics x dome
Soulder formation This was a flowing spring to be thereof. Flow green casing mean warm water - 80° y.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks
Soulder formation This was a flowing spring to be thereof. Flow green casing mean warm water - 80° f.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks
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Boulder formation This was a flowing spring to be thereof. Flow grer casing measure water - 80° y.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks
Soulder formation This was a flowing spring to be thereof. Flow green casing mean warm water - 80° f.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks
Soulder formation This was a flowing spring to be thereof. Flow green casing mean warm water - 80° f.	3 regin with a	and well	was drilled in the center	Tp. Rance Section Fractional section STATISTICS: Well type-Dig Elevation (land surdomestics top face) ft. domestics top land irrigation dry hole includes stock wells Final depth El' Troy Griffin original fillers base Address Boardman, Oregon Address Esraketon, Oregon Dete of drilling May 1944 This record compiled by N.S.V. from Despend attacement of the compiled warch 1948 Date Naterial Thickness Depth Recarks

Weston City #1			Index number — 25-0 48-35E-22-C
Well Dame	-		File number (Code: Tp., R., Sec., Sec.)
LOCATION:			Years 1915 Kill Berry Berry
			D C B A
Umatilla Count	•		E F G H
Unmapped Quedrang	.•		W L K J
Tp. Range Section Fractional	section		N P Q R
STATISTICS:	_		
Nell type-Dag Elevation (1 Drilled x face) Driven above	ft.	dom	satic"
palon		irri	istrial ebandoned dry hole icipal x producer x
Final depth 534		*include	es etock wells
City of Weston	A. A.	Durand	& Son
Owners name Address	Origi Add	inal dril	llers name Valla Walla, Washington
<u> </u>	Det	e of dri	111ing 1939
This record complid by N.S.W.	from De	epened_	_
this record compiled by A.S.W. data secured from the collowing sou	C I	-cesed	by
U. S. G. S. Ground-Water Division	_		
Date compiled February 1948	De	te	
Material	Thickness (feet)	Depth	Remarks
Soil	(1991)	6	
Bonlders	14	20	
Pasalt honeycomb	10	30	
Basalt honeycomb with clay se	 	34	
Black besalt	18	52	
Gray besalt	6	58	
Gray basalt with clay seams	11	69	
Grny baselt	38	107	
Gray basalt with blue clay see		115	
Gray basalt	10	125	
	-		
Basalt honeycomb with clay	35	160	
Orny basalt	6	166	
Gray basalt changing to black	9	175	
Black basalt	10	195	
Blue clay	5	190	
Gray basalt, hard	30 10	220	
Black basalt - with mater Black basalt changing to gray	45	275	
Gray basalt	5	280	
Gray base_t with black streaks	20	300	
Black baselt, medium hard	30	330	
Black baselt with some clay	10	340	
Black baselt, medium hard	100	446	
Black baselt with clay pockets	20	460	
Gray basalt, very hard	26	486	· -
Gray baselt - some water	22	508	
	26	534	Bottom of hole
Gray basalt with strong water (washed cuttings away)			
			SWL about 1001. Pumps 247 g.p.m. with 8031 drawdown
		<u> </u>	Casing 10" to 40".
for about 15 hour periods during the	at this w	ll is p	suped at the rate of 500 g.p.m. he summer. Otherwise the
to the southeast of the town. No	prings si ata is av	nated a	bout 4 miles up Pine Creek s to the flow of these springs
The city watermaster reports to for about 15 hour periods during it city water supply is derived from to the southeast of the town. No other than the observation that the winter, but taper off to wery litt.	y fill a	he summ	line to capacity during the
According to the County Sanital Eastern Oregon Canning Co. Well #2	ian the c	ty well	quit producing when the
	,		
	·	L	
		L	

Well name			6F-35 F-37-L
			File number (Code: Tp., R., Sec., & Sec.)
LOCATION:			D G B A
Umatilla Coun	ity		E F G H
Unmapped Quedrang	gle els		M L X J
65 358 33 EF2 of SW2 Tp. Range Section Fractional			N P Q R
Tp. Range Section Fractional	section		
STATISTICS:			
STATISTICS: Well type-Dug Elevetion (iand sur-	Use st	totus- Well status-
Driven sbove		inu	estic*
Final depth 150' below		mun:	101 bar broducer_*
		-1mclude	as stock wells
J. T. Wharton Owners name Address Routs fl			llers name
	_	iress	
Proewater, Oregon	Dat	te of dr	111ing 1945
This record compli d by M.S.Y. deta secured from the obliving so	_ from De	espened	<u>-</u>
State Engineer	c:	leaned	ъу
	-		
Deta compiled February 1948		te	· · · · · · · · · · · · · · · · · · ·
Material	Thicknes (feet)		Remarks
Loose gravel	24	24	
Cement gravel	13	37	
Open gravel with light flow	2	39	
Cement gravel	27	66	
Open gravel - water	5	71	
Cement gravel	544	125	
Open gravel and water	3	128	
Cement gravel	22	150	
Hole diameter: 10" SWL 35'.	Maximus ra	de of yi	eld during 1947 seeson reported
llliems Well name	_		Index number 40-U 3M-35E-18-E File number
			(Code: Tp., R., Sec., 2 Sec.)
LOCATION:			D C B A
matilla Count			Z 7 G H
napped Quadrang	le		
napped Quadrang	le		E F G H
nnapped Quadrangi N 35F 18 Egof NEG Tp. Range Section Fractional	le		H L K J
nnapped Quadrangi E 32 18 12 of E2 TP. Range Section Frectional	section		E F G H H L K J N P Q R
nnapped Quadrangi N 35T 18 Pr of M22 D. Range Section Tractional STATISTICS: [61] type-Dug Elevation [1]	section	Use st dome	E 7 G H H L K J N P Q R
	section	Use at dome in au irri	E 7 G H H L K J N P Q R
	section	irri zuni	E 7 G H H L K J N P Q R
Quadrange Quadrange N 25T 18 Fig of NET Property Property Property Property	section and surft.	irri zuni include	otua- stic* X Well statue- stics abandoned dry hole cipal producer x stock wells
Quadrange Quadrange N 15F 18 Friends Fractional	section land surft. A. A. Origi	irri muni include Durand & mal dril	E 7 G H M L K J N P Q R stic* x well statue- strist gation dry hole cipal producer x
	section land surft. A. A. Origi	irri muni include Durand d nal iril	etua- stre' x strei shandoned gation dry hole cipal producer x s Son lers name Wells statue- streix shandoned dry hole cipal producer x stock wells
mapped Quadrang N 15F 18 'Po of MF4 Dr. Range Section Fractional STATISTICS: [ell typs-Dug Drives bove balow blow balow Address Adams, Oregon	section land surft. A. A. Originadd	irri muni minclude Durand d nel dril rees e of dri epened	atua- stic* X Well statue- strisi abandoned gation dry hole cipal producer X s stock wells Son lers name Walla Washington ling July and angust 1947
mapped Quadrang N 15F 18 'Fr of NF4 TD. Range Section Fractional STATISTICS: [ell type-Dug Driven elove balow "inal depth 176" Trank Villians Whate name Address Adams, Oregon his record compiled by N.S.V. ete escured from the Following sou	section land surft. A. A. Original Add Dat from Deterrose: re-	irri muni- include Durand d nal dril rees	atua- stic* X Well statue- strisi abandoned gation dry hole cipal producer X s stock wells Son lers name Walla Washington ling July and angust 1947
mapped Quadrang N 15F 18 'Po of MF4 Dr. Range Section Fractional STATISTICS: [ell typs-Dug Drives bove balow blow balow Address Adams, Oregon	section land surft. A. A. Original Add Dat from Deterrose: re-	irri muni minclude Durand d nal dril rees a of dril spensd -cased	etua- strici strici strici strici gation dry hole cipal producer z son lers name Walla Walla, Washington lling July and Angust 1947
mapped Quadrang N 15F 18 'Fr of NF4 TD. Range Section Fractional STATISTICS: [ell type-Dug Driven elove balow "inal depth 176" Trank Villians Whate name Address Adams, Oregon his record compiled by N.S.V. ete escured from the Following sou	section land surft. A. A. Original Add Dat from Deterrose: re-	irri zuni *include Durand & nal dril rees a of dril spensd -cased	etua- strici strici strici strici gation dry hole cipal producer z son lers name Walla Walla, Washington lling July and Angust 1947
Description Quadrange Quadrange N 15F 18 Friedrick Fractional STATISTICS: [cell type-Dug Care) Fractional STATISTICS: [cell type-Dug Care) Care) Care) Care Common Care Care Care Care Common Care Care Care Care Care Common Care Care Care Care Care Common Care Care Care Care Common Care Care Care Care Care Common Care Care Care Care Care Care Common Care Common Care Care	asection land surft. A. A. Original Addd Date from Desircae: re- cl:	irri muni include Durand à nal iril rees a of dri spensd -cased saned	etua- strici strici strici strici gation dry hole cipal producer z son lers name Walla Walla, Washington lling July and Angust 1947
mapped Quadrang N 15F 18	and surft. A. A. Original Add Dat from Desirone: received:	irri muni include Durand à nal iril rees a of dri spensd -cased saned	atus- stic*
mapped Quadrang N 15F 18 'For NF4 TP. Range Section Frectional STATISTICS: [ell type-Dug Driven elove balow rinal depth 176' Trank Villians mare name Address Adams, Oregon his record compt: d by N.S.V. etc escured from the rollowing sour- citler ats comptled Jamery 1948 Neterial	lead surft. A. A. Original Add Date from Descrete received from Thickness (feet)	irri muni muni minclude Durand d nel dril rees a of dri spensed anned Depth freet)	atus- stic*
grapped Quedrang N 15F 18 'Fr of NF4 TD. Range Section Fractional STATISTICS: [ell type-Dug Driven elove balow rinal depth 176' Trank Villians more name Address Adams, Oregon his record compt: d by N.S.V. etc escured from the rollowing sourtiller ats comptled January 1948 Neterial	lead surft. A. A. Original Add Date from Descree: recipies: recipies (feet) Date of the control of the contro	irri muni include Durand A nal dril rees a of dri spensed cased asaned Depth freet) 10	atus- stic*
grapped Quedrang N 15F 18 'For NET DP. Range Section Frectional STATISTICS: [ell type-Dug Driven elove balow rinal depth 176' Trank Villians mare name Address Adams, Oregon his record compt: d by N.S.V. etc escured from the rollowing sour- citler Attachment Address Neterial Attachment Top soil Cemented gravel	lead surft. A. A. Original Add Date from Descree: reclification (feet) Date of the control of	irri muni muni muni minclude Durand & mal dril rees a of dril spensed ccased samed Depth freet)	atus- stic*
mapped Quadrang N 15F 18 'Fo of NF4 TD. Range Section Frectional STATISTICS: [ell typs-Dug Driven bave balow rinal depth 176' Trank Villians mars name Address Adams, Oregon his record compiled by N.S.V. etc secured from the collowing sou ciller Attachment Address Noterial Top soil Cemented gravel Basalt, hard Flack basalt	lead surft. A. A. Original Add Date from Descree: recipies: recipies (feet) Date of the control of the contro	irri muni "include Durand a mal dril rees a of dri spensed saned Depth feet) 10 14 15 98 100	etua- stic* X Fell statue- stic* X strisi
mapped Quadrang N 15F 18 'Fo of NF4 TP. Range Section Frectional STATISTICS: [ell typs-Dug Driven below final depth 176' Trank Villians mare name Address Adams, Oregon his record compiled by N.S.V. etc secured from the collowing sou ciller Actorial Top soil Cemented gravel Basalt, hard Flack basalt Oray basalt	les section Land surft. A. A. Original Add Distriction Described Principles (feet) Date of the description of the descriptio	irri muni "include Durand a mal dril rees a of dri spensed saned Depth feet) 10 14 15 98 100	etua- stic* X Fell statue- stic* X strisi
grapped Quedrang N 15F 18 'For NET DP. Range Section Frectional STATISTICS: [ell type-Dug Driven below below rinal depth 176' Trank Villians mare name Address Adams, Oregon his record compiled by N.S.V. etc escured from the collowing sou ciller Ate compiled January 1948 Noterial Top soil Cemented gravel Basalt, hard Flack basalt Slack basalt	lead surft. A. A. Original Add Date from Describer received (feet) 10 1 83	irri muni include Purand a mal dril. rees a of dri spensed -cased anned Depth (reet) 10 14 15 98 100 134	atus- stic*
mapped Quadrang N 15F 18 'Fo of NF4 TP. Range Section Frectional STATISTICS: [ell typs-Dug Driven below final depth 176' Trank Villians mare name Address Adams, Oregon his record compiled by N.S.V. etc secured from the collowing sou ciller Actorial Top soil Cemented gravel Basalt, hard Flack basalt Oray basalt	les section land surft. A. A. Original Add section Destrones: recition of the control of the c	irri muni include Durand A mal dril. ress of dri spensed cassed assned Depth freet) 10 14 15 98 100 134 176	atus- stic* x F Q R Well status- stic* stris: gestion dry hole cipal producer is son lers mane Wells wells y Son lers mane Wells wells y Son lers mane Well status- strict y Son lers mane Well status- y Son lers man
grapped Quedrang N 15F 18 'For NET DP. Range Section Frectional STATISTICS: [ell type-Dug Driven below below rinal depth 176' Trank Villians mare name Address Adams, Oregon his record compiled by N.S.V. etc escured from the collowing sou ciller Ate compiled January 1948 Noterial Top soil Cemented gravel Basalt, hard Flack basalt Slack basalt	les section land surft. A. A. Original Add section Destrones: recition of the control of the c	irri auni auni auni auni auni auni auni aun	etua- stic* xxifei shandoned dry hole cipal producer x stres as bandoned dry hole cipal producer x stres anse walla Walla, Washington ling July and Angust 1947 by Recarks

Wild Horse Grange Well name	-		Index number 34-U 48-342-34-Q File number		Vilkinson Fell name			Index number 158-M 4B-23E-33-B File number (Code: Tp., R., Sec., Sec.
			(Code: Tp., R., Sec., Sec.)			··		(Gode: Tp., R., Sec., 2 Sec.
LOCATION:			D C B A		LOCATION:	_		D C B A
Umatilla Count			E F G H	1	Horrow Count			E F C H
Pendleton Quadracgl	.A		H I K J	I .	Blalock Island Quadrangl	•		M L X J
rp. Runga Section Practional	section		N P Q R	7	Tp. Range Section Fractional	section		N P Q R
TATISTICS:				2	TATISTICS:			
ell type-Dug Elevation (1 Drilledx face)	and sur- ft.	Use et	atus- Well status-		Fell type-Dug Elevation (1 Drilled z face)	and sur- ft.	Use et	atus- Well status-
Drivan above		inau	striel abandoned gation dry bole		Driven above below		in .u.	strial shandoned gation dry hole
'inal depth 209'		aun i	cipal producer i	1	final depth still drilling		zun i	cipal producer
Wild Horse Grange	A, A,	Durand &	Son		Frank Wilkinson	A. H.	24wnrds	lers hade
wners name Address Adams, Gregon	Orlgi Add	nal dril	lere mame Walla Wolls, Washington	'	Address Reppner, Oragon	Add	ess Le	xington, Oregon
	Det	e of dri	llingVinter 1946-47		· · · · · · · · · · · · · · · · · · ·	Det	of dri	11ing 1948
his record comptical by N.S.W.	from ne	epened	-	1 3	This record compiled by N.S.W.	from Dec	paned	-
ata secured from the following son	rces: 19	-craed	pà	(ole	ened_	
Oriller					Driller			
mate compiled Jacuary 1948	De	1.0		1	Date compiled March 1948	Det		<u> </u>
Naterial	Thickness	Depth	Remarks]	Material	Thickness (feet)		Remarks
	(feet)	17	Casing: 22: 9" of 6"		5011	12	11	
Clay and boulders					•	7	8)	
Plack basalt	17	20	Static water leval 18'		Hardpan Broken brown basslt	29	371	
(ray besalt	20	30				6	3/3	Very herd and cutting white
Dark hard basalt	30	52			Granite boulder	10	54	, man and conting child
Gray besalt	52	66			Bard dark green rock		59	
Black hasalt (hard and fine)	66	79			Softer dark green rock	5	68	
Dork besalt	79	92		.	Very hard green rock	9		Very hard and cuttings whit
Soft, gray baselt	92	100		.	Granite boulder	5	72	(new bit every 6 inches)
Black basalt	100	112		.	Hard basalt - gray	6	78	
Brown shale	112	117		.	Blue basalt	9	87	
Dark basalt, hard	117	143			Soft red rock, gritty	4	91	
Gray basalt	143	160			Yellow clay (blue streaks)	57	148	
Black basalt (hard streaks)	160	209	Bottom of hole] }	Red and blue clay, firm to has	10	158	
			Some water at 165 to 168] }	Blue clay - runny	8	166	(Still drilling - hole dry-
					Seamy, broken ruck		183	need drill water)
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]				

Vood ward			Index master 33-0 49-348-28
Well name	-		File number
LOCATION:			(Code: Tp., R., Sec., Sec.)
Umatilla Coun	t.		D C B A
Pendleton Quadrana	-		E F G H
the are are			M L K 7
Tp. Range Section Fractional	section		N P Q R
SPATISTICS:			
Well type-Dig Elevation (land aur-	. Use a	
Drilled x face) Driven ebove below	ft.	ın.	ustrial abandoned
Final depth 9791		aur	rightion dry hole producer x
Mrs. C. L. Coodward	A. J	. Durand	
Owners name Address Adams, Oragon	0214		llers name
	_		illing Sept. to Dec. 1941
This record compiled by N.S.V.	from T	hananad	*
data secured from the following son Driller	TLCGS: L	e-tased_	by A. A. Durand & Son
Diffiel	_		Walla Walla, Washington
Date compiled Jamuary 1948	_	ate	Oct. and Nov. 1946
Material	Thicknes (feet)	(feat)	Remerks
Soil	7	7	8* hole
Tellow dirt	49	56	Test records for original we.
Black rock	21	77	30 g.p.m. in baller test with no drawdown from 641
Hard blue basalt	46	123	
Hard Fack baselt	12	135	
Soft red rock and clay	18	153	Test records for deepened wel
Black rock	2	155	SWL 1211 18 g.p.m. with drawdown to
Soft brown r and mad	10	165	Well recovered at the rate
Hard black rock	30	195	of one inch per minute.
Sard gray baselt Brown muddy rock	15	210	
Black basalt	31	243	
Very hard blue basalt	27	270	
Black rock	20	290	
Hard gray rock - orevices	9	299	
Hard gray baselt	21	320	
Blue clay	1	221	
Hard black basalt	11	332	
Hard gray basalt	20	352	
Black baselt - hard	18	370	
Very hard gray basalt	16	386	
Black rock with clay seams	19	405	
Hard black rock	10	410	
Streeks of hard and soft rock	7	427	
Very bard blue rock	29	456	
Black rock and clay	3	459	
Eard black baselt	6	465	
Hard gray & black rock, crevic	s 4	469	
Yery hard gray hasalt	24	493	
Black rock with some clay stree	uks 62	555	
Medium brown rock	5	560	
Fairly hard black rock	19	579	
Hart gray baselt	19	598	
Black rock (clay in upper port		632	
Hard blue reck	. 8	640	
Black rock	,	643	Water here
Hard gray rock		645	Bettom of original wall
Eard blue basalt	126	284	
Medina black baselt	135	280 285	
Hard gray baselt	15	800	
Sticky brown shale	10	810	

Sticky blue shale	12_	822	
Gray sandy shale hard on bottom	20	842	
Black basalt, soft on top,	16	858	
Hard gray basalt	89	947	
Hard brown basalt	4	951	
Bard red rock	28	979	
			Bottom of hole
		 	
		· · · ·	
		 	
		+	
		 	
		+	
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Yoods			lndex numb				
Well name	_		File number (Code: Tp.,				Sec
LOCATION:				0	c	R	Ι.
Gilliam Cour	nty			<u> </u>	<u> </u>		A
Arlington Quadrang	gle .			E	7	G	H
1N 21E 10				×	ı	K	3
Tp. Range Section Fractional	section			N	P	Q	R
STATISTICS:							
Well type-Dug Elevation (land sur-	Use s	tatus-	¥6	11 6	tatu:	s-
		dom in:	stic* I			ndon	-4
below		irr	igation			bol	
Final depth 354		mun:	cipal s stock well		pro	luce	-
		100100		•			
Sollo Woods		Vil burn					
Address Umatilla, Oregon	OTI gi	rese Bla	llers name 2 E. 7th, The	n-11.			
				Dalie	· . ()アサイ (
This record compiled by Dole late secured from the Collowing so	Dat	of dr	illing				_
This record comptied by Dole late secured from the Following so Letter from the driller, Jan. 19,	Dat	of dr	illing				_
	from De urces: re 1948	of dr	illing				_
	from De urces: re 1948	e of dr: epenedcased_ eaned_ te	llling				_
Date compiled January 1948	Dat from De urcas: re urcas: re 1948 Da	e of dr: epenedcased_ eaned_ te	llling				_
Date compiled January 1948 Material	from De urces: re cl 1948 Thickness (feet)	e of dr: epened -cased eaned te Depth freet)	by R	emarke	Vat	or	
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	by R Bottom of P	enarks	Wat	er bose	
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become format	emarks	Vat oft	er bose	
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become free comb format feet of war hole. Appe	emarks	Vat Are andi	er bone und ite	y- 80 B
Naterial Sand and conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	by	emarks	Vat Are andi	er bone und ite	y- 80 B
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become free comb format feet of war hole. Appe	emarks	Vat Are andi	er bone und ite	y- 80 B
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become free comb format feet of war hole. Appe	emarks	Vat Are andi	er bone und ite	y- 80 B
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become free comb format feet of war hole. Appe	emarks	Vat Are andi	er bone und ite	y- 80 B
Naterial Sand sand conglowerate	from De urcas: re cl 1948 Da Thickness (feet)	e of dr: epenedcased_eened te	Bottom of become free comb format feet of war hole. Appe	emarks	Vat Are andi	er bone und ite	y- 80 B

Wright						-4.	
Well name			File number				
			(Code: Tp.	н.,	sec.	<u></u>	500
LOCATION:				D	C	В	
Morroy County	7			E	7	٥	В
Unnapped Quadrangle	•				L	T _x	7
18 25E 34 EEl of MEl Tp. Range Section Fractional section					P	q	R
STATUSTICS:							
### STATISTICS: Well type-Dug	and sur- ft.	Use at dome	atus- atio"	₩o	11 ,		
Drivenabove		1n.u	strial	-	dry	nobe	ad_
Final depth 192		mun1	cipal	-	pro		
		*include	s stock well	.6			
Address Ecppner, Oregon	Add	1683	lers name Valla Vall				_
This record compined by M.S.V. data secured from the Following Sout Driller	Add Dat from Do ress: re cl	o of dri	Valla Vall	rine	1947		
This record compiled by M.S.N. data secured from the collewing soul Driller Data compiled January 1948	Add Dat from Do ress: re cl	e of dri epened -cased eaned	Valla Wall	oring	1947		
This record compined by M.S.V. data secured from the Following Sout Driller	Add Dat from Do ress: re cl	e of dri	Valla Wall	rine	1947		
This record compiled by M.S.N. data secured from the collewing soul Driller Data compiled January 1948	Pet from Do class reces: reces: reces: reces: Thickness	e of dri	Valla Wall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Driller Date compiled January 1948 Natorial	from Dorcess: recas: cl	e of dri epened -cased eaned te	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Driller Date compiled January 1948 Natorial	Det from Do ress: re cl Det Thickness (foet)	e of dri epond -asad eaned ts Depth (reet)	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Driller Date compiled January 1948 Natorial Top soil Broken black baselt	Add Dat from Do rees: re cl Thickness (foet)	e of dri epenndasod eaned Depth treet)	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Driller Date compiled January 1948 Naterial Top soil Broken black baselt Esselt - hard	Det from Dorces: recall	e of dri epennd -cased eaned Depth (feet) 5	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Briller Date compiled January 1948 Naterial Top soil Broken black baselt Baselt - hard Gray baselt - hard	Thickness (fost) 16 23 24	e of dri epennd -casod eaned te Depth teet) 5 21 444 68	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Briller Date compiled January 1948 Naterial Top soil Broken black baselt Baselt - hard Gray baselt - hard Orny baselt	Thickness (fost) 16 23 24	s of dri eponsd -asod eaned Depth (rest) 5 21 44 68	Valla Vall	Remark	1947		
This record complicable N.S.V. data secured from the collewing soul Driller Date compiled January 1948 Naterial Top soil Broken black baselt Essalt - hard Gray baselt - hard Orny baselt, clay & scapston	Patential Patent	e of dri epaned -assod eaned Depth (test) 5 21 44 68 89	Valla Vall	Remark	1947		

Wyrick		Index number 25	-30 x -	-25		
Well name		File number (Code: Tp.,)				Sec.
LOCATION:			D	c	В	
Umatilla Count	t y		E	7	G	н
Unatilla Quadrang	1.		H	L	ĸ	3
ZE 30E Z5 Center of ST. Benge Bestion Frestional	section		Ŋ	P	Q	P
STATISTICS:						
Well type-Dug Elevetion () Drilled x face)	ft. dome	atus- atic* _ z	We)			e- ed
Driven above below	irri	gation			hol	
Final depth 1501	nuni •include	cipal s stock wells		proc	iucs	Œ
Conningham Sheep Company	Original dril	1000				
Owners name Address Pandleton, Oregon	Original arii	Tera mane				
This record complicaby H.S.V.	-	11ing				
data secured from the Pollowing sou	from Deeponod ircss: re-cessd oleansd	ру				
deta secured from the following sou	-	- by				
deta secured from the following sou	from Deeponod ircss: re-cestd oleansd	- by				
This record complicably M.S.V. deta secured from the Following sou Company officials Date compiled July 1947 Material Mo log ovaliable	from Desponed ircss: re-cestd oleaned	- by	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		
Company officials Date compiled July 1947 Material	from Despondd ircs: re-costd oleaned Date Thickness Depth (feet) (feet)	Box	mark	•		

Key to Well Index System

. All logs have been given a number for index purposes in this report. This number appears on the upper right hand corner of each log. The number for any given well corresponds to that used to spot the location of that well on the base map showing well distribution. Letters following the number refer to the county in which the well is situated, as follows:

> G . . . Gilliam M . . . Morrow U . . . Umatilla

Un . . Union

In the index below, well logs are listed alphabetically; following this index, the logs are listed in numerical order.

Index by Name

		_			
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	no.	no.		no.	no.
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Andregg	160-ม	26	Davis (Frank)	167-м	35
Athena City no.1	27 - U	26	Dillon	168-и	35
Athena City no.2	28-U	27	Doherty no.1	100-M	36
Baker no.1	161-м	27	Doherty no.2	101-M	36
Baker no.2	161-M	2 / 2 7	Dudley no.2	- U	36
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Birchman	79 - 0	29.	Eastern Oregon Food Co-op no.2	2!+-U	39
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Appendix

List of Flowing Wells

Name	Index no.	Depth	Flow Characteristics
	Um	atilla (County
Adam City	35 - U	163	Brought-in in 1938; still flows; no measured rate.
Athena City no.1	27 - U	680	Original flow of 15 g.p.m. ceased when pumping operations were commenced on city's no. 2 well.
Athena City no.2	28-U	1206	Flow of estimated 40 to 50 g.p.m. ceased after pumping began; SWL now 15 feet.
Cockburn	3 - V	636	(Still drilling.) Estimated at 165 g.p.m.
Hermiston City no.2	87 - U	500	Original flow estimated at 125 g.p.m. Less now but still flows when not pumped.
Kilkinney	92 - U	140 170	Flows periodically at low g.p.m. rate.
Morton	41 - 0	146	Flowed originally; must be pumped now.
Nolin	74-U	233	Estimated at 100 g.p.m.
Pilot Rock City	49 - U	309	Measured at 1420 g.p.m.
Rogers Canning Co. Athena no.3	31-U	1148	Estimated at 40 g.p.m.
Stevens	8 - v	1007	Measured $61\frac{1}{2}$ g.p.m. in 1939. Well still flows; stronger in spring than summer.

	Index		
Name	no.	Depth	Flow Characteristics
Umatilla City no.2	84-U	580	Original flow in 1940 was an estimated 125 g.p.m. Ceased flowing in 1944. SWL now -32 feet.
Union Pacific, Meacham	48-U	279	Reported as 25 g.p.m.
Ward	86 - U	1000	Large flow reportedly encountered before well was lost and abandoned.
Wattenburgher	156 - U	72	Estimated at 15 g.p.m.
Weber	67 - U	not known	Flowed originally; believed caved now.
	1	Morrow Co	unty
Baker no.1	161 -M	98	Flow pressure unmeasured, but sufficient to service domestic water system without mechanical boost; flow persisted for 20 yrs.
Baker no.2	162 -1	86	Estimated at 20 g.p.m., but mechanical pressure boost needed to service domestic system.
Ball	163 -M	70	Unmeasured but at low g.p.m. rate and persistent for $28~\mathrm{yrs.}$
Boardman City	96 -m	178	Reported at 115 g.p.m.
Briggs	164 -m	96	Flow and pressure unmeasured but sufficient to service domestic water system without mechanical boost.
Cassidy	165 -1	85	Estimated at about 1 g.p.m.
Crowder	166-M	85	Flow reportedly good and consistent, but mechanical pressure boost needed to service domestic water system.
Cutsforth no.2	109-M	46	Unmeasured but low g.p.m. rate.
Dillon	168-M	100	Flow and pressure unmeasured but sufficient to service domestic water system without mechanical boost.
Doherty no.2	101-M	125	Unmeasured, but reportedly strong and persistent for about 30 years.
Eades (C. D.)	169 - M	72	Flow and pressure unmeasured but sufficient to service domestic water system without mechanical boost.
Ely	171 - M	90	Very light now, but flow and pressure were originally strong enough to service domestic water system without mechanical boost (1924).
Fortner	172-M	85	Unmeasured, but supplies domestic water system by natural pressure.
Heppner City no.1	125-M	211	Very strong for 3 years. SWL now deep.
Hodson	108-м	not known	Unmeasured, but low g.p.m. rate.
McEntire	173-и	127	Flow reportedly encountered but cased out.
McFarlane no.l	174-м	9 [†]	Measured at 54 g.p.m.

List of Flowing Wells (cont.)

A contract of the contract of			
Name	Index no.	Depth	Flow Characteristics
McFarlane no.2	175-м	115	Estimated at 5 to 6 g.p.m.
Messenger	176-n	110	Unmeasured but low g.p.m. yield.
Moore	177-м	116	Very light but persistent year round.
Nickerson	178-м	86	Unmeasured, but of domestic water system proportions.
Pool	181-M	96	Unmeasured, but supplies domestic water system by natural pressure.
Potts	182-M	93	Unmeasured, but supplies domestic water system by natural pressure.
Rasmussen (R. E.)	184- M	80	Reportedly flowed originally, but flow cased out later due to contaminated surface water.
Rice	107-M	350	Original flow reported as 600 g.p.m. (1915). Well still flows an estimated 40-60 g.p.m.
Rogers	185 - M	87	Light periodic flow.
Rugg no.1	69 -1	161	Reported at 465 g.p.m.
Waagbo	187 -1	83	Unmeasured. Mechanical boost needed to service domestic water system.
Wagner	188-M	76	Unmeasured. Reportedly consistent; ample for domestic water system.
Wasmer	189 - M	74	Unmeasured. Reportedly consistent; ample for domestic water system.
wells Springs	102-異	425	Flow over casing measured at 25 g.p.m., but well was drilled in center of a strong natural spring which still flows.
		Union	County
Elgin City no.1	191-Un	290	Original flow reported as 125 g.p.m.; adversely affected by city's no.2 well; flow resumes when no.2 is not pumped.
Elgin City no.2	192-Un	350	Original flow reported as 85 g.p.m.; flows when not pumped.
Elgin City no.3	193-Un	655	Reported as 350 g.p.m.
LaGrande City no.1	151-Un	1093	Original flow reported as 500 g.p.m.; 300 g.p.m. in 1947.
LaGrande City no.2	152-Un	1370	Original flow reported as 1500 g.p.m.; 600 g.p.m. in 1947.
Union Pacific, LaGrande no.1	153-Un	1557	Measured at 75 g.p.m. in 1947.
Union Pacific, LaGrande no.2	154-Un	1536	Measured at 289 g.p.m. in 1948.

Tabulation of Wells Having a Depth of 300 Feet or More

	Index Depth		Index	Depth
Name	no. (ft.)	Name	no.	(ft.)
			18-U	550
Dallas	68-U 300	Milton City no.3		550
Krebs no.l	103-м 304	Rietman (Victor)	105-м	574
Pilot Rock City	49-U 309	Lundell	121-M 84-U	574 580
Mann	39-U 315	Umatilla City no.2		-
Heppner Lumber Company no.1	127-и 319	Krebs no.2	145-G	609
Taylor	104-M 321	French no.2	64 - U	624
Ordnance Depot no.1	194 - U 327	McClintock	122 - M	630
Siebold	-U 344	Cockburn	3 - U	636*
Miller	9 - U 345	Milton City no.1	21-U	651
Elgin City no.2	192 - Un 350	Elgin City no.3	193 - Un	655
Rice	107-M 350	Smith Canning Co	56 - U	665
Heppner City no.2	126-표 352	Weatherford	150-G	666
Nonds	148-G 354	Smith (Frank)	149-G	667
Ordnance Depot no.2	195 - V 360	Athena City no.1	27-U	680
Tucker	93 -1 1 365	Kinsaid	115-M	685
Freewater City no.1	17 - 0 375	Cotter	12 0- M	690
McBride	5 - 0 376	Rogers Canning Co., Milton no.1	19 - U	70 2늘
Gillanders	47 - 0 383	Eastern Oregon Food Co-op no.1	23 - U	737
Till	-v 385	Umatilla City no.3	85 - V	785
State Highway, Meacham	46-ช 388	Pendleton Airport	58-U	825
Olden	113 -м 397	Mumm	59 - U	844
Schomp	-G 398	Smyth	146-G	895
U.S. Forest Service, Ukiah	129 - U 400	Milton City no.2	20 - U	902
Vais no.1	-U 400	Pendleton City	57 - 0	934
French no. 1	62 - U 416	Halvorsen no.2	116-м	946
	111-M 420	Barnett	42-U	968
Lexington City	102-M 423	Woodward	33-U	979
Wells Springs	106-M 427	Union Pacific, Kamela	155-Un	996
Rietman (David)	94-M 447	·	86 - U	1000
Corrigal		Ward	8 - U	1007
Ordnance Depot no.3	196-M 453	Stevens		1040
Union Pacific, Munley no.2	99-M 457	Halvorsen no.l	117-M	1040
Hermiston City no.2	87 - U 500	Rogers Canning Co., Athena no.1	29 - U	•
Pulmer	123-M 500	La Grande City no.1	151-Un	1093
Freewater City no.2	16-U 502	Rogers Canning Co., Athena no.3	31 - U	1148
Birchman	79 - 0 505	Rogers Canning Co., Athena no.2	30÷U	1156
Echo City	77 - U 520	Athena City no.2	28-U	1206
Utah Canning Co	14-U 528	Eastern Oregon Food Co-op no.2	24 - U	1218
Roberts	112-M 529	La Grande City no.2	152-Un	
Nolan	114-M 533	Union Pacific, La Grande no.2	154 - Un	1536
Weston City	25 - U 534	Union Pacific, La Grande no.1	153 - Un	1557
Ordnance Housing Project	90 - 0 543	Milton Nursery	15 - V	2000

^{*}Still drilling, March 1948.

Municipal Wells			Industrial Wells		
	Index	Depth			
Name	no.	(ft.)	Name	Index	- •
Umatilla County Adam City			Umatilla County	no.	(ft.)
Adam City	35 - U	163	Eastern Oregon Food Co-op no.1	23 - U	737
Athena City no.2	27 - U	680	Eastern Oregon Food Co-op no.2	24-U	1218
Echo City	28 - U	1206	Jones & Scott	95 - 0	
Freewater City no.1	77-บ 17-ช	520	Kik	81 - U	160
Freewater City no. 2	1/-U 16-U	375	Milton Nursery	15-U	2000
Hermiston City no.1	91 - 0	502 160	Ordnance Depot no.1	194-U	327
Hermiston City no. 2	87 - 0	500	Ordnance Depot no.2	195-0	-
Milton City no.1	21 -U	651	Pendleton Airport	58 - 0	
Milton City no.2	20-U	902	Rogers Canning Co., Athena no.1	29 - U	•
Milton City no.3	18-U	550	Rogers Canning Co., Athena no.2	30 - U	1156
Ordnance Housing Project	90-U	543	Rogers Canning Co., Athena no.3	31 - U	
Pendleton City	57 - U	93 ¹ 4	Rogers Canning Co., Milton no.1	19 - U	703
Pilot Rock City	49-U	309	Smith Canning Co.,	56 - 0	665
Stanfield City	78-U	187	Union Pacific, Barnhart no.1	63 - U	161
Umatilla City no.1	83 - v	133	Union Pacific, Cayuse Union Pacific, Field Station	4 4- U	85
Umatilla City no.2	84- u	580	Union Pacific, Gibbon	89 - U	275
Umatilla City no.3	85 - 0	785	Union Pacific, Meacham	43-U	80
Weston City no.1	25-U	534	Union Pacific, Rieth no.1	48-U	279
			Union Pacific, Rieth no.2	55 - 0	188
Morrow County			Union Pacific, Umatilla	54 - U 82 - U	287
Boardman City	96 -m	178	Utah Canning Company		192
Heppner City no.1	125-14	211	o the carrier of the company	14 - U	528
Heppner City no.2	126-M	325	Morrow County		
Lexington City	111-M	420	Heppner Lumber Co. no.1	127-M	319
			Heppner Lumber Co. no.2	128-M	229
Union County			Union Pacific, Messner	97-M	162
	191-Un	290	Union Pacific, Munley no.1	98-M	165
	192-Un	350	Union Pacific, Munley no.2	99-M	457
	193-Un		, ,	//	. 77
7 - 0 . 0	151-Un		Union County		
La Grande City no.2	152 - Un	1370	Union Pacific, Kamela	155-Un	996
		•	Union Pacific, LaGrande no.1	153-Un	
			Union Pacific, LaGrande no.2	154-Un	
	~~~~~				
Abandoned Wells		J	Dry Wells		
Halvorsen no.2	116-м	946	Halvorsen no.1	110	2010
Pendleton Airport	58-U	825	Hulden	117-H	1040
Rogers Canning Co., Athena no. 2	-	1156	Palmer	147-G	200
Union Pacific, Munley no.1	98-M	165	Smith (Frank)	123-M 149-G	500 669
Ward		1000	Smyth	149-G	6 6 7
Weber	67 - 0		Union Pacific, Kamela	146-G 155-Un	895 896
	•	[in a second second second	±22-011	996

Hell Logs That Give Temperature Date	dell	Logs	That	Give	Temperature	Data
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Name	Index no.	Temp.	Name	Index	Temp. (F.)
		<u> </u>	1		
Baker no.2	162-M	1420	Eastern Oregon Food Co-op no.1	23-U	60∙
McEntire	173-M	450	Birchman	79 - U	6 3°
Smith Canning Co	56 - ប	5 1½°	Pilot Rock City	49-U	65°
Elgin City no.1	191-Un	52°	Echo City	77 - U	6 7°
Elgin City no.3	193-Un	53°	Heppner City no.2	126-M	6 8°
Ordnance Housing Project	90 - U	53°*	Stevens	8 - u	69°
Lexington City	111-M	540	Eastern Gregon Food Co-op no.2	24 - U	70°
Nolin	74-U	55°	Umatilla City no.3	85 - ប	71°
Miller	9 - U	57°	Hermiston City no.2	8 7- 0	76°
Cockburn	3~ U	58°	Union Pacific, LaGrande no.2	154-Un	78°
Rogers Canning Co., Hilton no.1	19-U	58°	Wells Springs	102-M	°08
Pendleton City	57-U	59°	LaGrande City no.2	152-Un	81°

^{*}Standing. After considerable pumping, temperature rises to 58°.

Suggestions Regarding Preparation of Well Logs

Well logs are rendered more valuable if certain important data are recorded accurately, concisely, and completely. In such form they will prove more readily usable to both the driller, the engineer, or the geologist. The job of recording a log in such fashion is not difficult if proper log forms are used. The log forms used in this report are not necessarily recommended except as a general pattern. Instead of submitting a finished model of a well log blank, some of the items that should be included on such a form are discussed below as a guide to anyone desiring to prepare a suitable blank.

1. A name should be given to all wells for future reference purposes. The owner's name is usually most appropriate, but the well should be further designated by an appropriate well number, and also by the ranch name if the owner has one or more ranches.

Example: Jones, Wilmot G., no. 3, Dry Creek.

- 2. Location should include description by county, township, range, section, and quarter section.
- 3. The driller should not only identify himself with his name and address, but where the job involves work on an old well, the original driller's name and the original date of drilling should be given also.
- 4. The nature of the new work on an old well should be set forth in the log; that is, the reconditioning, deepening, pump testing, and servicing.
- 5. The recording of drilling results should state why, if the hole was abandoned, and whether it was dry or a producer.
- 6. Depth of the hole; hole diameter at top and at bottom; final standing water level or rate of flow. Date on which drilling was commenced and finished should be recorded.

- 7. Records should list the number of feet of each size of casing used, the depths between which each size was set, together with comments on perforations, lining, and any other information considered pertinent. Casing diameters should be specified as OD (outside diameter) or ID (inside diameter) when listed.
- 8. In describing formations the driller should endeavor to be consistent in his descriptions of color. This is particularly important when two drillers are working in shifts, lest they each describe the same formation by different colors. Drillers should record regularly the color, drilling characteristics, and evidence of porosity or fracture for each formation penetrated. Although the original driller's log should show each change in the formation encountered, a condensed log can often be substituted later in cases where variations in the formation have been repeated.

Example: Black, massive basalt formation from 4 to 6 feet thick alternating with gray soft basalt from 5 to 10 feet in thickness. Total thickness 97 feet.

- 9. All changes in hole diameter should be indicated together with the depth at which the change was made.
- 10. All changes in standing water level and the depth at which the change occurred should be noted.
- ll. Tests should be described and their results should be summarized as comprehensively as possible. Reference is made to the discussion of this subject in the text. For bail tests, drillers should take pains to state bailer capacity and the number of bail loads when practicable.

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