| دی وت است.<br>ان اف است ا  | UMAT 1   | 383  | (UI  | MAT   |   | •                      | • •,                              |
|--|--|--|--|---|---|------------------------|-----------------------------------|
| NOTICE TO WATER WELL CONTRACTOR<br>The original and first copy<br>of this report are to be JJAN<br>filed with the  | V 2 1 1964 WATER WH  | CLL REP  | PORT   | 383<br>State W  | ell No. <u>3N</u>                                     | <u>  3 -</u>           | -31C                              |
| STATE ENGINEER, SALEM 10, OREGON<br>within 30 days from the date<br>of well completion.  | 1 4 1 24 49 43 17 1  | F OREGO<br>pe or print)  |  | State Pe  | ermit No  |                        |                                   |
| (1) OWNER:   |  | 1  | WELL TES   | Iowerea   | wn is amount<br>below static l                        | evel                   | l is                              |
| Name Blaine Isom   |  | Yield:   |  | Ves No If   |   |                        | •                                 |
| Address Pendleton, Oreg  | on   | "  | ga   | l./min. with  | ft. drawdo<br>"                                       | own atter              | hrs                               |
| <u></u>  | ر<br>منظمہ میں معامل میں منظم میں منظم میں معامل میں معامل میں معامل میں معامل میں معامل میں معامل میں میں میں مع  |  |  |   |   |                        |                                   |
| (2) LOCATION OF WELL:  | numher   | Bailer te  | st gal   | ./min. with   | ft. drawdo  | wn after               | hrs                               |
|  | 3N R. 3] R. W.M.   | Artesian   | flow   | g.p.m. I  | Date  |                        |                                   |
| <u>NE ¼ N W ¼ Section 3]</u> T.<br>Bearing and distance from section or subdivision  |  | Tempera  | ture of water  | Was a chen  | nical analysis  | made? 🛛                | Yes 🗌 N                           |
| bearing and distance from section of subdivision   |  | (12)   | WELL LOG   | Diameter of   | well below c  | asing (                | 2                                 |
|  |  | Depth dr   |  |   | f completed w   |                        | и<br>10 в                         |
|  |  |  |  |   |   |                        | <u>18 1</u>                       |
| <u></u>  |  | show this<br>stratum   | ckness of aquifi<br>penetrated, with   | color, character,<br>ers and the kind<br>h at least one en  | and nature of<br>try for each                         | the mater<br>change of | ial in each<br>formation          |
|  |  |  | ·  | ATERIAL   |   | FROM                   | то                                |
| (3) TYPE OF WORK (check):  | differing D Alandar P  |  | <u>Soil</u>  |   |   |                        | 2                                 |
| * w Well 2 Deepening □ Record<br>ábandonment, describe material and proced   | ditioning 🗌 Abandon 🗌  |  | <u>Clay b</u>  |   |   | 2                      | <u> </u>                          |
| abandonment, describe material and proced  |  |  | <u>Rock</u> b  | rown  |   | 9                      | 34                                |
| (4) PROPOSED USE (check):  | (5) TYPE OF WELL:  |  | Gravel   |   |   | 34                     | 45                                |
| Domestic X Industrial I Municipal I  | Rotary 📋 Driven 🗌  |  | Rock g   |   |   | 45                     | 53                                |
| Irrigation 🔲 Test Well 🗌 Other 🗌   | Cable 🗹 Jetted 🗌<br>Dug 🗍 Bored 🗌  |  |  | rown soft   | <u> </u>  | 53                     | 69                                |
|  |  |  | Rock r   |   |   | 69                     | 89                                |
| (6) CASING INSTALLED: Three  | aded 🖾 Welded 🗋  | <u> </u>   |  | ray hard  |   | 89                     | 98                                |
| 8 7 Diam. from 0 ft. to  | 353. ft. Gage  | <u> </u>   |  | rown soft   | 5   | 98                     | <u>114</u>                        |
|  | ft. Gage   |  |  | ray hard  |   | <u>114</u>             | 155                               |
|  | ft. Gage   |  |  | lack soft   | 5   | <u>155</u>             | 192                               |
|  |  |  |  | ray hard  | <u>.</u>  | <u>192</u>             | 327                               |
| (7) PERFORATIONS: Per  | forated? 🗋 Yes 🛣 No  |  |  | ray hard  |   | 327                    | 354                               |
| Type of perforator used  |  |  |  | oft   |   | <u>354</u>             | 370                               |
| Size of perforations in. by  | <u>in.</u>   | ·  | Rock g   | ray hard  |   | 370                    | 406                               |
| perforations from  | ft. to ft.   |  |  | rown boul   |   | 406                    | 418                               |
| perforations from  |  |  |  | ray mediu   | lm  | 418                    | 441                               |
| ? perforations from  | ft. to ft.   | wL   |  | rown  |   | 441                    | 446                               |
| perforations from  | ft. to ft.   | Clicke Inin  |  |   |   | 446                    | 450                               |
| perforations from  | ft. to ft.   |  |  | ray hard  |   | 450                    | 480                               |
|  |  | 25   |  | <u>ed soft</u>  |   | 480                    | 485                               |
| (8) SCREENS: Well screen insta   |  | 9/3  |  | <u>ray mediu</u>  |   | 485                    | 518                               |
| Manufacturer's Name  | 18   | 0/2  |  | lack soft   | ! <u>.</u>  | <b>518</b>             | 537                               |
| · 2  | . d. 1 <b>17</b> .   | 1  |  |   |   |                        | 552                               |
| The No   |  | 0/3  |  | ray hard  |   | 537                    |                                   |
| im Slot size Set from  | ft. to ft.   | 1  | Rock g   | ray hard  | Completed   | 537                    | 19                                |
| im Slot size Set from  | ft. to ft.   | 0/3<br>Work sta  | Rock g   | ray hard  |   | 537                    |                                   |
| m Slot size Set from<br>Diam Slot size Set from  | ft. to ft.   | 0/3<br>Work sta<br>Date wel  | Rock g<br>arted<br>I drilling machi  | ray hard  |   | 537                    | 19                                |
| Jim.         Slot size         Set from           Diam.         Slot size         Set from           (9)         CONSTRUCTION:   | ft. to ft. to ft.  | 0/3<br>Work sta<br>Date wel<br>(13) ]  | Rock g.<br>rted<br>I drilling machi<br>PUMP:   | ray hard<br>19<br>ne moved off of   | well  |                        | 19<br>19                          |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9)       CONSTRUCTION:         Well seal—Material used in seal       C.e.   | ft. to ft.<br>ft. to ft.<br>ement.   | 0/3<br>Work sta<br>Date wel<br>(13) ]<br>Manufact  | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name   | ray hard<br>19<br>ne moved off of   | well  | ·····                  | 19<br>19                          |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9)       CONSTRUCTION:         Well seal—Material used in seal       C.C.         Depth of seal       18       ft. Was a point  | ment   | 0/3<br>Work sta<br>Date wel<br>(13) ]<br>Manufact  | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name   | ray hard<br>19<br>ne moved off of   | well  | ·····                  | 19<br>19                          |
| 1  | ement  | o/3<br>Work sta<br>Date wel<br>(13) J<br>Manufact<br>Type:   | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name   | ray hard<br>19<br>ne moved off of   | well  | ·····                  | 19<br>19                          |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal-Material used in seal       C.C.         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       Seal         Were any loose strata cemented off?       Yes X   | ement  | 0/3<br>Work sta<br>Date wel<br>(13) J<br>Manufact<br>Type:<br>Water V  | ROCK g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contracto   | ray hard<br>19<br>ne moved off of<br>pr's Certification   | well  | H.P                    | <u>19</u><br><u>19</u>            |
| im Slot size Set from<br>Diam Slot size Set from<br>(9) CONSTRUCTION:<br>Well seal-Material used in seal<br>Depth of seal 18 ft. Was a p<br>Diameter of well bore to bottom of seal<br>Were any loose strata cemented off? □ Yes K<br>Was a drive shoe used? K Yes □ No  | ement  | 0/3<br>Work sta<br>Date wel<br>(13) J<br>Manufact<br>Type:<br>Water V<br>This  | Rock g   | ray hard<br>19<br>ne moved off of   | well  | H.P                    | <u>19</u><br><u>19</u>            |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9)       CONSTRUCTION:         Well seal-Material used in seal       C.C.         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off? [] Yes K         Was a drive shoe used? K] Yes [] No       No         Was well gravel packed? [] Yes K       No  | ft. to       ft.         ft. to       ft.         genent       ft.         packer used?       ft.         ll       in.         No       Depth         ize of gravel:       ft.             | 0/3<br>Work sta<br>Date wel<br>(13) J<br>Manufact<br>Type:<br>Water V<br>This<br>true to t   | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contractor<br>well was drill<br>the best of my                          | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and   | well<br>n:<br>jurisdiction<br>d belief.               | H.P                    | 19<br>19<br>report is             |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal—Material used in seal       Ce         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       mmmm         Were any loose strata cemented off?       Yes X         Was a drive shoe used? X       Yes       No         Was well gravel packed?       Yes X       Yes   | ft. to       ft.         ft. to       ft.         ft. to       ft.         ement       ft.         packer used?       in.         jNo       Depth         ize of gravel:       ft.         | 0/3<br>Work sta<br>Date wel<br>(13) J<br>Manufact<br>Type:<br>Water V<br>This<br>true to t   | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contractor<br>well was drill<br>the best of my                          | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and   | well<br>n:<br>jurisdiction<br>d belief.               | H.P                    | 19<br>19<br>report is             |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal-Material used in seal       C.C.         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       Seal         Were any loose strata cemented off?       Yes K         Was a drive shoe used?       Yes I No         Was well gravel packed?       Yes K         Did any strata contain unusable water?       Yes  | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?       in.         jno       Depth         ize of gravel:       ft.         ize of gravel:       ft. | 0/3         Work sta         Date well         (13) J         Manufact         Type:         Water V         This         true to the         NAME   | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contractor<br>well was drill<br>the best of my<br>(Persc                | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and   | well<br>  | H.P                    | 19<br>19<br>report i              |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal—Material used in seal       C.C.         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off? [] Yes K         Was a drive shoe used? K] Yes [] No       Was well gravel packed? [] Yes [] No         Was well gravel packed? [] Yes [] No       Si         Gravel placed from       ft. to         Did any strata contain unusable water? [] Ye       Type of water?  | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?       in.         jno       Depth         ize of gravel:       ft.         ize of gravel:       ft. | 0/3         Work sta         Date well         (13) J         Manufact         Type:         Water V         This         true to the         NAME   | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contractor<br>well was drill<br>the best of my<br>(Persc                | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and   | well<br>  | H.P                    | 19<br>19<br>report is<br>r print) |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal—Material used in seal       CC         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off? □ Yes K         Was a drive shoe used? L Yes □ No       Was well gravel packed? □ Yes ☑ No         Was well gravel packed? □ Yes ☑ No       Si         Gravel placed from       ft. to         Did any strata contain unusable water? □ Ye       Type of water?         Depth of sealing strata off       Depth of sealing strata off  | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?       in.         jno       Depth         ize of gravel:       ft.         ize of gravel:       ft. | 0/3         Work sta         Date well         (13) J         Manufact         Type:         Water V         This         true to t         NAME         Address                                     | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contractor<br>well was drill<br>the best of my<br>(Persc                | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and   | well<br>i.<br>jurisdiction<br>d belief.               | H.P                    | 19<br>19<br>report is<br>r print) |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9)       CONSTRUCTION:         Well seal-Material used in seal       C.C.         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off? [] Yes K         Was a drive shoe used? K] Yes [] No       Was well gravel packed? [] Yes [] No         Was well gravel packed? [] Yes [] No       Si         Gravel placed from       ft. to         Did any strata contain unusable water? [] Ye       Type of water?  | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?       in.         jno       Depth         ize of gravel:       ft.         ize of gravel:       ft. | 0/3         Work state         Date well         (13) I         Manufact         Type:         Water V         This         true to the         NAME         Address         Drilling                | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contracto<br>well was drill<br>the best of my<br>(Person<br>Machine Ope | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and<br>m, firm or corporat<br>rator's License | well<br>n:<br>jurisdiction<br>d belief.               | H.P                    | 19<br>19<br>report i              |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal—Material used in seal       CC         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off? □ Yes K         Was a drive shoe used? L Yes □ No       Was well gravel packed? □ Yes ☑ No         Was well gravel packed? □ Yes ☑ No       Si         Gravel placed from       ft. to         Did any strata contain unusable water? □ Ye       Type of water?         Depth of sealing strata off       Depth of sealing strata off  | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?   | 0/3         Work state         Date well         (13) I         Manufact         Type:         Water V         This         true to the         NAME         Address         Drilling                | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>surer's Name<br>Vell Contracto<br>well was drill<br>the best of my<br>(Person<br>Machine Ope | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and<br>m, firm or corporat                    | well<br>n:<br>jurisdiction<br>d belief.               | H.P                    | 19<br>19<br>report i              |
| im.       Slot size       Set from         Diam.       Slot size       Set from         (9) CONSTRUCTION:         Well seal—Material used in seal       Ce         Depth of seal       18       ft. Was a p         Diameter of well bore to bottom of seal       ft. Was a p         Diameter of well bore to bottom of seal       Were any loose strata cemented off?       Yes K         Was a drive shoe used? La Yes       No       No         Was well gravel packed?       Yes K       No         Gravel placed from       ft. to       ft. to         Did any strata contain unusable water?       Ye       Ye         Type of water?       Depth of sealing strata off       (10) WATER LEVELS:         Static level       446ft. below land strata in the seal off | ft. to       ft.         ft. to       ft.         ement       ft.         packer used?   | 0/3         Work state         Date well         (13)         Manufact         Type:         Water V         This         true to the         NAME         Address         Drilling         [Signed] | Rock g.<br>rted<br>I drilling machi<br>PUMP:<br>were's Name<br>Vell Contractor<br>well was drilline best of my<br>(Person<br>Machine Ope     | ray hard<br>19<br>ne moved off of<br>pr's Certification<br>lled under my<br>knowledge and<br>m, firm or corporat<br>rator's License | well<br>i:<br>jurisdiction<br>d belief.<br>ion)<br>No | H.P                    | 19<br>19<br>report is<br>r print) |

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| NOTICE TO WATER WELL CONTRACTOR   |   | · · · ·   |   |               |
|---|---|---|---|---------------|
| The original and first copy<br>of this report are to be                 |   | LL REPORT   | N/31-3  | 31            |
| filed with the<br>STATE ENGINEER, SALEM 10, OREGON JAN                  | 21 1964 STATE OF  | F OREGON - No. State wen No. State  | <u>, , , , , , , , , , , , , , , , , , , </u> |               |
| within 30 days from the date<br>of well completion.                     | (Please ty)   | pe or print) (CONT), State Permit No  |   |               |
|   | <u>المعام المعام المعام</u> | (11) WELL TESTS. Drawdown is amount   | woter level                                   | ie            |
| (1) OWNER:  | -   | lowered below static  | level   | 12            |
| Name  |   | Was a pump test made? Ves No If yes, by who   |   |               |
| Address   | · · · · · · · · · · · · · · · · · · ·   | Yield: gal./min. with ft. drawd   | lown after                                    |               |
|   |   |   |   |               |
| (2) LOCATION OF WELL:   |   | ·   | lown after                                    |               |
| County Driller's well numb  | er  | Artesian flow g.p.m. Date   | own arter                                     |               |
| 1/4 1/4 Section T.  | R. W.M.   | Temperature of water Was a chemical analysis  | made? [7] Y                                   | 'es           |
| Bearing and distance from section or subdivision cor                    | ner   |   |   |               |
|   |   | (12) WELL LOG: Diameter of well below of  | casing  |               |
|   | . <u></u>   | Depth drilled ft. Depth of completed t  | well  |               |
| · · · · · · · · · · · · · · · · · · ·                                   |   | Formation: Describe by color, character, size of mater<br>show thickness of aquifiers and the kind and nature o<br>stratum penetrated, with at least one entry for each | ial and struc                                 | ture          |
| / <sup>**</sup>   |   | stratum penetrated, with at least one entry for each  | change of f                                   | orm           |
| ·   |   | Convert meter clicks frin MATERIAL  | FROM  | т             |
| (3) TYPE OF WORK (check):   |   |   |   |               |
| Well Deepening Reconditioni   | ing 🔲 Abandon 🗌   | - 9/3min. Rock brown soft   | 552   | <u>م</u><br>د |
| Jandoninent, describe material and procedure in                         |   | Rock gray medium<br>Rock red soft   |   |               |
|   |   | - Mock red soll   | 581   |               |
|   | TYPE OF WELL:   | 17/min Bock red soft  | 500   |               |
| Domestic [] Industriat [] Municipal [] [Cab]                            |   | 25/min. Rock gray medium  | 611   |               |
| Irrigation [] Test Well [] Other [] Dug                                 | Bored 🗌   | 25/min Rock red soft  | 1044  | 530           |
| (6) CASING INSTALLED: Threaded  | Welded  | Rock gray medium  | 630   | 6             |
| " Diam, from  |   | 39/min Rock gray hard   | 656   | Ē             |
|   | —   | 28/min Rock gray medium   | 684   |               |
| " Diam. from  |   | 26/min Rock red soft  | 784   | 7             |
|   |   | 26/min Rock grav  | 796   | į             |
| (7) PERFORATIONS: Perforate   | d? 🗌 Yes 🔲 No   | Rosk red soft   | 818   | ē             |
| Type of perforator used   | · · · · · · · · · · · · · · · · · · ·   | 28/min Rock gray medium   | 832   | <u> </u>      |
| Size of perforations in. by   | in.   | Rock gray hard  | 870   | Ē             |
| perforations from fi  |   |   | +   |               |
| perforations from fi  |   |   |   |               |
|   |   |   | - <b>}</b> }                                  |               |
| perforations from fr  |   |   |   |               |
|   | t. to ft.   |   | ┥──┤  |               |
| (8) SCREENS: Well screen installed?                                     | 🗌 Yes 📋 No  |   | ++  |               |
| Manufacturer's Name   |   |   | ++  |               |
| e Model N   |   | l   | +   |               |
| m,  | ft. to ft.  | Work started 12-13 1962 Completed   | 2-27  |               |
| Diam Slot size Set from   | ft. to ft.  | Date well drilling machine moved off of well  | <u></u><br>3-1                                | 1<br>1        |
|   |   |   |   |               |
| (9) CONSTRUCTION:   |   | (13) <b>PUMP</b> :  | •   |               |
| Well seal—Material used in seal   | •   | Manufacturer's Name   |   |               |
| Depth of seal ft. Was a packet  |   | Туре:   | . H.P   |               |
| Diameter of well bore to bottom of seal                                 |   | Water Well Contractor's Certification:  | <u> </u>                                      |               |
| Were any loose strata cemented off? [] Yes [] No                        | Debru   |   |   |               |
| Was a drive shoe used? 🗌 Yes 📋 No Size of                               | drovel -  | This well was drilled under my jurisdiction<br>true to the best of my knowledge and belief.   | and this r                                    | epo           |
| Was well gravel packed? 🗌 Yes 🗌 No Size of<br>Gravel placed from ft. to | gravel:   |   |   |               |
| •   |   | NAME Ben Drover Drilling Cor<br>(Person, firm or corporation)   | itracto                                       | r             |
| Did any strata contain unusable water?  Yes  Yes                        | <u>NO</u>   |   |   |               |
| Type of water? Depth of strata<br>Method of sealing strata off          |   | Address Rt. 1 Box 225 Hermist   | ·››››   | <u></u>       |
| MELOND OF SEALING SUBTA OFF   |   | Drilling Machine Operator's License No.   | 7   |               |
|   |   | Drilling Machine Operator's License No.   |   |               |
| (10) WATER LEVELS:  |   | [Signed]  | •   |               |

| NOTICE TO WATER WELL CONTRACTOR  | UMAT 1                                |  |                  |  | •                                       |                          |                           |  |
|--|---------------------------------------|--|------------------|--|---|--------------------------|---------------------------|--|
| of this report are to be<br>filed with the   | AN 21 196WATER WE                     |  | et į             | State Well   | No. 3N                                  | <u>  3 -</u> .           | 31 C                      |  |
| STATE ENGINEER, SALEM 10, OREGONA<br>within 30 days from the date<br>of well completion. | STATE OI<br>(Please typ               | e or print)                            | (conti)          | State Pern   | /<br>nit No                             |                          | ,<br>,                    |  |
| (1) OWNER:<br>Name Blaine Isom   |                                       |  | test made?       | Drawdown<br>lowered be<br>Yes [] No If y                   | is amount v<br>low static le            | vel                      | is                        |  |
| Address Pendleton, Orea  | ion                                   | Yield:                                 |                  | in. with   | ft. drawdo                              |                          | hrs.                      |  |
|  |                                       | ······································ | יי<br>           |  | 39                                      |                          | "                         |  |
| (2) LOCATION OF WELL:  |                                       | Bailer test                            |                  | in. with   | ft. drawdo                              | m often                  | <u>"</u><br>hrs.          |  |
| County Umatilla Driller's well   | number                                | Artesian flor                          |                  | g.p.m. Da  |   | WAT LEVEL                |                           |  |
| <u>14 ¼ Section T.</u>   | <u>R. W.M.</u>                        | Temperature                            | of water         | Was a chemic   | al analysis :                           | mađe? 🔲                  | Yes 🗌 No                  |  |
| Bearing and distance from section or subdivis  | lon corner                            | (12) WE                                | LL LOG:          | Diameter of w  | eli below ca                            | istner (                 | 8.                        |  |
|  |                                       | Depth drilled                          |                  | ft. Depth of c   |   | ·······                  |                           |  |
|  |                                       | show thickne                           | ess of aquifiers | or, character, siz<br>and the kind an<br>t least one entry | e of materic<br>d nature of             | il and stru<br>the mater | cture, and<br>ial in each |  |
|  | · · · · · · · · · · · · · · · · · · · | clicks/min                             | MAT              | ERIAL  |   | FROM                     | то                        |  |
| (3) TYPE OF WORK (check):  | ditioning 🗆 Abandon 🗌                 |  |                  | ray mediu  |   | 890                      | 948                       |  |
| Well Deepening A Recon   |                                       | <br>27/min                             |                  | lack sof   | •                                       | 948                      | 962                       |  |
|  |                                       | 17/min                                 |                  | ray mediu<br>rav hard                                      | <u>1m</u>                               | 962                      | 988                       |  |
| 4) PROPOSED USE (check):   | (5) TYPE OF WELL:                     |  |                  | ad mediur  |   | 1039                     | 1029                      |  |
| Domestic 本 Industrial □ Municipal □<br>rrigation □ Test Well □ Other □                   | Cable 🕅 Jetted 🛛                      | ?                                      |                  | lack med   |   | 1046                     | 1052                      |  |
| rrigation 🗌 Test Well 📋 Other 🔲  | Dug 🗌 Bored 🗌                         | ·                                      | Rock gi          | ray hard   |   | 1052                     | 1152                      |  |
| 6) CASING INSTALLED: Three   | adéd 🔲 Welded 🔲                       |  | Rock re          |  |   | 1152                     | 1156                      |  |
| "Diam. from ft. to   | ft. Gage                              | ·?                                     |                  | lack hard  |   | 1156                     | 1190                      |  |
|  | _                                     | · · · · ·                              | GUTTINE          | s washed   | hole                                    | 1190                     | <u>1518</u>               |  |
| Diam. from ft. to  | ft. Gage                              | ·                                      |                  |  |   |                          |                           |  |
| (7) PERFORATIONS: Per  | rforated? 🗌 Yes 🔲 No                  |  |                  |  |   |                          |                           |  |
| ype of perforator used   | · · · · · · · · · · · · · · · · · · · |  | <u>.</u>         |  |   |                          | ļ                         |  |
| size of perforations in. by  | <u>iń.</u>                            |  |                  |  |   | <u> </u>                 | <u> </u>                  |  |
| perforations from  | ft. to ft. ft.                        |  | · · · · · · ·    |  |   | <u> </u>                 |                           |  |
|  |                                       |  |                  | ,``  |   |                          |                           |  |
| perforations from  |                                       |  |                  | · · · ·  |   |                          | [                         |  |
| perforations from  | ft. to ft.                            |  | -                |  |   | <u> </u>                 | <u> </u>                  |  |
| (8) SCREENS: Well screen inst  |                                       | 1                                      | ·                | <u> </u>   |   |                          | <u> </u>                  |  |
| Manufacturer's Name  |                                       |  |                  |  |   |                          |                           |  |
|  | odel No.                              |  |                  |  | · · · - · · · · · · · · · · · · · · · · |                          | <u> </u>                  |  |
| Diam,  |                                       | Work started                           |                  |  | mpleted ]                               | 2-18                     | <u>1967</u>               |  |
|  |                                       | Date well dr                           | illing machine   | moved off of we  | ell                                     |                          | 19                        |  |
| (9) CONSTRUCTION:  |                                       | (13) <b>PU</b>                         |                  | ,  |   |                          |                           |  |
| Well seal—Material used in seal  |                                       |  |                  | ******   | *******                                 |                          |                           |  |
| Depth of seal ft. Was a packer used?<br>Diameter of well bore to bottom of seal in.      |                                       |  | - Type:          |  |   |                          |                           |  |
| Vere any loose strata cemented off? [] Yes   |                                       | Water Well                             | l Contractor's   | <b>Certification:</b>                                      |   |                          |                           |  |
| Vas a drive shoe used? 📋 Yes 📋 No  |                                       | This we                                | ell was drilled  | i under my ju  | risdiction                              | and this                 | report i                  |  |
| Was well gravel packed? 🗌 Yes 🗌 No 🛛 S   | - '                                   | true to the                            | pest of my ki    | nowledge and   | Delleï.                                 |                          | •                         |  |
| Gravel placed from ft. to  |                                       | NAMEB                                  | en Dreye         | r Drilli   | ng Con                                  | tract                    | or                        |  |
| Did any strata contain unusable water?   |                                       |  |                  | x. 225 H   |   |                          |                           |  |
| Type of water?         Depth of           Method of sealing strata off                   | suala                                 |  |                  |  |   | -                        |                           |  |
|  |                                       |  | < 3              | or's License N   |   |                          |                           |  |
| (10) WATER LEVELS:   |                                       | [Signed]                               | Ben              | (Water We  | ul                                      | 1                        |                           |  |
|  | surface Dateare inch Date             |  |                  | (Water We  |   | 31                       | A                         |  |
|  |                                       |  |                  |  |   |                          | 191 1                     |  |

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**UMAT 1383** 

3N/31-31C Umatilla G.

January 22, 1964

المراشف فساعتهم

Mr. Blaine Isom Echo, Oregon

Dear Mr. Isom:

Upon returning to Salem, I have had an opportunity to review your artesian well problem and the related current meter data. Enclosed is a copy of the flow rates measured during our current meter run in the well on Tuesday, January 14, 1964. It should be pointed out that the accuracy of the current meter used is in question regarding the actual amount of water flowing in the well. The meter is to be sent to the U. S. Bureau of Standards to be properly rated. At low flow rates the meter is not accurate enough to permit a close approximation of the amount of water moving in the well.

The change in the number of counts at various levels in the well suggests that the change in diameter of the well bore would best explain the variation in water velocity. In areas of large overbreak where the well bore is wider, the velocity would be reduced. Where the bore is cut in solid rock and is smaller in diameter, the water velocity should increase. It appears that the water leakage occurs at a depth of 592 to 600 feet below land surface. Water standing in the well above 592 feet has no apparent movement that can be measured and represents the head or artesian pressure surface on the confined water body.

The highest count of 30 clicks per minute indicates a velocity of .07 feet per second, or .07 x 60 = 4.20 feet per minute. One foot of an 8-inch diameter hole contains approximately 2.61 gallons per foot. A ten-inch hole contains 4.08 gallons per foot. Therefore,  $4.2 \times 2.61 = 11$ gallons per minute moving in an 8-inch well bore. In sections of larger diameter, the velocity drops off and probably averages in the neighborhood of 8 to 10 gallons per minute.

We can adjust for meter inaccuracy and error by doubling the observed readings and computing the maximum probable loss as follows. Sixty clicks per minute = .16 feet per second or 9.6 feet per minute;  $9.6 \times 2.61 = 25$  gallons per minute. This is probably a maximum figure for the amount of water lost by leakage from the well.

Mr. Blaine Isom

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Nothing regarding the artesian pressures involved can be determined from our test. The present water level stands near 446 feet as I recall from Mr. Dreyer's observations during drilling. This represents the position of the pressure surface on the artesian some with a flow of between 11 and 25 gallons per minute. It is not expected that the control of this leakage will result in a substantial rise in the pressure surface. However, the leakage should certainly be controlled to prevent a constant waste of ground water and reductions of artesian pressures. Allowing the leakage in the well to continue is the same as if the well were being pumped day and night at the same rate. Such a loss could result in the steady decline of the water table in the area.

Casing the full length of the well will be an expensive operation. We suggest that a packer be set in the well at a depth of 620 feet below land surface. Concrete slurry can then be placed by a dump bailer on the packer and forced out into the porous rock area between 620 feet and 590 feet. After the concrete is placed a high column of water can be placed on the concrete to force it out into the wall rock. The cement plug can then be drilled out and the well completed. We will follow the progress of your well completion with interest; if we may be of further assistance, please contact this office.

> Very truly yours, CHRIS L. WHEELER State Engineer

By

Wm. S. Bartholomew, Geologist

WSB:mgb Enclosure CC: Ben Dreyer Blaine Isom's Well 3N/31-31C Umatilla County

## Depth in feet below land surface

7

## Counts per minute

2**4**.)

|                    |           | si   | —                        |
|--------------------|-----------|--|--------------------------|
| Static Water Level | 446 feet  |  |                          |
|                    | 480 feet  |  | 0/5 minutes              |
|                    | 500 feet  |  | 0/3 minutes              |
|                    | 530 feet  | -  | 0/3 minutes              |
|                    | 560 feet  | :  | 0/3 minutes              |
| •                  | 590 feet  |  | 0/3 minutes              |
|                    | 595 feet  |  | 0/2 minutes              |
|                    | 600 feet  |  | 17/ minute               |
|                    | 605 feet  | anatomis and a solution of the | 18/ minute               |
|                    | 610 feet  |  | 17/ minute               |
|                    | 620 feet  |  | 25/ minute               |
|                    | 640 feet  |  | 25/ minute               |
|                    | 660 feet  | s anno 10 mart - 1<br>31   | 30/ minute               |
|                    | 670 feet  | <b>*</b>   | 25/ minute               |
|                    | 690 feet  | ۰.<br>۱  | 30/ minute               |
| •                  | 700 feet  |  | 29/ minute               |
|                    | 730 feet  |  | 28/ minute               |
|                    | 740 feet  |  | 27/ minute               |
|                    | 750 feet  |  | 28/ minute               |
|                    | 760 feet  |  | 26/ minute               |
|                    | 770 feet  |  | 27/ minute               |
|                    | 790 feet  |  | 26/ minute               |
|                    | 810 feet  |  | 26/ minute               |
|                    | 820 feet  |  | 24/ minute               |
|                    | 830 feet  |  | 23/ minute               |
|                    | 850 feet  |  | 22/ minute               |
| x                  | 860 feet  |  | 24/ minute               |
|                    | 870 feet  |  | 28/ minute               |
|                    | 880 feet  |  | 20/ minute               |
|                    | 890 feet  |  | 22/ minute               |
|                    | 910 feet  |  | 22/ minute<br>23/ minute |
|                    | 930 feet  |  | 22/ minute               |
|                    | 950 feet  |  | 22/ minute               |
|                    | 970 feet  |  | 17/ minute               |
|                    | 1000 feet |  | T() WILLIGE              |
|                    |           |  |                          |