

T-8536

CLAIM OF BENEFICIAL USE for Transfer with Multiple Changes - Groundwater



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem, Oregon 97301-1266
(503) 986-0900
www.oregon.gov/OWRD

A fee of \$230 must accompany this form for any Transfer final orders including a water right with a priority date of July 9, 1987, or later.

Example – A transfer involves 5 rights and one of the rights has a priority date of July 9, 1987, or later, the fee is required.

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A separate form shall be completed for each transfer.

This form is subject to revision. **Begin each new claim** by checking for a new version of this form at:

<https://www.oregon.gov/OWRD/Forms/Pages/default.aspx>

The completion of this form is required by OAR 690-014-0100(1) and 690-014-0110(4).

Please type or print in dark ink. If this form is found to contain errors or omissions, it may be returned to you. **Every item must have a response.** If any requested information does not apply to the claim, insert "NA." **Do not delete or alter any section of this form unless directed by the form.** The Department may require the submittal of additional information from any water user or authorized agent.

"Section 7" of this form is intended to aid in the completion of this form and should not be submitted.

A claim of beneficial use includes both this report and a map. If the map is being mailed separately from this form, please include a note with this form indicating such.

If you have questions regarding the completion of this form, please call 503-979-9103.

The Department has a program that allows it to enter into a voluntary agreement with an applicant for expedited services. Under such an agreement, the applicant pays the cost to hire additional staff that would not otherwise be available. This program means a certificate may be issued in about a month. For more information on this program see:

<https://www.oregon.gov/OWRD/programs/WaterRights/RA/Pages/default.aspx>

GENERAL INFORMATION

Type of Authorized Change

This Claim is being submitted for a transfer involving multiple changes.

YES

Mark all that apply:

- 1. Change in POA(s) or Additional POA(s)
- 2. Change in Place of Use
- 3. Change in Character of Use

A separate section will be completed for each type of change authorized in the transfer final order.

1. File Information

APPLICATION # T-8536

2. Property Owner (current owner information)

APPLICANT/BUSINESS NAME City of Malin		PHONE NO. (541) 723-2021	ADDITIONAL CONTACT NO.
ADDRESS P.O. Box 61			
CITY Malin	STATE OREGON	ZIP 97632	CITY Malin

If the current property owner is not the transfer holder of record, it is recommended that an assignment be filed with the Department. ***Each transfer holder of record must sign this form.***

3. Transfer holder of record (this may, or may not, be the current property owner)

TRANSFER HOLDER OF RECORD NA		
ADDRESS		
CITY	STATE	ZIP

4. Date of Site Inspection:

10/27/2021

5. Person(s) interviewed and description of their association with the project:

NAME	DATE	ASSOCIATION WITH THE PROJECT
Rob Grounds	10/27/2021	Public Works

6. County:

Klamath

7. If any property described in the place of use of the transfer final order is excluded from this report, identify the owner of record for that property (ORS 537.230(5)):

OWNER OF RECORD NA		
ADDRESS		
CITY	STATE	ZIP

Add additional tables for owners of record as needed

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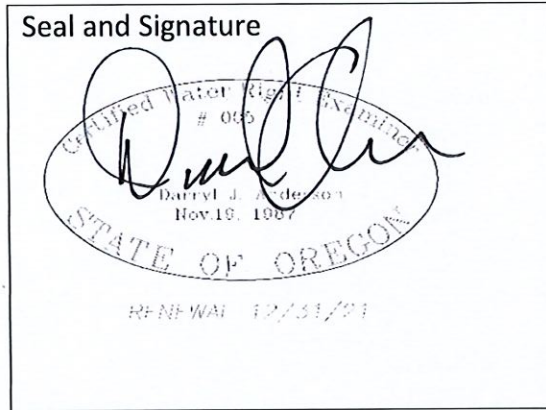
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**SECTION 2
SIGNATURES**

CWRE Statement, Seal and Signature

The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge.

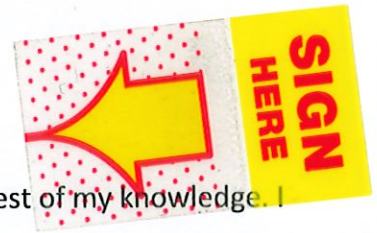


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CWRE NAME Darryl Anderson		PHONE NO. 541-947-4407	ADDITIONAL CONTACT NO.	
ADDRESS 17681 Highway 395				
CITY Lakeview	STATE OR	ZIP 97630	CITY Lakeview	

Transfer Holder of Record Signature or Acknowledgement

Each transfer holder of record must sign this form in the space provided below.



The facts contained in this Claim of Beneficial Use are true and correct to the best of my knowledge. I request that the Department issue a water right certificate.

SIGNATURE	PRINT OR TYPE NAME	TITLE	DATE
	ROBERT GROUNDS	PUBLIC WORKS CITY OF MALIN	11-5-21

SECTION 3
Changes Made

Note: The Claim only needs to describe the changes that were authorized in the transfer final order.

Change #1

Change in POA(s) or Additional POA(s)

Did the transfer order authorize a change in the points of appropriation or additional points of appropriation? **YES**

If "NO", this Section can be deleted.

1. New or additional point of appropriation name or number:

POINT OF APPROPRIATION (POA) NAME OR NUMBER (CORRESPOND TO MAP)	WELL LOG ID # FOR ALL WORK PERFORMED ON THE WELL (IF APPLICABLE)	WELL TAG # (IF APPLICABLE)	SOURCE (IF LISTED IN TRANSFER FINAL ORDER)
Well #2 (authorized)	KLAM 15095 KLAM 15096		A well in the "D" Canal (Lost River) Basin
Well #3 (new poa)	KLAM 15097		
Well #4 (new poa)	KLAM 51832	L-29461	

Attach each well log available for the well (include the log for the original well and any subsequent alterations, reconstructions, or deepenings)

2. Variations:

Was the use developed differently from what was authorized by the transfer final order, or extension final? **NO**

If yes, describe below.

(e.g. "The order allowed three new/additional points of appropriation. The water user only developed one of the points.")

NA

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3. Claim Summary:

NEW OR ADDITIONAL POA NAME OR #	MAXIMUM RATE AUTHORIZED	CALCULATED THEORETICAL RATE BASED ON SYSTEM	AMOUNT OF WATER MEASURED
Well #2	0.84 cfs	0.84 cfs	none
Well #3	0.84 cfs	0.84 cfs	none
Well #4	0.84 cfs	0.84 cfs	None

System Description

Are there multiple new or additional Points of Appropriation (POA)? **YES**

If "YES" you will need to copy and complete either Section A or B in this Section for each POA.

POA Name or Number this section describes (only needed if there is more than one):

Well #2 (authorized)

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A. POA System Information

Provide the following information concerning the point of appropriation. Information provided must describe the equipment used to appropriate water from the point of appropriation.

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1. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unavailable	NA	NA	Submersible	6"	4"

2. Motor Information

MANUFACTURER	HORSEPOWER
Franklin Electric	30 hp

3. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
30	55.75	83	94	0.84

4. Provide pump calculations:

See Attached

5. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not Measured			

Reminder: For pump calculations use the reference information at the end of this document.

6. Additional notes or comments related to the system:

NA

POA Name or Number this section describes (only needed if there is more than one):

Well #3 (new)

A. POA System Information

Provide the following information concerning the point of appropriation. Information provided must describe the equipment used to appropriate water from the point of appropriation.

1. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unavailable	NA	NA	Submersible	6"	4"

2. Motor Information

MANUFACTURER	HORSEPOWER
Hitachi	30 hp

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3. Theoretical Pump Capacity

HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
30	55.75	83	94	0.84

4. Provide pump calculations:

See Attached

5. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not Measured			

Reminder: For pump calculations use the reference information at the end of this document.

6. Additional notes or comments related to the system:

Well 3 was originally installed with a turbine pump that was proofed in 2011 for Certificate 90916 that was operational for the completion date of the transfer. The pump was replaced in July 2021.

POA Name or Number this section describes (only needed if there is more than one):

Well #4 (new)

A. POA System Information

Provide the following information concerning the point of appropriation. Information provided must describe the equipment used to appropriate water from the point of appropriation.

1. Pump Information

MANUFACTURER	MODEL	SERIAL NUMBER	TYPE (CENTRIFUGAL, TURBINE OR SUBMERSIBLE)	INTAKE SIZE	DISCHARGE SIZE
Unavailable	NA	NA	Submersible	6"	4"

2. Motor Information

MANUFACTURER	HORSEPOWER
Franklin Electric	30 hp

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3. Theoretical Pump Capacity

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HORSEPOWER	OPERATING PSI	LIFT FROM SOURCE TO PUMP *IF A WELL, THE WATER LEVEL DURING PUMPING	LIFT FROM PUMP TO PLACE OF USE	TOTAL PUMP OUTPUT (IN CFS)
30	50	91	0	0.84

4. Provide pump calculations:

See Attached

5. Measured Pump Capacity (using meter if meter was present and system was operating)

INITIAL METER READING	ENDING METER READING	DURATION OF TIME OBSERVED	TOTAL PUMP OUTPUT (IN CFS)
Not Measured			

Reminder: For pump calculations use the reference information at the end of this document.

6. Additional notes or comments related to the system:

NA

B. Groundwater Source Information (Well and Sump)

1. Is the appropriation from a dug well (sump)?

NO

Change #2
Change in Place of Use

Did the transfer order authorize a change in the place of use?

YES

If "NO", this Section can be deleted.

1. Claim Summary – Authorized Use:

If Irrigation or Nursery Use:

THE # OF ACRES ALLOWED	THE # OF ACRES DEVELOPED
NA	

If the new use(s) was not irrigation or nursery:

NEW USE(S)	WAS THE NEW PLACE OF USE DEVELOPED TO THE FULL EXTENT AUTHORIZED UNDER THE ORDER? (INCLUDE THE LOCATION OF THE DEVELOPED PLACE USE ON THE CLAIM MAP)
Municipal Use	YES

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2. Variations:

Was the use developed differently from what was authorized by the transfer final order? **YES**

If yes, describe below.

(e.g. "The order authorized a change in place of use for 40 acres. The water user only developed 38 acres.")

Place of use is the urban growth boundary of the City of Malin. The place of use listed on the final order lists areas by quarter-quarters. There are several government lots in the urban growth boundary that were not listed on the transfer application that are shown on this map. The area shown on the map with government lots is the same area that is listed on the transfer order.

Change #3

Change in Character of Use

Did the transfer order authorize a change in character of use?

NO

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**SECTION 4
CONDITIONS**

All conditions contained in the transfer final order, or any extension final order shall be addressed. Reports that do not address all performance related conditions will be returned.

1. Time Limits:

Describe how the water user has complied with each of the development timelines established in the transfer final order and any extensions of time issued for the transfer:

	DATE FROM TRANSFER	DATE THE AUTHORIZED CHANGES WERE COMPLETED *THIS DATE MUST FALL BETWEEN THE "ISSUANCE DATE" AND THE "COMPLETENESS DATE"
ISSUANCE DATE	01/11/2007	
COMPLETENESS DATE FROM ORDER (C)	10/1/2012	Wells were constructed for other rights. Distribution system was already constructed. Changes were completed in 2008. Well 3 flowmeter was replaced in 2013

* MUST BE WITHIN PERIOD BETWEEN TRANSFER FINAL ORDER, OR ANY EXTENSION FINAL ORDER ISSUANCE AND THE DATE TO COMPLETE THE CHANGE

2. Is there an extension final order(s)?

NO

3. Measurement Conditions:

a. Does the transfer final order, or any extension final order require the installation of a meter or other approved measuring device?

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Reminder: If a meter or approved measuring device was required, the COBU map must indicate the location of the device in relation to the point of appropriation.

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b. Has a meter been installed?

YES

c. Meter Information

POA NAME OR #	MANUFACTURER	SERIAL #	CONDITION (WORKING OR NOT)	CURRENT METER READING	DATE INSTALLED
Well #2	Sensus	8237588 6	working	34584306 gal x 10	2011
Well #3	McCrometer	13- 07167	Working	000918 gal x 100	2013 (replacement)
Well #4	Onicon	113299	Working	NA	1999

4. Recording and reporting conditions

a. Is the water user required to report the water use to the Department?

NO

5. Other conditions required by the transfer final order or extension final order:

a. Were there special well construction standards?

NO

b. Was submittal of a ground water monitoring plan required?

NO

c. Other conditions?

NO

If "YES" to any of the above, identify the condition and describe the water user's actions to comply with the condition(s):

NA

**SECTION 5
ATTACHMENTS**

Provide a list of any additional documents you are attaching to this report:

ATTACHMENT NAME	DESCRIPTION
COBU Map	Claim map
Photos	Site photos
Well Logs	Well logs for Wells 2, 3, and 4
Worksheet for Pressure Pipe	Pressure pipe calculations for Wells 2, 3, and 4
Pump Calculations	Theoretical pump capacities for wells 2, 3, and 4

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SECTION 6

CLAIM OF BENEFICIAL USE MAP

The Claim of Beneficial Use Map must be submitted with this claim. Claims submitted without the Claim of Beneficial Use map will be returned. The map shall be submitted on poly film at a scale of 1" = 1320 feet, 1" = 400 feet, or the original full-size scale of the county assessor map for the location.

The changes that were authorized under the transfer final order must be mapped based on the developed locations; new or additional points of appropriation and place of use.

In cases where the order involved additional points of appropriation, the additional points should be mapped based on their developed locations. The original points of appropriation should be mapped based on the original right of record at the time the transfer final order was issued.

In cases where the order involved changing the place of use for a portion of a water right, the portion of the place of use being changed should be mapped based on the developed location. If the transfer also included portions of the place of use that were not being modified, but were receiving a new or additional point of appropriation, the place of use for those lands should be mapped based on the original right of record at the time the transfer final order was issued.

Provide a general description of the survey method used to prepare the map. Examples of possible methods include, but are not limited to, a traverse survey, GPS, or the use of aerial photos. If the basis of the survey is an aerial photo, provide the source, date, series and the aerial photo identification number.

Survey performed with Real Time GPS – Corner tie is a mag nail with brass washed located at the west ¼ corner of section 15

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Map Checklist

Please be sure that the map you submit includes ALL the items listed below.
(Reminder: Incomplete maps and/or claims may be returned.)

- Map on polyester film
- Appropriate scale (1" = 400 feet, 1" = 1320 feet, or the original full-size scale of the county assessor map)
- Township, Range, Section, Donation Land Claims, and Government Lots
- If irrigation, number of acres irrigated within each projected Donation Land Claims, Government Lots, Quarter-Quarters
- Locations of fish screens and/or fish by-pass devices in relationship to point of diversion
- Locations of meters and/or measuring devices in relationship to point of diversion or appropriation
- Conveyance structures illustrated (pumps, reservoirs, pipelines, ditches, etc.)
- Point(s) of diversion or appropriation (illustrated and coordinates)
- Tax lot boundaries and numbers
- Source illustrated if surface water
- Disclaimer ("This map is not intended to provide legal dimensions or locations of property ownership lines")
- Application and permit number or transfer number
- North arrow
- Legend
- CWRE stamp and signature

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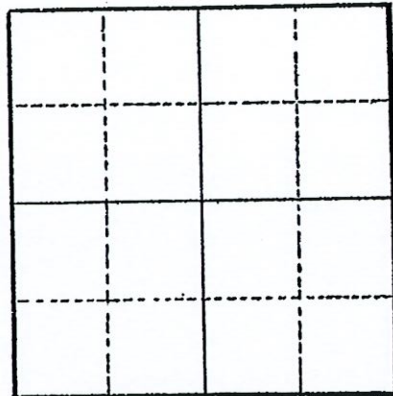
Klam
15095

Well Record

OWNER: Town of Malin
MAILING ADDRESS:
CITY AND STATE:

LOCATION OF WELL: Owner's No.
1/4 1/4 Sec. T. N. E.
S., R. W., W.M.

Bearing and distance from section or subdivision corner



Section

Altitude at well 4,066

TYPE OF WELL: Drilled Date Constructed

Depth drilled 327 Depth cased

CASING RECORD:
10-8 inch

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FINISH:

AQUIFERS:

Sand and gravel (?)

WATER LEVEL:

21 feet below land surface, 1943

PUMPING EQUIPMENT: Type Turbine H.P.
Capacity 600 G.P.M.

WELL TESTS:

Drawdown ft. after hours G.P.M.
Drawdown ft. after hours G.P.M.

USE OF WATER Public Supply Temp. °F., 19

SOURCE OF INFORMATION USGS

DRILLER or DIGGER

ADDITIONAL DATA:

Log Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:

City Well No. 2; located 300 ft. west of well No. 1; drawdown 10 ft. when pumped at 532 gpm for 1 hr.

STATE ENGINEER
Salem, Oregon

Klamath
18096

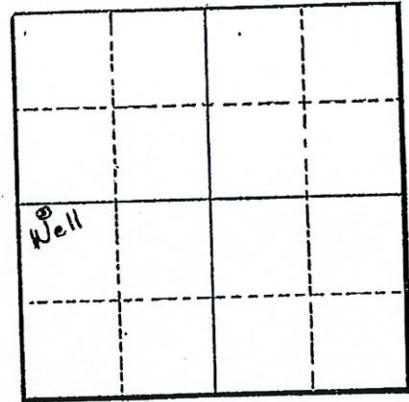
Well Record

STATE WELL NO. 41/12-15M
COUNTY Klamath
APPLICATION NO. 6-1167

OWNER: Malin Municipal Water System (City of Malin) ADDRESS: MAILING ADDRESS:

LOCATION OF WELL: Owner's No. # 2 CITY AND STATE: Malin, Oregon

NW 1/4 SW 1/4 Sec. 15 T. 41 S. R. 12 W., W.M.
Bearing and distance from section or subdivision corner 73°25' E. 501' 7" from 1/4 cor. of sections 15 & 16.



Section 15

Altitude at well 4200 ft.

TYPE OF WELL: Drilled Date Constructed 1937

Depth drilled 380 ft. Depth cased 100 ft.

CASING RECORD:
10 inch standardpipe 0 to 100 ft.

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AQUIFERS:

WATER LEVEL:
21 ft.

PUMPING EQUIPMENT: Type Layne pump H.P. 25
Capacity 600 G.P.M.

WELL TESTS:
Drawdown 10 ft. after 532 1/2 hours G.P.M.
Drawdown 9 ft. after 450 hours G.P.M.

USE OF WATER Municipal Temp. °F., 19.
SOURCE OF INFORMATION Related registration statement

DRILLER or DIGGER
ADDITIONAL DATA:
Log Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:
Log: Soil 0 to 5 ft.
Rocks with sand & clay layers 5 to 100 ft.
Lava rock & stratas of Honeycomb
lava rock 100 to 370 ft.
Heavy black water sand 370 to 380 ft.

WATER WELL REPORT
STATE OF OREGON

Klamath
18097

RECEIVED State Well No. *415/12E-1609*

MAR 31 1982

State Permit No.

WATER RESOURCES DEPT

SALEM, OREGON

(1) OWNER:

Name City of Malin
Address _____
City Malin, Stat Ore. 97632

(2) TYPE OF WORK (check):

New Well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:

Rotary Air Driven Domestic Industrial Municipal
Rotary Mud Dug Irrigation Test Well Other
 Bored Thermal: Withdrawal ReInjection

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other
Thermal: Withdrawal ReInjection

(5) CASING INSTALLED:

Steel Plastic
Threaded Welded
.....12" Diam. from0 ft. to181 ft. Gauge250.....
....." Diam. from ft. to ft. Gauge

LINER INSTALLED: none

....." Diam. from ft. to ft. Gauge

(6) PERFORATIONS:

Perforated? Yes No

Type of perforator used _____
Size of perforations _____ in. by _____ in.
..... perforations from ft. to ft.
..... perforations from ft. to ft.
..... perforations from ft. to ft.

(7) SCREENS:

Well screen installed? Yes No

Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot Size _____ Set from _____ ft. to _____ ft.
Diam. _____ Slot Size _____ Set from _____ ft. to _____ ft.

(8) WELL TESTS:

Drawdown is amount water level is lowered below static level **Interstate**

Is a pump test made? Yes No If yes, by whom? Pump Co.
Field: 1000 gal./min. with 83 ft. drawdown after 3 hrs.
" 800 " 53 " 3 "
Air test gal./min. with drill stem at _____ ft. hrs.
Bailer test gal./min. with _____ ft. drawdown after _____ hrs.
Artesian flow g.p.m. _____
Temperature of water 54 Depth artesian flow encountered ft.

(9) CONSTRUCTION:

Special standards: Yes No

Well seal—Material used cement
Well sealed from land surface to 40 50 ft.
Diameter of well bore to bottom of seal 16 in.
Diameter of well bore below seal 10 in.
Number of sacks of cement used in well seal 45 sacks
How was cement grout placed? grout pump
.....
Was pump installed? no Type _____ HP _____ Depth _____ ft.
Was a drive shoe used? Yes No Plugs _____ Size: location _____ ft.
Did any strata contain unusable water? Yes No
Type of Water? surface depth of strata 15
Method of sealing strata off casing & cement
Was well gravel packed? Yes No Size of gravel: _____
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:

County Klamath Driller's well number _____
N.E. 1/4 S.E. 1/4 Section 16 T. 41S R. 12E. W.M. _____
Tax Lot # _____ Lot _____ Blk _____ Subdivision _____
Address at well location: _____

(11) WATER LEVEL: Completed well.

Depth at which water was first found 194 ft.
Static level 25 ft. below land surface. Date 10/12/8
Artesian pressure _____ lbs. per square inch. Date _____

(12) WELL LOG:

Diameter of well below casing 10 ft.
Depth drilled 300 ft. Depth of completed well 300 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
top soil	0	4	
brown clay & sand	4	17	
yellow clay	17	65	
gray clay	65	73	
yellow clay & coarse sand	73	117	
gray lava & clay	117	126	
gray shale	126	175	
gray lava	175	194	25
brown lava	194	207	"
gray lava	207	214	"
brown lava	214	221	"
gray lava	221	229	"
brown lava	229	260	"
gray lava	260	300	"

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Work started 9/17 19 81 Completed 10/12 19 82
Date well drilling machine moved off of well 10/12 19 82

Drilling Machine Operator's Certification:

This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] John A. Van Meter Date 3/29, 19.82
(Drilling Machine Operator) License No. 118

Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name John A. Van Meter (Type or print)
(Person, firm or corporation)
Address P.O. Box 204 Malin, Ore. 97632
[Signed] John A. Van Meter
(Water Well Contractor)
Contractor's License No. 170 Date 3/29, 19.82

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

WATER RESOURCES DEPARTMENT,
SALEM, OREGON 97310
within 30 days from the date of well completion.

SP*12658-69X

KLAM 51832

MAY 24 1999

STATE OF OREGON WATER SUPPLY WELL REPORT (as required by ORS 537.765)

WATER RESOURCES DEPT. SALEM, OREGON

WELL I.D. # L 29461 START CARD # 107320

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number #4 Name CITY OF MALIN Address PO Box 61 City MALIN State ORE Zip 97632

(2) TYPE OF WORK [X] New Well [] Deepening [] Alteration (repair/recondition) [] Abandonment

(3) DRILL METHOD: [] Rotary Air [X] Rotary Mud [] Cable [] Auger [] Other

(4) PROPOSED USE: [] Domestic [X] Community [] Industrial [] Irrigation [] Thermal [] Injection [] Livestock [] Other

(5) BORE HOLE CONSTRUCTION: Special Construction approval [] Yes [X] No Depth of Completed Well 625' Explosives used [] Yes [X] No Type Amount

Table with columns: HOLE Diameter, From, To, Material, SEAL From, To, Sacks or pounds. Row 1: 17 1/2, 0, 31, CEMENT, 0, 31, 23 SKS

How was seal placed: Method [] A [] B [X] C [] D [] E [] Other Backfill placed from ft. to ft. Material Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER: Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Casing: 12 3/4, 79, 31, 280, [X], [], [X], []

Final location of shoe(s) 31 FEET

(7) PERFORATIONS/SCREENS: Table with columns: From, To, Slot size, Number, Diameter, Tele/pipe size, Casing, Liner

(8) WELL TESTS: Minimum testing time is 1 hour [X] Pump [] Bailer [] Air [] Flowing Artesian Yield gal/min 275 Drawdown 183 Drill stem at Time 24 hr

Temperature of water 58°F Depth Artesian Flow Found Was a water analysis done? [] Yes By whom Did any strata contain water not suitable for intended use? [] Too little [] Salty [] Muddy [] Odor [] Colored [] Other Depth of strata:

(9) LOCATION OF WELL by legal description: County Klamath Latitude Longitude Township 41S N or S Range 12E E or W. WM. Section 16 NE 1/4 NE 1/4 Tax Lot R4112 Lot 01600 Block 401 Subdivision Street Address of Well (or nearest address) CANAL ST MALIN, ORE

(10) STATIC WATER LEVEL: 91 ft. below land surface. Date 5/14/99 Artesian pressure lb. per square inch. Date

(11) WATER BEARING ZONES: Depth at which water was first found 117 FEET

Table with columns: From, To, Estimated Flow Rate, SWL. Row 1: 117, 625, 275 GPM

(12) WELL LOG: Ground Elevation

Table with columns: Material, From, To, SWL. Contains text: SEG ATTACHED SHEET, RECEIVED NOV 12 2021, QWRD

Date started APRIL 7, 99 Completed MAY 14, 99 (unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

Signed _____ Date _____ WWC Number _____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

Signed _____ Date 5/17/99 WWC Number 601

STOREY DRILLING SERVICES

P.O. Box 98 • MIDLAND, OREGON 97634
(541) 884-3990 • (800) 245-8122
Fax #: (530) 528-2562

22560 ADOBE ROAD • RED BLUFF, CALIFORNIA 96080
CONTRACTOR'S LICENSES:
OR #601 • CA #583153 • NV #38199

City of Malin
P. O. Box 61
Malin, Oregon 97632

WELL LOCATION: NE¼ NE¼S16 T41S R12E
South end of Turkey Hill above city pool

LOG

0 - 2	Brown sandy clay
2 - 4	Decomposed brown lava
4 - 25	Brown lava
25 - 32	Gray basalt
32 - 42	Brown lava
42 - 44	Gray basalt
44 - 72	Brown basalt
72 - 106	Hard black basalt
106 - 112	Brown lava
112 - 117	Hard black basalt
117 - 119	Black lava
119 - 141	Hard black basalt
141 - 149	Gray basalt
149 - 164	Hard black basalt
164 - 172	Bubbly black lava with black clay
172 - 187	Hard black basalt
187 - 188	Hard broken black basalt
188 - 190	Hard black basalt
190 - 250	Black lava
250 - 260	Grayish blue clay
260 - 267	Gray clay with black lava
267 - 282	Hard gray basalt
282 - 283	Bubbly brown lava
283 - 297	Hard black basalt
297 - 298	Brown lava
298 - 312	Black basalt
312 - 315	Brown clay with black lava
315 - 333	Hard black basalt
333 - 344	Brown lava
344 - 353	Hard broken black basalt
353 - 386	Brown basalt
386 - 390	Brown lava with brown clay
390 - 397	Hard broken black basalt
397 - 405	Black lava
405 - 414	Hard black basalt
414 - 421	Black lava
421 - 430	Black basalt
430 - 436	Black lava
436 - 442	Black basalt



START: April 7, 1999
FINISH: May 14, 1999

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City of Malin LOG (continued)

442 - 454	Brown decomposed lava with clay
454 - 467	Hard broken black basalt
467 - 477	Brown decomposed lava with clay
477 - 490	Black lava
490 - 501	Hard broken gray basalt
501 - 513	Hard gray basalt
513 - 533	Bubbly black lava with gray clay
533 - 550	Black basalt
550 - 556	Hard black basalt
556 - 563	Gray clay
563 - 588	Hard black basalt
588 - 589	Black lava with clay
589 - 597	Brown lava with clay
597 - 625	Black lava with gray clay

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40 feet of 12 3/4 inch O. D. x .250 wall steel casing set and cemented at 31 feet (9 feet of casing above ground level to accommodate fill).

12 1/4 diameter open hole from 31 to 243 feet; 7 7/8 inch diameter hole from 243 to 625 feet.

Test pumped 24 hours to yield 275 GPM at 183 feet. Static water level at 91 feet. Specific capacity 3GPM/foot.

Temperature 58° Fahrenheit. 7 grains Hardness. 0.0 PPM Iron.

An electric log of the well was performed to determine water bearing zones.

Worksheet for Pressure Pipe - Well 2

Project Description

Friction Method Hazen-Williams Formula
Solve For Pressure at 1

Input Data

Pressure 2	15.00	psi
Elevation 1	4066.00	ft
Elevation 2	4160.00	ft
Length	2100.00	ft
Roughness Coefficient	150.000	
Diameter	8.00	ft
Discharge	0.84	ft ³ /s

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Results

Pressure 1	55.75	psi
Headloss	0.00	ft
Energy Grade 1	4194.60	ft
Energy Grade 2	4194.60	ft
Hydraulic Grade 1	4194.60	ft
Hydraulic Grade 2	4194.60	ft
Flow Area	50.27	ft ²
Wetted Perimeter	25.13	ft
Velocity	0.02	ft/s
Velocity Head	0.00	ft
Friction Slope	0.00000	ft/ft

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Theoretical Pump Capacity Well #2
City of Malin T-8536 FINAL PROOF SURVEY

Flow 0.84 CFS
Head 55.75 PSI see calculations on loss
LIFT 83 Feet (from well log)
Efficiency 85% Submersible Pump

HP 23.7 30 HP total pump

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Worksheet for Pressure Pipe - Well 3

Project Description

Friction Method Hazen-Williams Formula
Solve For Pressure at 1

Input Data

Pressure 2	15.00	psi
Elevation 1	4066.00	ft
Elevation 2	4160.00	ft
Length	2000.00	ft
Roughness Coefficient	150.000	
Diameter	8.00	ft
Discharge	0.84	ft ³ /s

Results

Pressure 1	55.75	psi
Headloss	0.00	ft
Energy Grade 1	4194.60	ft
Energy Grade 2	4194.60	ft
Hydraulic Grade 1	4194.60	ft
Hydraulic Grade 2	4194.60	ft
Flow Area	50.27	ft ²
Wetted Perimeter	25.13	ft
Velocity	0.02	ft/s
Velocity Head	0.00	ft
Friction Slope	0.00000	ft/ft

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Theoretical Pump Capacity Well #3
City of Malin T-8536 FINAL PROOF SURVEY

Flow 0.84 CFS
Head 55.75 PSI see calculations on loss
LIFT 83 Feet (from well log)
Efficiency 85% Submersible Pump

HP 23.7 30 HP total pump

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Worksheet for Pressure Pipe - Well 4

Project Description

Friction Method Hazen-Williams Formula
Solve For Pressure at 1

Input Data

Pressure 2	50.00	psi
Elevation 1	4160.00	ft
Elevation 2	4160.00	ft
Length	66.00	ft
Roughness Coefficient	150.000	
Diameter	8.00	ft
Discharge	0.84	ft ³ /s

Results

Pressure 1	50.00	psi
Headloss	0.00	ft
Energy Grade 1	4275.33	ft
Energy Grade 2	4275.33	ft
Hydraulic Grade 1	4275.33	ft
Hydraulic Grade 2	4275.33	ft
Flow Area	50.27	ft ²
Wetted Perimeter	25.13	ft
Velocity	0.02	ft/s
Velocity Head	0.00	ft
Friction Slope	0.00000	ft/ft

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Theoretical Pump Capacity Well #4
City of Malin T-8536 FINAL PROOF SURVEY

Flow	0.84 CFS
Head	50 PSI see calculations on loss
LIFT	91 Feet (from well log)
Efficiency	85% Submersible Pump
HP	23.1 30 HP total pump

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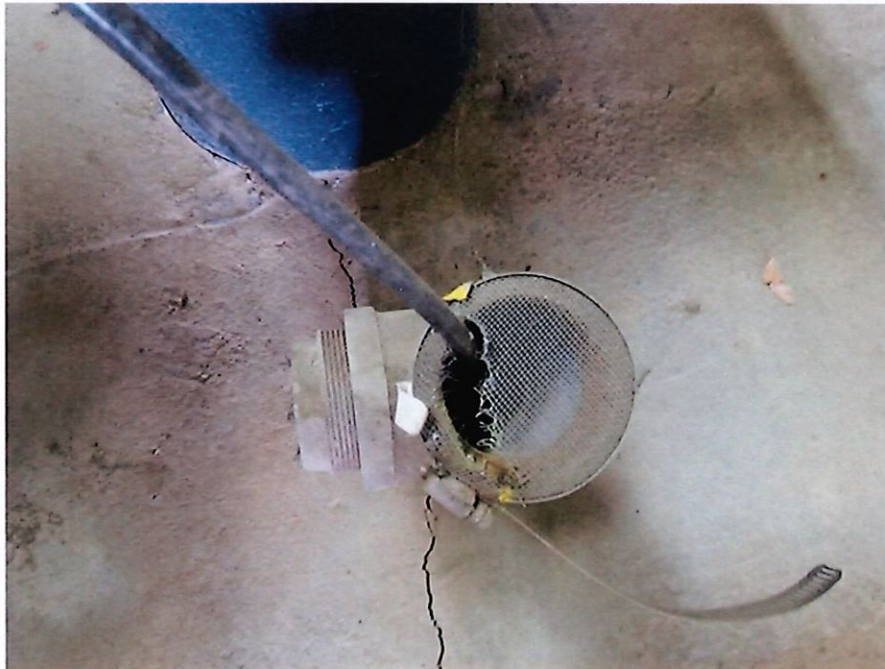
City of Malin
CLAIM OF BENEFICIAL USE
Inspection Photographs
Transfers T-8536 & T-8537

Job: 2021-150
Date: 10/27/2021



Well #2 & Access Port

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Well #2 Access Port With Electronic Level Transducer Installed



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17681 Hwy 395
Lakeview, Oregon 97630

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Inspection Photographs
Transfers T-8536 & T-8537

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Date: 10/27/2021



Well #2 Flowmeter

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Well #2 Flowmeter



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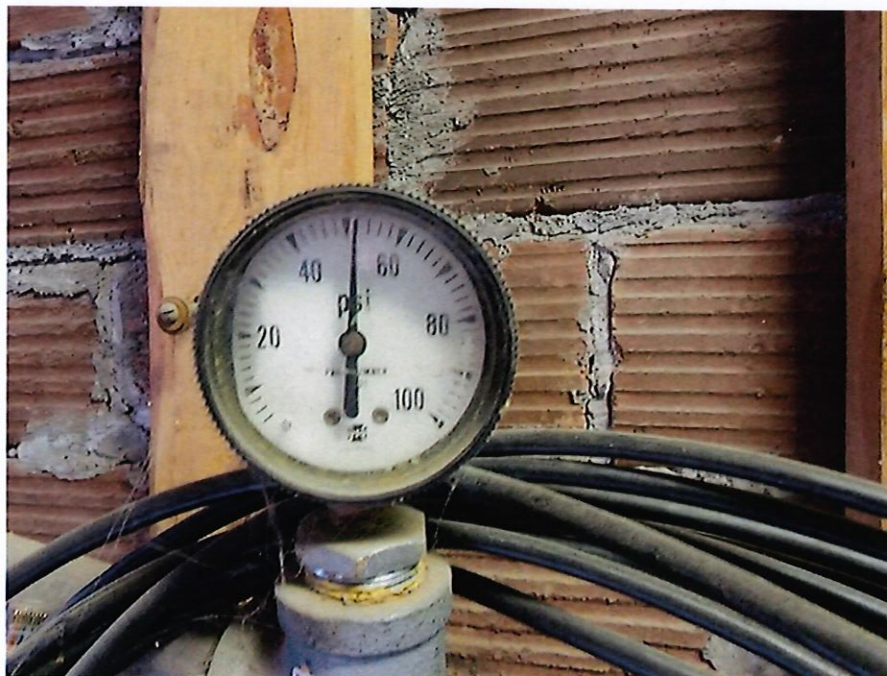
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Inspection Photographs
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Date: 10/27/2021



Well #2 Discharge to Municipal System

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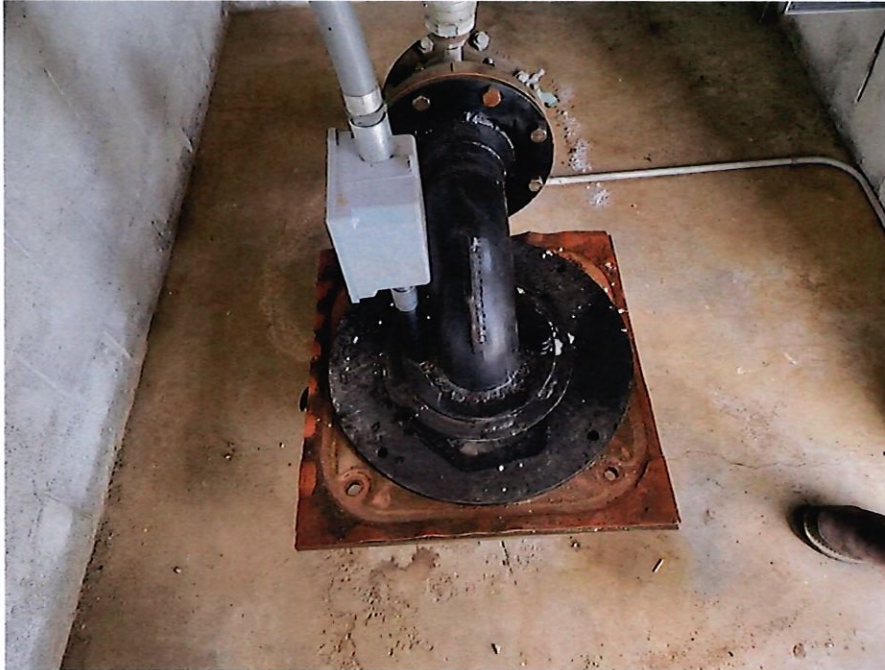
Well #2 Pressure Gauge



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Well #3



Well #3 Access Port

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Well #3 Flowmeter



Well #3 Flowmeter



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Well #3 Discharge to Municipal System

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Well #4



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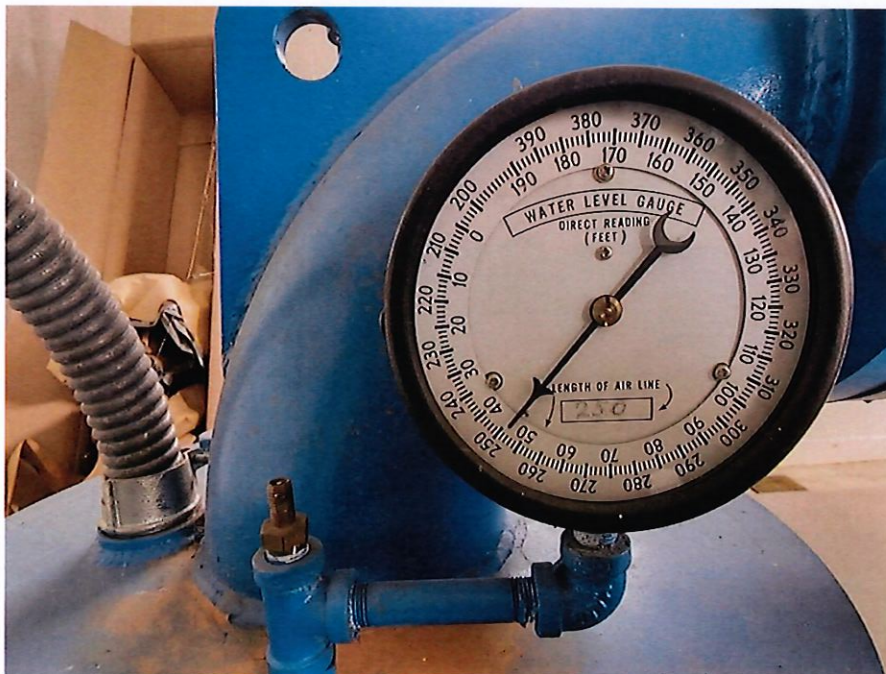
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Well #4 Flowmeter



Well #4 Water Level Gauge



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