Title SR Well

NC

UMAT 472

RECEIVED JAN 19 1967 STATE ENGINEER

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/28-7aad(2)

State Permit No.

(1) OWNER: Larry Hansell
Name Oliver Abney
Address Lind, Washington

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ NE ¼ Section 7 T. 2N R. 28E W.M.
Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):
Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check): (5) TYPE OF WELL:
Domestic ☐ Industrial ☐ Municipal ☐ Rotary ☐ Driven ☐
Irrigation ☒ Test Well ☐ Other ☐ Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED: Threaded ☐ Welded ☒
16 " Diam. from 0 ft. to 120 ft. Gage .330
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS: Well screen installed? ☐ Yes ☒ No
Manufacturer's Name
Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Well seal—Material used in seal puddle clay
Depth of seal 120 ft. Was a packer used? no
Diameter of well bore to bottom of seal 18 in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth
Was a drive shoe used? ☒ Yes ☐ No
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 90 ft. below land surface Date
Artesian pressure lbs. per square inch Date

(11) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

(12) WELL LOG: Diameter of well below casing 16"
Depth drilled 159 ft. Depth of completed well 155 ft.
Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Soil Sandy	0	27
Gravel Sandy	27	51
Clay Brown	51	80
Clay Blue	80	96
Clay White	96	101
Clay Red	101	107
Clay Blue	107	119
Green Sand Boulders (hard)	119	132
Gray Sand Boulders (hard)	132	155

See Lithology 2-28-7aad

RECEIVED BY OWRD
MAY 28 2014
SALEM, OR

Work started Feb. 28 1966 Completed May 6 1966
Date well drilling machine moved off of well May 7 1966

(13) PUMP:
Manufacturer's Name
Type: H.P.

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 Ben Dreyer Drilling Contractor (Person, firm or corporation) (Type or print)
Address Rt. 1, Box 225 Hermiston, Oregon
Drilling Machine Operator's License No. 7
[Signed] Ben Dreyer (Water Well Contractor)
Contractor's License No. 12 Date May 8, 1966

(USE ADDITIONAL SHEETS IF NECESSARY)

No Pump Test. See Lithology

RECEIVED
JAN 28 1966
STATE ENGINEER
SALEM OREGON

OBSERVATION WELL
UMAT 474

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/28-7 aad(1)
State Permit No.

(1) OWNER:
Larry Hammon
Name Oliver Abney
Address
Lind, Washington

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ NE¼ Section 7 T 2N R 28E W.M.
Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☒ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☐
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS:
Well screen installed? ☐ Yes ☒ No
Manufacturer's Name
Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Well seal—Material used in seal
Depth of seal ft. Was a packer used?
Diameter of well bore to bottom of seal in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth
Was a drive shoe used? ☐ Yes ☒ No
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusuable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 90 ft. below land surface Date 1-3-66
Artesian pressure lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☒ Yes ☐ No If yes, by whom Driller
Yield: 800 gal./min. with 15 ft. drawdown after 3 hrs.
" " " " "
" " " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

(12) WELL LOG:
Diameter of well below casing 8 in.
Depth drilled 702 ft. Depth of completed well 702 ft.
Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Rock Gray hard	400	439
Loose Boulder	439	442
Rock Black hard	442	512
Rock Gray hard	512	578
Rock Black medium	578	594
Rock Gray hard	594	600
Rock Gray medium	600	625
Rock Black Soft water	625	697
Rock Black Medium	697	702

RECEIVED BY OWRD
MAY 28 2014
SALEM, OR

Work started Nov. 15 19 65 Completed Jan. 2 19 66
Date well drilling machine moved off of well Jan. 3 19 66

(13) PUMP:
Manufacturer's Name
Type: H.P.

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 Ben Drever Drilling Contractor
(Person, firm or corporation) (Type or print)
Address Rt. 1 Box 225 Hermiston, Oregon
Drilling Machine Operator's License No. 7
[Signed] Ben Drever (Water Well Contractor)
Contractor's License No. 12 Date Jan 22, 1966 19

(USE ADDITIONAL SHEETS IF NECESSARY)

NC

UMAT 473

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM, OREGON 97310 within 30 days from the date of well completion.

RECEIVED SEP 3 1968 STATE ENGINEER SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/28-7aad(2)

State Permit No. 4581

(1) OWNER:
Name Oliver Abney
Address (Formerly of Lind, Washington)
815 Madrona, Hermiston, Oregon 97838

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ NE ¼ Section 7 T. 2N R. 28E W.M.
Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☒ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☒
16" Diam. from 0 ft. to 120 ft. Gage .330
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS:
Well screen installed? ☐ Yes ☒ No
Manufacturer's Name
Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Well seal—Material used in seal puddle clay
Depth of seal ft. Was a packer used? no
Diameter of well bore to bottom of seal in.
Were any loose strata cemented off? ☐ Yes ☒ No Depth
Was a drive shoe used? ☒ Yes ☐ No
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 155 ft. below land surface Date 7/23/68
Artesian pressure lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☒ Yes ☐ No If yes, by whom?
Yield: 2690 gal./min. with 95 ft. drawdown after 3 hrs.
" " " "
" " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water 74° Was a chemical analysis made? ☐ Yes ☒ No

(12) WELL LOG:
Diameter of well below casing 16"
Depth drilled 540 ft. Depth of completed well 690 ft.

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

Start 1/23/67 MATERIAL	FROM	TO
Deepening	150	
White Basalt	150	160
Clay	160	165
Red Sand & Clay	165	172
Red Rock	172	177
Red Sand & Clay	177	186
Rock	180	185
Red Porous Rock	185	192
Hard Rock	192	200
Red Porous Rock	200	222
Hard Gray Rock	222	285
Black Rock	285	299
Black Porous Rock & Green Clay	299	390
Hard Black Rock	390	445
Black Porous Rock	445	515
Gray Hard Rock	515	540
Hard Black Rock	540	585
Blue Clay	585	605
Soft Black Rock	605	620
Hard Gray Rock	620	627
Water Bearing Strata	627	690

RECEIVED BY OWRD MAY 28 2014 SALEM, OR

Work started 1/23/67 19 Completed 7/25/68 19
Date well drilling machine moved off of well 7/25/68 19

(13) PUMP:
No pump yet
Manufacturer's Name
Type: H.P.

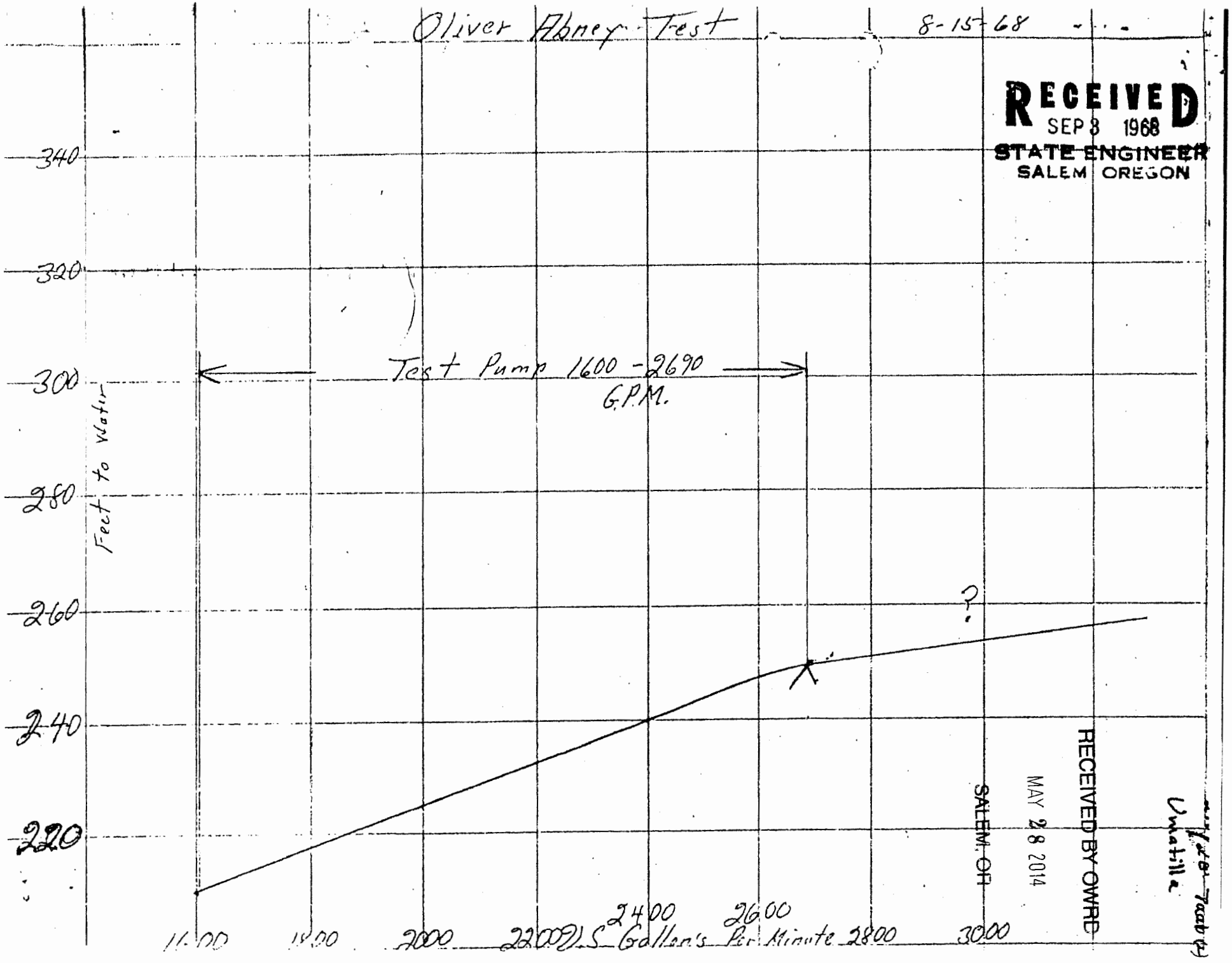
Water Well Contractor's Certification:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Oliver Abney (Person, firm or corporation) (Type or print)
Address 815 Madrona, Hermiston, Oregon 97838

Drilling Machine Operator's License No.
[Signed] Oliver Abney (Water Well Contractor)
Contractor's License No. Date Aug 30, 19 68

(USE ADDITIONAL SHEETS IF NECESSARY)


Oliver Abney Test
8-15-68
RECEIVED
SEP 3 1968
STATE ENGINEER
SALEM OREGON
340
320
300
280
260
240
220
Feet to Water
Test Pump 1600 - 2690 G.P.M.
?
1600
1800
2000
2200
2400
2600
2800
3000
U.S. Gallon's Per Minute
RECEIVED BY OWRD
MAY 28 2014
SALEM, OR
Umatilla
Tab 4

Ammon well # 2

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.

UMAT 441

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/27E-26b

RECEIVED
APR 18 1978
WATER RESOURCES DEPT
SALEM, OREGON

State Permit No.

(Do not write above this line)

RECEIVED
MAY 15 1978
WATER RESOURCES DEPT
SALEM, OREGON

(1) OWNER:
Name Ammon Bros. Farms Inc.
Address Box 52
Jefferson

(2) TYPE OF WORK (check):
New Well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☑ Driven ☐
Cable ☐ Jetted ☐
Dug ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☑ Test Well ☐ Other ☐

CASING INSTALLED:
Threaded ☐ Welded ☑
14" Diam. from 0 ft. to 202 ft. Gage .250
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

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
Was a pump test made? ☑ Yes ☐ No If yes, by whom? Fremore Pump
Yield: 1600 GPM gal./min. with ft. drawdown after 4 hrs.
" " " "
" " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m.
Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Well seal—Material used Neat Cement
Well sealed from land surface to 202 ft.
Diameter of well bore to bottom of seal 18 in.
Diameter of well bore below seal 14 in.
Number of sacks of cement used in well seal 120 sacks
How was cement grout placed?

Was a drive shoe used? ☐ Yes ☑ No Plugs Size, location ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? depth of strata
Method of sealing strata off
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 25-78
NW ¼ SW ¼ Section 26 T. 27N R. 27E W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 321 ft.
Static level 349 ft. below land surface. Date
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 14" to 550', 8" below
Depth drilled 1205 ft. Depth of completed well 1205 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
Soil	0	6	
Cobbles	6	20	
Broken Grey Basalt	20	181	
Hard Grey "	181	288	
Med. " "	288	320	
Soft Red "	320	356	water
Med. Grey "	356	500	
Soft " "	500	520	
Broken " "	520	575	
Hard " "	575	780	
Soft " "	780	812	water
Med Hard " "	812	1149	
Broken Red "	1149	1161	water
Broken Grey "	1161	1192	
Hard Grey "	1192	1205	

Work started 3-2 1978 Completed 3-27 1978
Date well drilling machine moved off of well 3-27 1978

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] E. Wallace (Drilling Machine Operator) Date 4-15, 1978
Drilling Machine Operator's License No. 886

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 Wallace Well Drlg Co. (Person, firm or corporation) (Type or print)
Address Pendleton, Or.
[Signed] E. Wallace (Water Well Contractor)
Contractor's License No. 583 Date 4-15, 1978

(USE ADDITIONAL SHEETS IF NECESSARY)

SP*45656-118

RECEIVED

MAY 28 1963

STATE ENGINEER

(UMAT 442)

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM 10, OREGON within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/27-27

State Permit No.

(1) OWNER:
Name Clausie Ammon
Address
Echo, Oregon

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ ¼ Section T. R. W.M.
Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☒ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☐
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) PERFORATIONS:
Perforated? ☐ Yes ☐ No
Type of perforator used
Size of perforations in. by in.
perforations from ft. to
perforations from ft. to
perforations from ft. to
perforations from ft. to
perforations from ft. to

(8) 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.

(9) CONSTRUCTION:
Well seal—Material used in seal
Depth of seal ft. Was a packer used?
Diameter of well bore to bottom of seal in.
Were any loose strata cemented off? ☐ Yes ☐ No Depth
Was a drive shoe used? ☐ Yes ☐ No
Was well gravel packed? ☐ Yes ☐ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusable water? ☐ Yes ☐ No
Type of water? Depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level FLOWING ft. below land surface Date 1-26-61
Artesian pressure lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

(12) WELL LOG:
Diameter of well below casing
Depth drilled ft. Depth of completed well ft.

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Boulders	840	855
Rock black hard	855	871
Boulders blue hard 100%	871	886

MATERIAL	From	To	SWL
DECOMPOSED BASALT	668	674	62
HARD BASALT	674	681	62
DECOMPOSED BASALT	681	683	62
HARD BASALT	683	705	62
DECOMPOSED BASALT	705	725	62

RECEIVED BY OWRD
MAY 28 2014
SALEM, OR

Work started 1-25 19 62 Completed 2-25 19 62
Date well drilling machine moved off of well 2-27 19 62

(13) PUMP:
Manufacturer's Name
Type: H.P.

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 Ben Dreyer Drilling Contractor
(Person, firm or corporation) (Type or print)

Address Rt. 1 Box 225 Hermiston, Oregon

Drilling Machine Operator's License No. 7

[Signed] Ben Dreyer
(Water Well Contractor)

Contractor's License No. 12 Date 5-20-63 19

(USE ADDITIONAL SHEETS IF NECESSARY)

UMAT 55669
RECEIVED

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

FEB 08 2006
WATER RESOURCES DEPT
SALEM, OREGON

WELL I.D. # L 82258
START CARD # 173606

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

(1) LAND OWNER — Well Number
Name Hale FARMS
Address P.O Box 110
City Hermiston State OR Zip 97838

(2) TYPE OF WORK ☐ New Well
☐ Deepening ☑ Alteration (repair/recondition) ☐ Abandonment ☐ Conversion

(3) DRILL METHOD
☑ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Other

(4) PROPOSED USE
☐ Domestic ☐ Community ☐ Industrial ☑ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION Special Construction: ☐ Yes ☒ No
Depth of Completed Well 1205 ft.
Explosives used ☐ Yes ☒ No Type ____ Amount ____

BORE HOLE Diameter	From	To	SEAL Material	From	To	Sacks or Pounds
8" Existing	See	UMAT 441				

How was seal placed Method ☐ A ☐ B ☐ C ☐ D ☐ E
☐ Other
Backfill placed from ____ ft. to ____ ft. Material ____
Gravel placed from ____ ft. to ____ ft. Size of gravel ____

(6) CASING/LINER

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing	Existing				☐	☐	☐	☐
Liner					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☐ None
Final location of shoe(s)

(7) PERFORATIONS/SCREENS
☐ Perforations Method
☐ Screens Type Material

From	To	Slot Size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☑ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
800		740	1 HR

Temperature of water 65° 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 (legal description)
County Umatilla
Tax Lot 700 Lot
Township 2N N or S Range 27E E or W WM
Section 02 NW 1/4 SW 1/4
Lat ° ' " or (degrees or decimal)
Long ° ' " or (degrees or decimal)
Street Address of Well (or nearest address) 73426 Hwy 207
Echo OR 97826

(10) STATIC WATER LEVEL
513 ft. below land surface. Date 1-31-06
543 ft. below land surface. Date 2-2-06
Artesian pressure lb. per square inch Date

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

From	To	Estimated Flow Rate	SWL
N/A		Existing	

(12) WELL LOG Ground Elevation

Material	From	To	SWL
Original Well Log indicates 14" Hole to 560 And 8" Hole to 1205			
Planned on Reaming 8" Hole to 12" down to 750'			
Found 8" Hole @ 740'			
Do not change anything in the Hole			

RECEIVED BY OWRD
MAY 28 2014
SALEM, OR

Date Started 1-30-06 Completed 2-2-06

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, 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

WWC Number 1735 Date 2-2-06
Signed

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, 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.

WWC Number 544 Date 2-2-06
Signed Jerry Bund

ORIGINAL – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – CUSTOMER 06/16/2004

UMAT 55809

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L 82258

START CARD # 173612

(1) LAND OWNER

Owner Well I.D. _____

First Name _____ Last Name _____
Company HALE FARMS
Address PO BOX 128
City ECHO State OR Zip 97826

(2) TYPE OF WORK

☐ New Well ☐ Deepening ☐ Conversion
☒ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD

☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☐ Other _____

(4) PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Community
☐ Industrial/ Commercial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other _____

(5) BORE HOLE CONSTRUCTION

Special Standard ☐ Attach copy
Depth of Completed Well 1,186 ft

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☒ Other POURED GRAVEL/BENT
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____
Explosives used: ☐ Yes Type _____ Amount _____

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s) _____
Temp casing ☐ Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS

Perforations Method _____
Screens Type _____ Material _____

Perf/ Screen	Casing/ Screen Liner	Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

◯ Pump ◯ Bailer ◯ Air ◯ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Temperature _____ °F Lab analysis ☐ Yes By _____
Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)

County UMATILLA Twp 2.00 N N/S Range 27.00 E E/W WM
Sec 2 NW 1/4 of the SW 1/4 Tax Lot 700
Tax Map Number _____ Lot _____
Lat ° 0 ' " or _____ DMS or DD
Long ° 0 ' " or _____ DMS or DD
◯ Street address of well ◉ Nearest address
NEXT TO HALE ARENA - BUTTERCREEK HWY
73426 HWY 207

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening	02-02-2006			443
Completed Well	02-16-2006			434

Flowing Artesian? ☐

WATER BEARING ZONES — Depth water was first found _____

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) WELL LOG

Ground Elevation _____

Material	From	To

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SALEM, OREGON

Date Started 02-13-2006 Completed 02-16-2006

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, 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.

License Number 1735 Date 03-14-2006
Password (if filing electronically) ****
Signed _____

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, 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.

License Number 544 Date 03-14-2006
Password (if filing electronically) ****
Signed Jay Beard

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.82

UMAT 55809

WATER SUPPLY WELL REPORT - continuation page

WELL I.D. # L 82258

START CARD # 173612

(5) BORE HOLE CONSTRUCTION

BORE HOLE

Dia	From	To

SEAL

Material	From	To	Amt	sacks/ lbs

FILTER PACK

From	To	Material	Size

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

(7) PERFORATIONS/SCREENS

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) WELL LOG

Material	From	To

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MAR 23 2006

WATER RESOURCES DEPT
SALEM, OREGON

Comments/Remarks

FILLED FROM 1156 TO 1160 WITH GRAVEL
FILLED FROM 1160 TO 1162 WITH BENTONITE
FILLED FROM 1162 TO 1164 WITH GRAVEL
FILLED FROM 1164 TO 1166 WITH BENTONITE
FILLED FROM 1166 TO 1171 WITH GRAVEL
FILLED FROM 1171 TO 1175 WITH BENTONITE
FILLED FROM 1175 TO 1186 WITH GRAVEL

BENTONITE = 6 SACKS
GRAVEL = 800 LBS

UMAT 55736

UMAT 55736

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

WELL LABEL # L 99396
START CARD # 186481

(1) LAND OWNER Owner Well I.D. UMAT 441
First Name _____ Last Name _____
Company Hale Farms
Address 115 W. Harriston Ave
City Hermiston State OR Zip 97838

(2) TYPE OF WORK ☐ New Well ☐ Deepening ☐ Conversion
☒ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD
☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Auger ☐ Cable Mud
☐ Reverse Rotary ☐ Other

(4) PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Community
☐ Industrial/ Commercial ☐ Livestock ☐ Dewatering
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION Special Standard ☐ Attach copy
Depth of Completed Well 1,146.5 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs

How was seal placed: Method ☐ A ☐ B ☐ C ☐ D ☐ E
☐ Other
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: ☐ Yes Type Amount

(6) CASING/LINER

Casing/Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

Shoe ☐ Inside ☐ Outside ☐ Other Location of shoe(s)
Temp casing ☐ Yes Dia From To

(7) PERFORATIONS/SCREENS
Perforations Method
Screens Type Material

Perf/Screen	Casing/Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/pipe

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)
Temperature °F Lab analysis ☐ Yes By
Water quality concerns? ☐ Yes (describe below)

From	To	Description	Amount	Units

(8) LOCATION OF WELL (legal description)
County UMATILLA Twp 2 N N/S Range 27 E E/W WM
Sec 2 NW 1/4 of the SW 1/4 Tax Lot 700
Tax Map Number Lot
Lat ° 0 ' " or 45.68194 N DMS or DD
Long ° 0 ' " or -119.39360 W DMS or DD
☐ Street address of well ☒ Nearest address
West of HWY 207 and N of Eagle Ranch Rd; Echo, OR

(10) STATIC WATER LEVEL

	Date	SWL(ps.)	+	SWL(ft)
Existing Well / Predeepening	04-18-2006			514.
Completed Well	04-25-2006			463.5

Flowing Artesian? ☐ Dry Hole? ☐

WATER BEARING ZONES Depth water was first found

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

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(11) WELL LOG Ground Elevation

Material	From	To
See UMAT 441 for well construction details.		
Backfill bottom of well - 8" open hole		
Cement - 2 sacks	1,146.5	1,152.5
Bentonite Pellets - 11 buckets (50 lbs)	1,152.5	1,173.8
Pea Gravel - 10 sacks	1,173.8	1,180.
Bentonite Chips - 23 sacks	1,180.	1,184.

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SALEM, OREGON

Date Started 04-18-2006 Completed 04-26-2006

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, 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.
License Number 1702 Date 5-22-06
Password (if filing electronically)
Signed

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, 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.
License Number 1523 Date 5-17-06
Password (if filing electronically)
Signed
Contact Info

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version: 0.88

UMAT 55736
UMAT 55736

WATER SUPPLY WELL REPORT -
continuation page

WELL I.D. # L 99396

START CARD # 106481

(5) BORE HOLE CONSTRUCTION

BORE HOLE Dia	From	To	SEAL Materia	From	To	Amt	sacks/ lbs

FILTER PACK

From	To	Material	Size

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

(7) PERFORATIONS/SCREENS

Perf/ Scree n	Casing /Liner	Screen Dia	From	To	Scrn/slot width	Slot lengt h	# of slots	Tele/ pipe elve

(8) WELL TESTS: Minimum testing time is 1 hour

Yield ga /min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)

(11) WELL LOG

Material	From	To

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WATER RESOURCES DEPT
SALEM, OREGON

Comments/Remarks

See UMAT 441 for well construction details.

Placed pea gravel backfill between 1173.8 to 1180 due to excessive loss of bentonite

UMAT 55692

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)
Instructions for completing this report are on the last page of this form.

WELL I.D. # L 82258
START CARD # 123790

(1) LAND OWNER Well Number
Name Hale Farms
Address P.O. Box 110
City Hermiston State OR Zip 97838

(2) TYPE OF WORK
☐ New Well ☐ Deepening ☒ Alteration (repair/recondition) ☐ Abandonment

(3) DRILL METHOD:
☐ Rotary Air ☐ Rotary Mud ☒ Cable ☐ Auger
☐ Other

(4) PROPOSED USE:
☐ Domestic ☐ Community ☐ Industrial ☒ Irrigation
☐ Thermal ☐ Injection ☐ Livestock ☐ Other

(5) BORE HOLE CONSTRUCTION:
Special Construction approval ☐ Yes ☐ No Depth of Completed Well 1165 ft
Explosives used ☐ Yes ☒ No Type Amount

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
14						
7 3/4			Cement	1170	1165	2 SK

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

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Drive Shoe used ☐ Inside ☐ Outside ☐ None
Final location of shoe(s)

(7) PERFORATIONS/SCREENS:
☐ Perforations Method
☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
NONE WAS PERFORMED			1 hr

Temperature of water 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 Umatilla Latitude — Longitude —
Township 2 ☒ N or ☐ S Range 27 ☒ E or ☐ W WM
Section 2 NW 1/4 SW 1/4
Tax Lot Lot Block Subdivision
Street Address of Well (or nearest address) off Rd 22

(10) STATIC WATER LEVEL:
428 ft. below land surface. Date 2-27-06
Artesian pressure lb. per square inch Date

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

From	To	Estimated Flow Rate	SWL

(12) WELL LOG:
Ground Elevation

Material	From	To	SWL
clean out well			
From 1132' to 1170			
Ran Dump Bailer in Hale Tripod Bailer			
Left cement @ 1165-1170			

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WATER RESOURCES DEPT
SALEM, OREGON
SALEM, OR

Date started 2-24-06 Completed 2-27-2006

(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.
WWC Number 1669
Signed Jody Hay Date 2-27-2006

(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.
WWC Number 1669
Signed Jody Hay Date 2-27-2006

ORIGINAL – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – CUSTOMER

Ammon well #1

STATE ENGINEER
Salem, Oregon

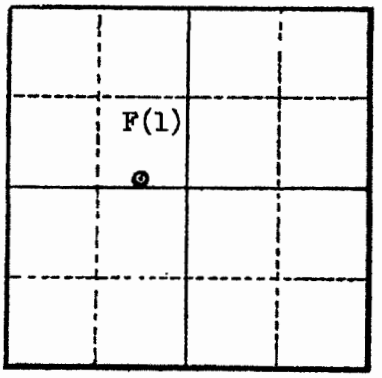
UMAT 440

OBSERVATION WELL
Well Record

STATE WELL NO. 2N/27-1F(1)
COUNTY Umatilla
APPLICATION NO. U- 750

OWNER: Ammon Bros.
MAILING ADDRESS:
CITY AND STATE: Echo, Oregon

LOCATION OF WELL: Owner's No.
SE ¼ NW ¼ Sec. 1 T. 2 N. R. 27 E. W.M.
Bearing and distance from section or subdivision corner N.47°34'W. 3942.2' from SE cor. of sec. 1



Altitude at well 760'+

TYPE OF WELL: Drilled Date Constructed 1952
Depth drilled 554' Depth cased 140'
Section 1

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CASING RECORD:
15 inch set from 0 to 140 feet
15 inch open hole from 140 to 240 feet
12 inch from 240 to 554 feet

FINISH:
Open hole

AQUIFERS:
Basalt

WATER LEVEL:
327 feet

PUMPING EQUIPMENT: Type Turbine H.P. 150
Capacity 1000 G.P.M.

WELL TESTS:
Drawdown 20 ft. after hours 1000 G.P.M.
Drawdown ft. after hours G.P.M.

USE OF WATER Irrigation Temp. °F., 19
SOURCE OF INFORMATION U-682
DRILLER or DIGGER Ben Dreyer
ADDITIONAL DATA:
Log X Water Level Measurements Chemical Analysis Aquifer Test

REMARKS:

State Printing 89316

STATE ENGINEER
Salem, Oregon

State Well No. 2N/27-1F(1)
County Umatilla
Application No. U-750

Well Log

Owner: Ammon Bros. ~~Elma A. Rugg~~ Owner's No.

Driller: Ben Dreyer Date Drilled 1952

CHARACTER OF MATERIAL	(Feet below land surface) From	To	Thickness (feet)
Soil	0	12	12
Gravel	12	14	2
Clay, yellow	14	50	36
Shale	50	70	20
Clay, yellow	70	85	15
Clay, red	85	120	35
Clay, green	120	130	10
Clay, blue	130	170	40
Rock, black, medium	170	203	33
Rock, black, soft	203	221	18
Rock, black, hard	221	255	29
Rock, red, soft	255	292	37
Rock, blue, hard	292	422	130
Rock, black, medium	422	449	27
Rock, black, hard	449	460	11
Rock, black, medium	460	472	12
Rock, black, hard	472	479	7
Rock, black, soft	479	500	21
Rock, black, medium	500	554	54

UMAT 439

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM 10, OREGON within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

RECEIVED
SEP 9 1963
STATE ENGINEER
SALEM, OREGON

State Well No. 2N/27-1F
State Permit No.

(1) OWNER:
Name Clausie Hinton
Address Echo One

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ ¼ Section T. R. W.M.
Bearing and distance from section or subdivision corner
Well No 2

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☒ Reconditioning ☒ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☐
Casing Diam. from 880 ft. to 892 ft. Gage
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS:
Well screen installed ☐ Yes ☒ No
Manufacturer's Name
Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Well seal—Material used in seal Checked Seals
Depth of seal ft. Was a packer used?
Diameter of well bore to bottom of seal in.
Were any loose strata cemented off? ☐ Yes ☐ No Depth
Was a drive shoe used? ☐ Yes ☐ No
Was well gravel packed? ☐ Yes ☐ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? Depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 0 ft. below land surface Date
Artesian pressure lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

(12) WELL LOG:
Diameter of well below casing
Depth drilled ft. Depth of completed well ft.
Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Encountered Steal objed at 880' was unable To Drill By it or Fish it owt It had a top Diameter of 6¼"		
Well was checked For lose of Artesian Water though existing Seals There Being No Loses		

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Work started 19 . Completed 19
Date well drilling machine moved off of well 19

(13) PUMP:
Manufacturer's Name
Type: H.P.

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 Logan Hellberg (Person, firm or corporation) (Type or print)
Address P.O. Box 40 Lowden Wash
Drilling Machine Operator's License No.
[Signed] (Water Well Contractor)
Contractor's License No. 377 Date Sept 4, 1963

(USE ADDITIONAL SHEETS IF NECESSARY)

STATE ENGINEER
Salem, Oregon

State Well No. 2N/27-1F(1)

County Umatilla

Application No. U-750

Water Level Record

OWNER: Ammon's OWNER'S NO. #1

Description of measuring point: Lip of port pipe on North side of well - MP-1.7 feet above LSD.

Date	Water Level Feet (above) (below) Land Surface	Remarks	Date	Water Level Feet (above) (below) Land Surface	Remarks
5-25-61	63.92	WSB (STATIC)			
8-23-61	282.0	WSB - Pumping			
11-7-61	24.31	RD&WSB (STATIC)			

REMARKS:

State Printing 89814

2N/27-1F1
Well No. 1
Umatilla

Notes from Claussie Ammon

1960

February 1	Static water level 334'

1961

January 1	Drilling on well
February 1	Drilling on well
March 16	Static water level 7'
April 9	Well started flowing pressure at pump 3 lbs.

1962

February 6	Started flowing about 50 gallons per minute
April 25	Well stood at 40" with the west well pumping before starting the east pump
July 3	After 6 hours of pumping at 55 lbs. pressure static water level 322 feet.

1963

May 22	Started well at 9:00 A. M. Static water level of well before the pump was started was 128 feet. After 6 hours of pumping on both wells static water level of Well No. 1 was 285 feet. 423 sprinklers were being run between both wells, with an average of 40 lbs pressure or better at the first sprinkler on each line. Gauges at both pumps registered an average of 50 lbs. pressure or slightly over.
May 28	Static water level in Well No. 1 before either Well No. 2 or Well No. 1 were turned on was 128 feet. 10 hours later of continuous pumping of both wells, No. 1 stood at 294 feet.
June 4	Static water level before either well No. 2 or Well No. 1 were turned on was 122 feet. After 6 hours pumping of both wells, well No. 1 stood at 289 feet. After 6 hours pumping of both wells, Well No. 2 would suck air which 40 lbs of pressure at pump. Well No. 1 turned off.
June 11	Before starting either well, No. 1 started 124" After 6½ hours pumping of both wells, No. 1 stood 293'
June 20	After 7 hours pumping on both wells, No. pumping level was 298'
June 21	Before starting either pumps, No. 1 stood at 132'.

2N/27-1F1
Well No. 1
Umatilla

Claussie Ammon

1963

June 27	Static level 110' after 9 hours rest.
June 29	Static level 100' after 9 hours rest.
	After 6 hours pumping of both wells, No. 1 pumping level 298'
July 10	Static level 112' after 10 hours rest.
	Pumping 292' after 6 hours rest.
July 21	Static level 115' after 7 hours rest
	Pumping 298' after 6 hours rest.

State Engineer

~~27~~ - 1F(1)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
GROUND WATER BRANCH
Box 3418 - 1001 N. E. Lloyd Boulevard
Portland 8, Oregon

Mr. Claussie Ammon

Echo, Oregon

Dear Claussie:

Enclosed is a copy of the drawing I made on the meter survey of your number 1 well.

I talked to Cecil Garbe of Pump, Pipe and Power about the peculiar surging of your wells. He offered two suggestions from his well-setting experiences.

He says that sometimes the shaft of a pump will stretch and cause the impellers to rub on the plate of each bowl in such a way as to give a surging effect, but that this commonly occurs only in deep settings of a pump. Also, he couldn't visualize it happening in two wells simultaneously.

He also stated that sometimes a well will surge when the pump is set so tightly that air can't get down to the water surface in the well. This causes the dropping water level to be helped upward by vacuum suction. As the water level is being lowered by the pump faster than it is being maintained by the artesian pressure in such a pumping situation, there will be a point where it will develop a vacuum. At this point it will be held up momentarily by the vacuum, then break the vacuum and drop suddenly, then re-establish the vacuum lift and rise, etc. The whole operation, he says, gives a surging as though the pump was breaking suction. He says this type of thing might have happened in your artesian well if the pump is sealed tight, but he didn't see how it would happen in the two wells simultaneously.

It seems a possibility that this type of surging might have started in your artesian well and the resultant ground-water wave might have produced a similar effect in your newly deepened well. Anyway, it's the most logical clue I have run across. The possibility of this causing your surging could be determined by lifting the pump an inch or two so as to eliminate any vacuum seal on your artesian well.

From the enclosed chart of the water movement in your well, I can't see anything that might cause a pump to surge. You'll note that the zone which is apparently taking water is only about 15 feet (from 550 to 565).

The small amount of water moving rather puzzles me. From the pressure difference and the known productive capacity of the upper aquifer, one would expect it to be taking much more water. I would suspect that the reason more water isn't moving out lies in the plugging of the upper aquifer by drill cuttings and other debris that have risen with the water and traveled out into the pore spaces of the upper aquifer.

I hope this type of information will be of some help in your problem.

Sincerely yours,

R. C. Newcomb
Research Geologist

Enclosure

Copy: State Engineer

GROUND WATER BRANCH
Box 3087
Portland 8, Oregon

April 4, 1963

Mr. Claussie Ammon
Butter Creek Road
Echo, Oregon

Dear Claussie:

Enclosed are three copies of the chart we made on the vertical flow measurements in your eastern well on April 2, 1963.

During the charting of the readings, we didn't find anything of importance except what we talked about at the well.

Summarized, I would say these measurements show about 200 gpm coming out of the 770-830 feet zone and flowing from the top of the well. The water speeds up or slows down about in proportion to the size of the pipe or hole through which it is flowing. I can't see that you're losing any water from the well.

The 10-inch liners are probably shown inaccurately because we didn't get a copy of Ben Dreyer's last report, and I didn't copy it from your log because I assumed we would have that data in the office.

Let us hear from you at least occasionally. I would like the opportunity to collect similar data in your western well.

Sincerely yours,

R. C. Newcomb
Research Geologist

Enclosure

cc: District Geologist, Portland
Oregon State Engineer, Salem ✓

RCN/nj

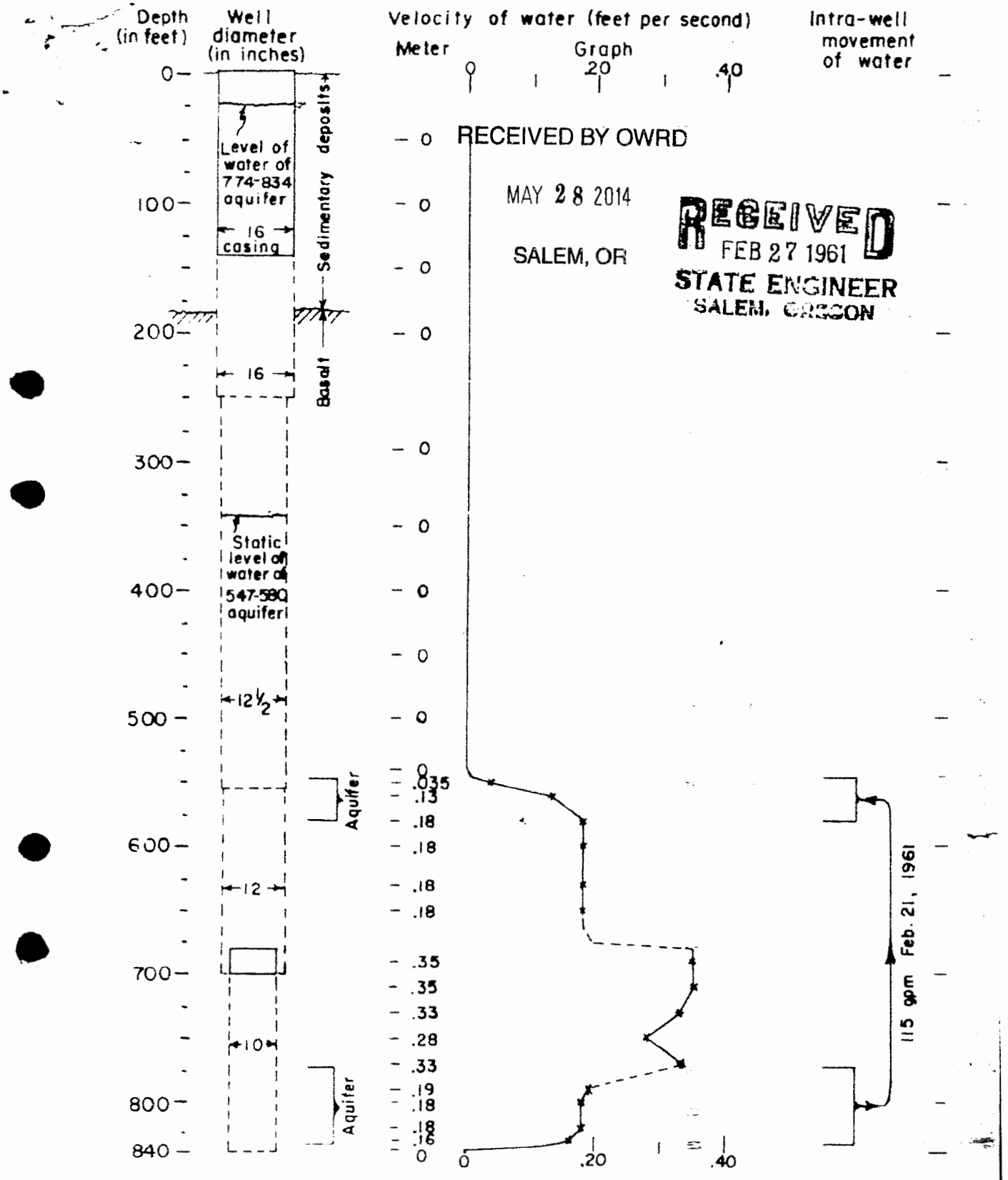
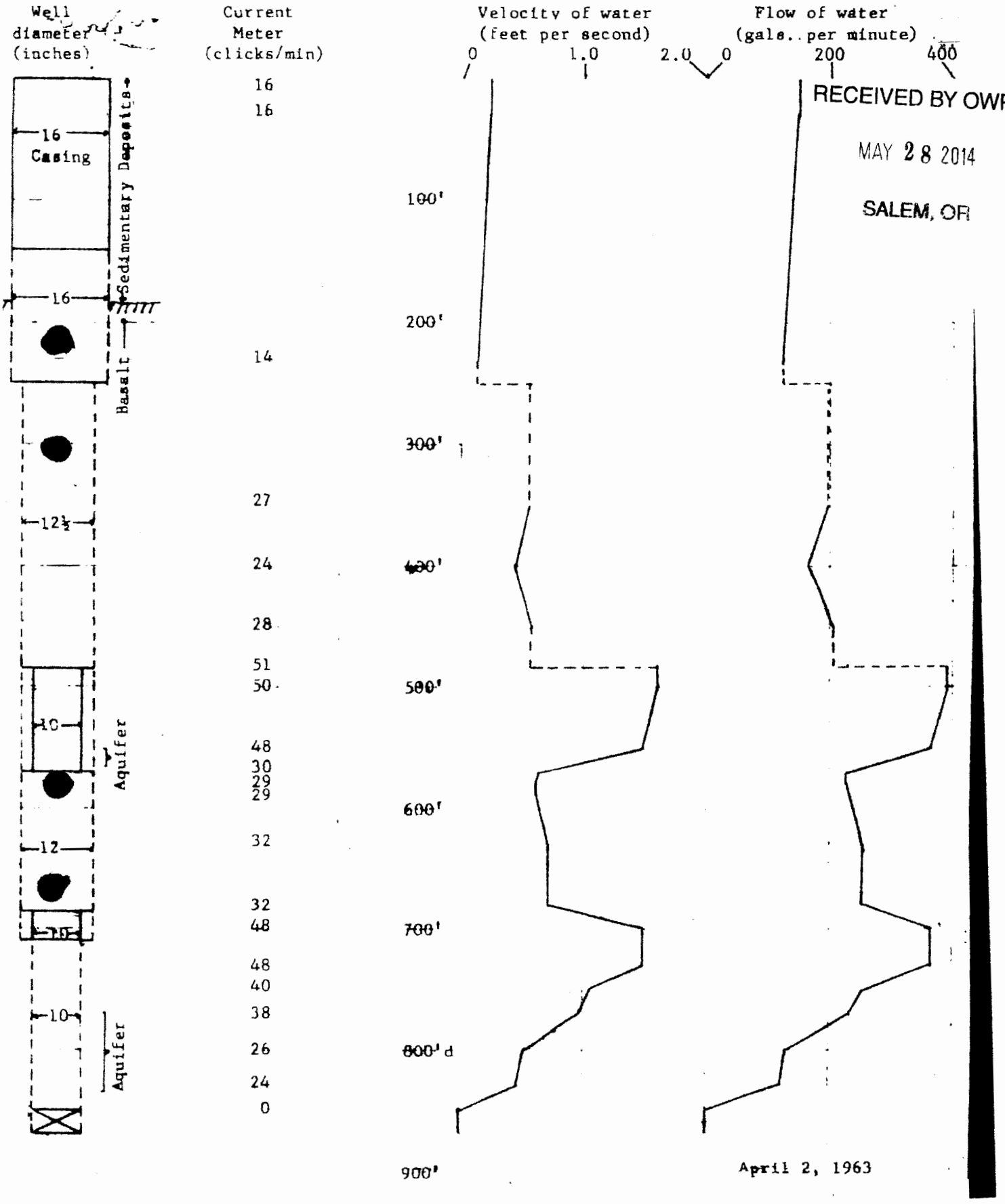


Figure – Movement of water between basalt aquifers in the C. Ammon well no. 1 (2/27-1E1) near Echo, Oreg.

MOVEMENT OF WATER IN THE C. AMMON WELL NO. 2N/2/-1F1 NEAR ECHO, OREGON



UMAT 439

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the STATE ENGINEER, SALEM 10, OREGON within 30 days from the date of well completion.

WATER WELL REPORT
STATE OF OREGON
(Please type or print)

State Well No. 2N/27-1F

State Permit No.

(1) OWNER:
Name Clausie H
Address Echo One

(2) LOCATION OF WELL:
County Umatilla Driller's well number
¼ ¼ Section T. R. W.M.
Bearing and distance from section or subdivision corner
Well Hole

(3) TYPE OF WORK (check):
New Well ☐ Deepening ☒ Reconditioning ☒ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) TYPE OF WELL:
Rotary ☐ Driven ☐
Cable ☒ Jetted ☐
Dug ☐ Bored ☐

(6) CASING INSTALLED:
Threaded ☐ Welded ☐
8 5/8" Diam. from 880 ft. to 892 ft. Gage
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(7) 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS:
Well screen installed ☐ Yes ☒ No
Manufacturer's Name
Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(9) CONSTRUCTION:
Well seal—Material used in seal Checked Seals
Depth of seal ft. Was a packer used?
Diameter of well bore to bottom of seal in.
Were any loose strata cemented off? ☐ Yes ☐ No Depth
Was a drive shoe used? ☐ Yes ☐ No
Was well gravel packed? ☐ Yes ☐ No Size of gravel:
Gravel placed from ft. to ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? Depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 0 ft. below land surface Date
Artesian pressure lbs. per square inch Date

(11) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" " " " "
" " " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

(12) WELL LOG:
Diameter of well below casing
Depth drilled ft. Depth of completed well ft.
Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

MATERIAL	FROM	TO
Encountered Steal object at 890' was unable To Drill By it or Fish it out It had a top Diameter of 6¼"		
Well was sheelsed For lose of Artesian Water though existing Seals There Being No Loses		

Work started 19 Completed 19
Date well drilling machine moved off of well 19

(13) PUMP:
Manufacturer's Name
Type: H.P.

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 Logan Hellberg (Person, firm or corporation) (Type or print)
Address P.O. Box 40 Lowden Wash
Drilling Machine Operator's License No.
[Signed] Lloyd L. Logan (Water Well Contractor)
Contractor's License No. 377 Date Sept. 19 63

(USE ADDITIONAL SHEETS IF NECESSARY)

HANSON Well #1

RECEIVED
OCT 26 1959
STATE ENGINEER
SALEM, OREGON

OBSERVATION WELL (UMAT 450)

666

2N/27-12D(1)

File Original and First Copy with the STATE ENGINEER, SALEM, OREGON

WATER WELL REPORT
STATE OF OREGON

State Well No. 2N/27-12D(1)

State Permit No. G-1227

(1) OWNER: L.
Name Clarence Hanson & MAYNARD AAby
Address Rt.1 Box 71
Echo Oregon.

(2) LOCATION OF WELL:
County Umatilla Owner's number, if any— 2
NW¼ NW¼ Section 12 T. 2N R. 27E W.M.
Bearing and distance from section or subdivision corner
10ft South & 10 ft EAST FROM
THE NW CORNE of SEC 12

(3) TYPE OF WORK (check):
New Well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic [ ] Industrial [ ] Municipal [ ]
Irrigation [X] Test Well [ ] Other [ ]

(5) TYPE OF WELL:
Rotary [ ] Driven [ ]
Cable [X] Jetted [ ]
Dug [ ] Bored [ ]

(6) CASING INSTALLED: Threaded [ ] Welded [X]
12 " Diam. from 0 ft. to 178 ft. Gage std.
10 " Diam. from 642 ft. to 748 ft. Gage std.
" Diam. from ft. to ft. Gage

(7) PERFORATIONS: Perforated? [ ] Yes [X] 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.
perforations from ft. to ft.
perforations from ft. to ft.

(8) SCREENS: Well screen installed [ ] Yes [X] No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. ft.
Diam. Slot size Set from ft. ft.

(9) CONSTRUCTION:
Was well gravel packed? [ ] Yes [X] No Size of gravel:
Gravel placed from ft. to ft.
Was a surface seal provided? [X] Yes [ ] No To what depth? 178 ft.
Material used in seal— cement
Did any strata contain unusable water? [ ] Yes [X] No
Type of water? Depth of strata
Method of sealing strata off

(10) WATER LEVELS:
Static level 63 ft. below land surface Date 9/17/59
Artesian pressure lbs. per square inch Date

Log Accepted by: Clarence Hanson
[Signed] (Owner) Date Oct 2, 1959

(11) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? [X] Yes [ ] No If yes, by whom? Yager
Yield: 889 gal./min. with 72 ft. drawdown after 4 hrs.
" " " " "
" " " " "
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? [ ] Yes [X] No

(12) WELL LOG: Diameter of well 12x10 inches.
Depth drilled 959 ft. Depth of completed well 959 ft.
Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Log Attached		

RECEIVED BY OWRD
MAY 28 2014
SALEM, OR

Work started 3/24 1959 Completed 9/17 1959

(13) PUMP:
Manufacturer's Name
Type: H.P.

Well Driller's Statement:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Yager Drilling Co (Person, firm, or corporation) (Type or print)
Address Rt. 3 Box 347-D Walla Walla Wn
Driller's well number 59-13
[Signed] Harold Yager (Well Driller)
License No. 155 Date 10/1/59, 19

(USE ADDITIONAL SHEETS IF NECESSARY)

2N/27-11D(1)
666

Clarence L. Hanson
Well Log
Well No. 2

Formation			From	To	Static Water Level			
Soil			0	13				
Gravel	Cemented		13	56				
"	&black shale		56	60				
Rock	"	"	60	91				
Black shale			91	116				
Shale	gray	sticky	116	140				
"	black	hard	140	159				
Basalt			159	187				
"	gray	hard	187	219				
"	shale		219	226				
"	black	med.	226	239				
"	gray	hard	239	271				
"	&clay brown	soft	271	277				
"	red	"	277	288				
"	black	med.	288	309				
"	gray	hard	309	414				
"	black	med.	414	422				
"	gray	hard	422	427				
"	black	med.	427	452				
"	gray	hard	452	461				
"	"	med.	461	464				
"	black	"	464	477				
"	gray	hard	477	487				
"	black	med.	487	495				
"	"	hard	495	505				
"	brown	soft	505	525	Water bearing	SWL	24'	6/5/59
"	"	hard	525	529				
"	black	"	529	537				
"	gray	"	537	549		"	22'	6/9/59
"	black	med.	549	558				
"	"	hard	558	570				
"	gray	"	570	596				
"	black	Med.	596	610				
"	gray	hard	610	675	Crevice@674'	"	37'	7/7/59
"	black	soft	675	684				
"	"	hard	684	693	Cemented 30 sks.			
"	"	med.	693	701				
Shale	"		701	704				
"	green		704	713				
"	black		713	721		"	52'	7/27/59
Basalt	"		721	725				
Shale	green		725	730				
"	& rock		730	771	10"holefrom 748'	"	64'	8/9/59
Basalt	black	hard	771	780				
"	"	med.	780	783				
"	"	hard	783	871		"	69'	8/16/59
"	"	soft	871	873	Clausie Ammon shut off his big pump 8/18 SWL raised to 50Ft. He started the pump again 8/19 SWL dropped to 66 ft.			
"	"	hard	873	882	Crevice @ 882'			
"	"	"	882	904				
"	"	med.	904	914				
"	"	hard	914	959	caving			

Apparently the well is water bearing from 771' to 959'

RECEIVED BY OWRD

MAY 28 2014

SALEM, OR

STATE ENGINEER
Salem, Oregon

State Well No. 2N/27-12D(1) 666

County UMATILLA

Application No. .....

Water Level Record

OWNER: CLARENCE L. HANSON & M.F. AABY OWNER'S NO. .....

Description of measuring point: LIP OF WELL PORT PIPE ON N. SIDE WELL 2.0' ABOVE L.S.D.

Date	Water Level Feet (above) (below) Land Surface	Remarks	Date	Water Level Feet (above) (below) Land Surface	Remarks
1-25-61	14.35	WSB			
5-25-61	49.70	WSB			
8-23-61	100.10	WSB			
11-7-61	48.00	RD & WSB			

REMARKS: .....

State Printing 69314