

WATER WELL REPORT

STATE OF WASHINGTON

Water Right Permit No. G4-26162(A)P

Start Card No. 36479

UNIQUE WELL I.D. # AM-729

OWNER: Name Black Rock Ranch Address _____

LOCATION OF WELL: County Yakima SW 1/4 SW 1/4 Sec 22 T. 12 N. R. 22 E. W.M.

(2a) STREET ADDRESS OF WELL (or nearest address) _____

(3) PROPOSED USE: Domestic Industrial Municipal
 Irrigation Test Well Other
 DeWater

(4) TYPE OF WORK: Owner's number of well (if more than one) _____
 Abandoned New well Method: Dug Bored
 Deepened Cable Driven
 Reconditioned Rotary Jetted

(5) DIMENSIONS: Diameter of well 20 x 16 x 14 inches.
 Drilled 2585 feet. Depth of completed well 2585 ft.

(6) CONSTRUCTION DETAILS:
 Casing installed: 20" Diam. from 0 ft. to 42 ft.
 Welded 16" Diam. from 0 ft. to 1440 ft.
 Liner installed 14" Diam. from 1440 ft. to 1600 ft.
 Threaded

Perforations: 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.

Screens: Yes No
 Manufacturer's Name _____
 Type _____ Model No. _____
 am. _____ Slot size _____ from _____ ft. to _____ ft.
 diam. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel packed: Yes No Size of gravel _____
 Gravel placed from _____ ft. to _____ ft.

Surface seal: Yes No To what depth? 1600 ft.
 Material used in seal CEMENT
 Did any strata contain unusable water? Yes No
 Type of water? _____ Depth of strata _____
 Method of sealing strata off _____

(7) PUMP: Manufacturer's Name Pump test by LANE
 Type: _____ H.P. _____

(8) WATER LEVELS: Land-surface elevation above mean sea level _____ ft.
 Static level 2380 ft. below top of well Date _____
 Artesian pressure _____ lbs. per square inch Date _____
 Artesian water is controlled by _____ (Cap, valve, etc.)

(9) 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.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)
 Time _____ Water Level _____ Time _____ Water Level _____

Date of test _____
 Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
 Artesian _____ gal./min. with stem set at _____ ft. for _____ hrs.
 Artesian flow _____ g.p.m. Date _____
 Temperature of water _____ Was a chemical analysis made? Yes No

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
Topsoil-Brown-loose	0	10
Sands & Gravel 2" Max	10	180
Basalt-Black-HardFrac.	180	338
Clay with Basalt	338	353
Basalt-Broken (hard)	353	442
Basalt-BlackMed with brown	442	477
477 lost to corrolation		
Black Basalt with clay streak	477	504
Black Basalt-med hard	504	555
Basalt with clay (gray)	555	580
Basalt with clay streaks	580	614
Tan clay-soft	614	620
Blk Basalt with clay streaks	620	627
Black Basalt med hard	627	659
Black Basalt-dpft	659	677
Black Basalt-med hard	676	698
Blk & brown Basalt-hard	698	735
Blk & gray basalt-med	735	770
Gray cloudy-sticky clay (?)	770	777
Blk Basalt with clay	777	801
Blk & red Basalt	801	873
Blk & Gray Basalt	813	834
Blk Basalt with Gray clay	834	849
Blk & br basalt w gray clay	849	858
Blk Basalt-med	858	892
Basalt gray (very hard)	892	1015
Soft Blk Basalt	1015	1027
Hard gray basalt (frac)	1027	1062
Soft blk basalt	1062	1070*
Fractured blk basalt-med	1070	1089
Grayhard basalt	1089	1191
Black basalt w gray clay soft	1191	1207
Hard gray basalt	1207	1306
Soft gray & black w clay	1306	1320

Work Started Oct 93 19. Completed JAN 19 94

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME Agua Drilling & Engineering

Address 120 Crestview Colville, WA 99114

(Signed) Harold Hathaway License No. 1532

Contractor's Registration No. 601-414-291 Date _____ 19 _____

(USE ADDITIONAL SHEETS IF NECESSARY)

WATER WELL REPORT

STATE OF WASHINGTON

Water Right Permit No. G4-26162 (A)P

Start Card No. #2

UNIQUE WELL I.D. # AAU-729

OWNER: Name Black Rock Ranch Address Sw 1/4 Sw 1/4 Sec 22 T. 12 N. R22E W.M.

LOCATION OF WELL: County Yakima

(2a) STREET ADDRESS OF WELL (or nearest address)

(3) PROPOSED USE: Domestic Industrial Municipal
 Irrigation Test Well Other
 DeWater

(4) TYPE OF WORK: Owner's number of well (if more than one)
 Abandoned New well Method: Dug Bored
 Deepened Cable Driven
 Reconditioned Rotary Jetted

(5) DIMENSIONS: Diameter of well _____ inches.
 Drilled _____ feet. Depth of completed well _____ ft.

(6) CONSTRUCTION DETAILS:
 Casing installed: _____" Diam. from _____ ft. to _____ ft.
 Welded _____" Diam. from _____ ft. to _____ ft.
 Liner installed _____" Diam. from _____ ft. to _____ ft.
 Threaded _____" Diam. from _____ ft. to _____ ft.

Perforations: 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.

Screens: Yes No
 Manufacturer's Name _____
 Type _____ Model No. _____
 _____ diam. Slot size _____ from _____ ft. to _____ ft.
 _____ diam. Slot size _____ from _____ ft. to _____ ft.

Gravel packed: Yes No Size of gravel _____
 Gravel placed from _____ ft. to _____ ft.

Surface seal: Yes No To what depth? _____ ft.
 Material used in seal _____
 Did any strata contain unusable water? Yes No
 Type of water? _____ Depth of strata _____
 Method of sealing strata off _____

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

(8) WATER LEVELS: Land-surface elevation above mean sea level _____ ft.
 Static level _____ ft. below top of well Date _____
 Artesian pressure _____ lbs. per square inch Date _____
 Artesian water is controlled by _____ (Cap, valve, etc.)

(9) 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.
 " _____ " _____ " _____ "
 " _____ " _____ " _____ "
 Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)
 Time _____ Water Level _____ Time _____ Water Level _____ Time _____ Water Level _____
 Date of test _____
 Bailor test _____ gal./min. with _____ ft. drawdown after _____ hrs.
 Airtest _____ gal./min. with stem set at _____ ft. for _____ hrs.
 Artesian flow _____ g.p.m. Date _____
 Temperature of water _____ Was a chemical analysis made? Yes No

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

MATERIAL	FROM	TO
Fractured basalt-gray	1320	1330
Very hard gray basalt	1330	1360
Gray basalt hard (fractured)	1360	1450
Run 16" casing		
Hard gray basalt	1452	1462
Blk sand with clayh(casing)	1462	1472
Clay-green (gray)	1472	
Soft blk basalt	1597	1602*
Blk basalt (med)	1602	1700
Gray basalt hard	1700	1770
Blk & gray (med)	1770	1788
Soft blk basalt	1788	1801
Med basalt	1801	1810
Soft blk basalt	1810	1827
Med blk & gray basalt	1827	1905*
Blk basalt - soft	1905	1916*
Gray basalt-soft	1916	1935*
Hard gray basalt	1935	1950
(Frac) blk basalt-St. D	1950	1955*
Soft blk med basalt Basalt ^{soft med blk}	1955	1972
Soft black	1972	1980*
Med gray basalt & black	1980	2021
Soft black basalt	2021	2030*
Med blk & gray basalt	2030	2053
Hard gray basalt	2053	2070
Blk & brn & red basalt	2070	2075*
Med black basalt	2075	2085
Soft blk basalt	2085	2090*
Hard Gray basalt	2190	2260
Med blk basalt	2190	2262
Soft blk basalt	2262	2305
Hard gray basalt	2305	2385

Work Started _____, 19. Completed _____, 19

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME Aqua Drilling & Engineering
 (PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)

Address 120 Crestview Colville, WA 99114

(Signed) _____ License No. _____
 (WELL DRILLER)

Contractor's Registration No. 601-414-891 Date _____, 19

(USE ADDITIONAL SHEETS IF NECESSARY)

File Original and First Copy with Department of Ecology
Second Copy - Owner's Copy
Third Copy - Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Start Card No.
UNIQUE WELL I.D. # AAM-729
Water Right Permit No. G4-26162(A)P

OWNER: Name Black Rock Ranchg Address

LOCATION OF WELL: County Yakima SW 1/4 SW 1/4 Sec 22 T.12 N. R.22E W.M.

(2a) STREET ADDRESS OF WELL (or nearest address)

(3) PROPOSED USE: Domestic, Industrial, Municipal, Irrigation, Test Well, DeWater, Other

(4) TYPE OF WORK: Owner's number of well, Abandoned, New well, Deepened, Reconditioned, Method: Dug, Cable, Rotary, Bored, Driven, Jetted

(5) DIMENSIONS: Diameter of well, Drilled, Depth of completed well

(6) CONSTRUCTION DETAILS: Casing installed, Welded, Liner installed, Threaded, Diam. from, ft. to

Perforations: Yes, No, Type of perforator used, SIZE of perforations, in. by, perforations from, ft. to

Screens: Yes, No, Manufacturer's Name, Type, Model No., diam., Slot size, from, ft. to

Gravel packed: Yes, No, Size of gravel, Gravel placed from, ft. to

Surface seal: Yes, No, To what depth?, Material used in seal, Did any strata contain unusable water?, Type of water?, Depth of strata, Method of sealing strata off

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

(8) WATER LEVELS: Land-surface elevation above mean sea level, Static level, Artesian pressure, Artesian water is controlled by

(9) WELL TESTS: Drawdown is amount water level is lowered below static level, Was a pump test made?, Yield, Recovery data, Date of test, Bailer test, Airtest, Artesian flow, Temperature of water

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

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 information.

Table with columns MATERIAL, FROM, TO. Entries include Soft blk & red basalt, Med blk basalt, Hard gray basalt, Med blk basalt.

*INDICATES WATER BEARING ZONE

Work Started, 19, Completed, 19

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Address 120 Crestview Colville, WA 99114

(Signed) License No.

Contractor's Registration No. 601-414-891 Date, 19

(USE ADDITIONAL SHEETS IF NECESSARY)