

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 91-7132

Exam Date: 6/18/2007

1. Current Owner: CASSANDRA HILLS OWNERS ASSN
905 CASSANDRA HILLS RD
ST MARIES ID 83861
(208)245-5320
2. Accompanied by: BEVERLY ANDERSON
Phone No: 208-245-3432
Address: SAME AS ABOVE
Relationship to Permit Holder: WATER OP

3. SOURCE

GROUND WATER

TRIBUTARY**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NONE
2. Other water rights with the same point of diversion: NONE

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER	SW1/4NW1/4	Sec. 9,	Twp 46N,	Rge 02W, B.M.
BENEWAH County				
GROUND WATER	NW1/4NW1/4	Sec. 9,	Twp 46N,	Rge 02W, B.M.
BENEWAH County				

Method of Determination: GPS

2.

PLACE OF USE: MUNICIPAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
46N	02W	8	X		X	X									X	X			
46N	02W	9					X	X			X								

Method of Determination:

3. ☐ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
<u>U/K</u>	<u>U/K</u>	<u>5</u>	<u>U/K</u>	<u>U/K</u>	<u>U/K</u>
<u>00033246</u>	<u>U/K</u>	<u>5</u>	<u>U/K</u>	<u>U/K</u>	<u>U/K</u>

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements:

E. FLOW CALCULATIONS

Measured Method:

$$\begin{array}{r}
 .445 \\
 + .259 \\
 \hline
 .704 \text{ cfs}
 \end{array}$$

Additional Computation Sheets Attached

PUMP EQUATIONS					
WATER RIGHT No.			WELL #1		
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \times 8.8 \times \text{Eff}}{H}$	5	79.2585034	0.8	33	20
Q = 0.445 cfs 199.6 gpm					

PUMP EQUATIONS					
WATER RIGHT No.			WELL #2		
	HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
$Q = \frac{HP \times 8.8 \times \text{Eff}}{H}$	5	136.2585034	0.8	90	20
Q = 0.259 cfs 116.1 gpm					

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 35 \times 3 = 105 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .7 \times 246 \times 1.9835 = 341.6 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 105 \text{ AF}$$

2. Volume Calculations for Other Uses:

$$35 \text{ homes} \times .6 = 21 \text{ AF}$$

$$\begin{array}{r} 105 \\ + 21 \\ \hline 126 \text{ AF total} \end{array}$$

G. NARRATIVE/REMARKS/COMMENTS

THIS SYSTEM USES 2 WELLS FOR THE CASSANDRA HILLS OWNERS ASSN. THE PERMIT WAS FOR DOMESTIC AND IRRIGATION BUT THEY THOUGHT IT WAS SWITCHED TO A MUNICIPAL IN 2001. THIS LICENSE SHOULD BE A MUNICIPAL DUE TO THERE GROWTH BUT IT WILL HAVE A LIMIT ON THE AF PER YEAR. THEY ARE RUNNING 2 WELLS INTO HOLDING TANK THAT THEN GRAVITY FEEDS THE SERVICE AREA. EACH WELL HAS A 5 HP PUMP INSTALLED.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
MUNICIPAL	01/01 to 12/31	0.700 CFS	126.00 AF
<u>Totals:</u>		0.700 CFS	126.00 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☒ Add P.D. as reflected above ☐ None

☒ Change P.U. as reflected above ☒ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

Field Examiner's Name

Reviewer

Date

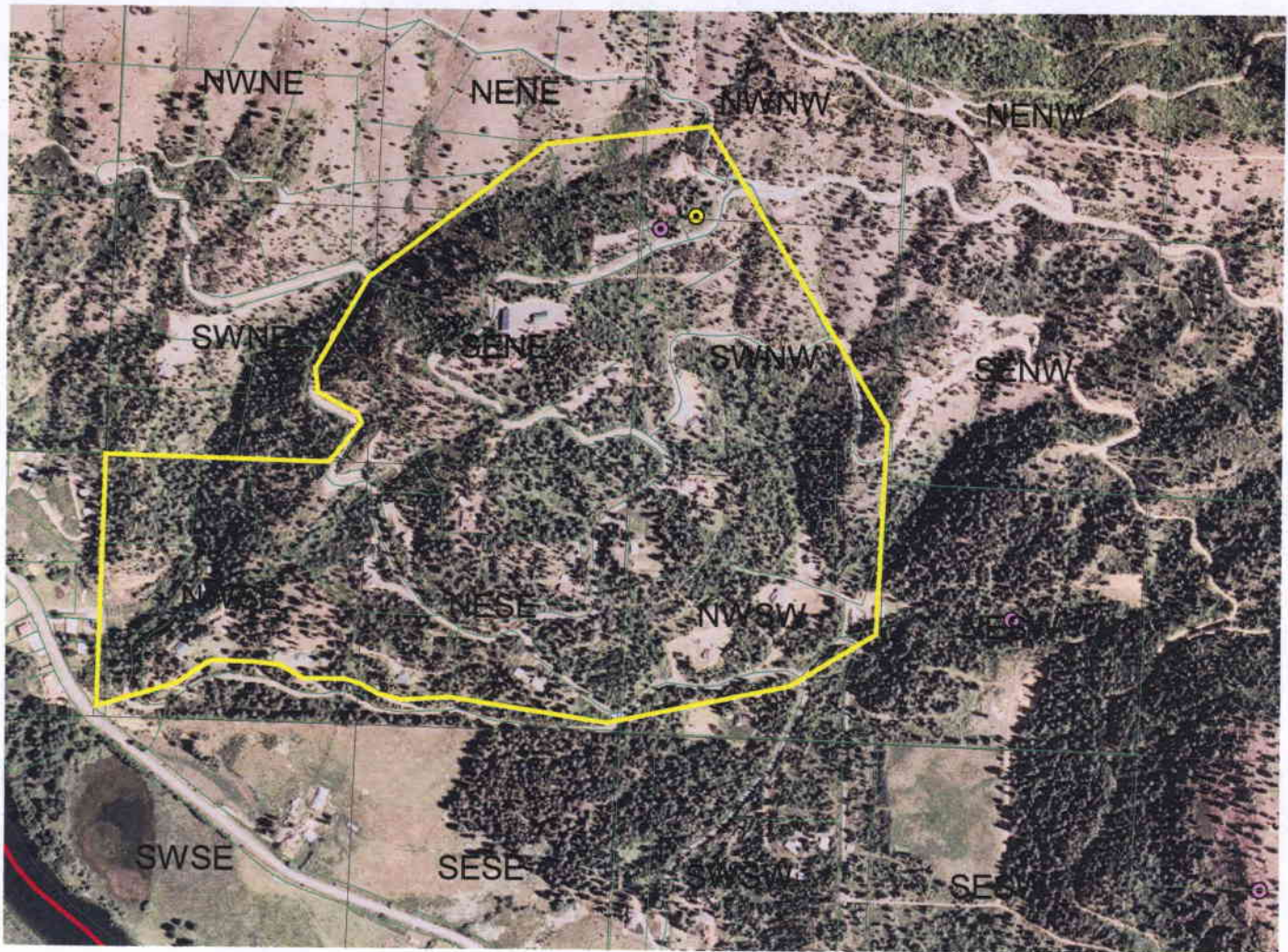
9-25-07

Date

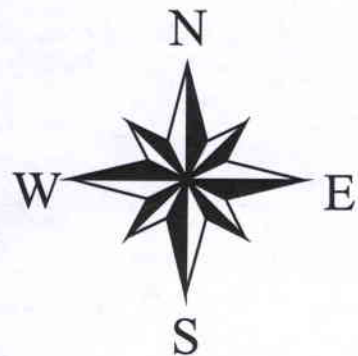
9/28/7

Public Water Supply
71050004

91-7132



-  Pou.shp
-  Benewah taxlots
-  GCDB46N02W GCDB
-  Right POD
-  Administrative BasinsAdminbas.shp





**Northwest
Hydro-Fracturing**

Increasing Water Well Yield

Permit No. 815523

Tag No. D 0033246

FRACTURING LOG

RECEIVED

JUL 19 2004

IDWR/North

1. OWNER NAME: Cassandra Hills Owners Assoc., Inc.
Address: 905 Cassandra Hills Rd St Maries, ID 83861

Total depth 441'

Diameter 6"

RECEIVED

2. TYPE OF WORK: Hydrofracturing

JUL 29 2004

3. WELL TESTS:

IDWR/North

Yield: gal./min. with ft. drawdown after Hrs.
Pre-frac: _____

Post-frac: _____

4. HYDRO-FRACTURING LOG

147 - 252

252 - 357

357- bottom

5. FRACTURER'S STATEMENT:

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

Company Name Northwest Hydro-Fracturing

Address 13812 W Lincoln Rd Spokane, WA 99224

Signed Lynn Bartholomew

Date Job was done 6/2/04

6. LOCATION OF WELL: County Benewah

SW1/4 NW 1/4 Sec. 9 T 46N N, R 2W WM

Note: there is no existing well log.

46N 2W 9

President:	Richard Taniguchi	40 Debi Lane	St. Maries	Id	83861
V. President:	Gary Gerje	1678 Cassandra Hills Rd	St. Maries	Id	83861
Secretary:	Eileen Homer	1168 Cassandra Hills Rd	St. Maries	Id	83861
Treasurer:	Linda Taniguchi	40 Debi Lane	St. Maries	Id	83861
Cert. Water Op:	Beverly Anderson	905 Cassandra Hills Rd	St. Maries	Id	83861
Directors(3):	Bill Whitney	1271 Cassandra Hills Rd	St. Maries	Id	83861
	Pat McFadden	111 Susie Drive	St. Maries	Id	83861
	Dale Phillips	P O Box 193	St. Maries	Id	83861

*New Officers
May 2007*

Richard Taniguchi

President



30,000 GAL HOLDING
TANK



CONNECTION OF WELL #1
AND WELL #2



MAP OF BOUNDRIES



METER FOR WELL #1



METER FOR WELL #2



WELL #1



WELL #2







CASSANDRA HILLS SUBDIVISION
PLAT 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000



AS-BUILT 1992 PROJECT
 AS-BUILT 1993 PROJECT
 AS-BUILT 1998 PROJECT
 AS-BUILT 2001 PROJECT

DATE	DESCRIPTION
1992	AS-BUILT 1992 PROJECT
1993	AS-BUILT 1993 PROJECT
1998	AS-BUILT 1998 PROJECT
2001	AS-BUILT 2001 PROJECT