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DEPARTMENT OF
WATER RESOURCES

Attorneys for Seneca Foods Corporation

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BEFORE THE STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

In Re

Proof of Beneficial Use for Water Right
No. 47-11236

No. 47-11236

AFFIDAVIT OF DOUG THORSON

STATE OF IDAHO)
) ss.
County of Twin Falls)

DOUG THORSON, having been duly sworn upon oath, deposes and states as
follows:

1. I am over the age of 18 years and make this affidavit based upon personal
information.

2. I am the Quality Assurance / Environmental Affairs Manager for Seneca Foods Corporation's processing plant in Buhl, Idaho. I have held the position since 1990. I have worked at the Buhl processing plant since 1984.

3. The Buhl plant operates through the use of both ground water and potable water supplied by the City of Buhl. Ground water is supplied by water right nos. 47-11236 and 47-2330, and is diverted from the well serving as the point of diversion for water right no. 47-2330. Water use at the plant consists of a 40 percent / 60 percent split. Put another way, 60 percent of the plant's water is supplied by ground water, and 40 percent is supplied by city water. To support and maintain plant operations, the Seneca Buhl plant requires at least 1,000 gallons per minute ("gpm") of ground water during various times of the processing season.

4. As for how water is used, city water is used in the packing, freezing, and canning of product, as well as other sanitary purposes. Ground water is used to wash the vegetables, cook (via steam), and cool the canned product, and reclaimed ground water is used to transport vegetables and canned product through the plant.

5. Originally, water right no. 47-11236 (priority date 1944) was diverted through a 437 foot deep well driven by a 25 horsepower Peerless pump. Then, to meet the needs of a major plant expansion in 1960, Seneca's predecessor, Green Giant, drilled a second 645 foot deep well in the same quarter quarter section as the 1944 well. The 1960 well serves as the point of diversion of water right no 47-2330, and is driven by a 150 horsepower GE pump.

6. Over time, operation of the deeper 1960 well would cause the shallower 1944 well to go dry after a couple of weeks of concurrent operation. Despite this fact, both wells would be operated concurrently for the first couple of weeks of the processing season. When the shallower 1944 well would go dry, production/diversion from the deeper 1960 well would be

increased to cover both the production of the 1944 well (water right no. 47-11236) and the 1960 well (water right no. 47-2330), for a total of 1,000 gpm. This concurrent well operation scheme was used from 1960 through the late 1970s or very early 1980s at the latest. At that point it was decided that the shallower 1944 well be retired, and that both water right nos. 47-11236 and 47-2330 be diverted from the deeper 1960 well from then on. As such, the plant diverts both water rights through the 1960 well to this day.

7. Attached hereto as Exhibit A, are true and correct copies of plant ground water and city water use records for processing season 2005, and processing season 2006 to date. As demonstrated by these records, the 1960 well is more than capable of diverting/producing 1,000 gpm.

8. As another example of the 1960 well's ability to divert up to 1,000 gpm, there have been occasions in the past where the City of Buhl has had to completely cut off the plant's city water supply. This last occurred on or about processing season 2001, when the city had trouble with two of its supply wells and corresponding piping infrastructure. At the time, the plant was run and operated exclusively on ground water diverted from the 1960 well. The well was being pumped for all it could produce. To maximize use of the ground water pumped, the plant instituted a number of water conservation measures to get by.

9. In response to Idaho Department of Water Resources Field Technician Nathan Erickson's August 2006 plant visit, Seneca asked for and received pump performance curves for the 1960 well from Andrew Well Drilling Services (the company that drilled and maintains the 1960 well). As can be see from the pump performance curves, the 1960 well is more than capable of diverting 1,000 gpm. True and correct copies of the Andrew Well Drilling Services' pump performance curve data is attached hereto as Exhibit B.

Further your affiant sayeth naught.

Doug Thorson
Doug Thorson

SUBSCRIBED AND SWORN to before me this _____ day of October, 2006.

Doug Thorson
NOTARY PUBLIC FOR IDAHO
Residing at _____
My Commission Expires _____

Notary Form: Jurat

*To be used when document is **SIGNED IN PRESENCE OF NOTARY**

 ✓ 1) Document signer(s) sign(s) the Journal

 ✓ 2) Oath Administered

(Do you swear or affirm the statements in this document are true?)

*Signer **MUST** answer in the affirmative to continue.

 ✓ 3) Person Signs Document

 4) Jurat Completed by Notary

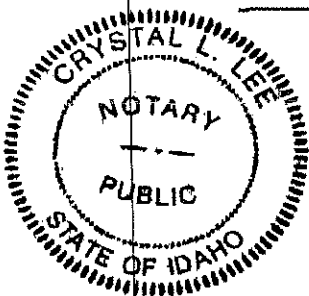
JURAT

State of Idaho

County of Twin Falls

Subscribed and sworn to (or affirmed) before me this

 4th day of October , 20 06 .



 Crystal L. Lee

Notary Public: Crystal L. Lee

Commission Expires: 6/12/2009

**Attribution Clause: This certificate is prepared for and exclusively belongs to, the accompanying documents entitled State of Idaho Dept of Water Res. , which consists of 5 page(s) and is dated: 10-4-06 . If this certificate is appropriated to any document other than the one described herein, it shall be deemed null and void.

CERTIFICATE OF SERVICE

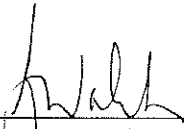
I HEREBY CERTIFY that on this 5th day of October, 2006, I caused a true and correct copy of the foregoing **AFFIDAVIT OF DOUG THORSON** to be served by the method indicated below, and addressed to the following:

Director
IDAHO DEPARTMENT OF WATER RESOURCES
Idaho Water Center
322 E. Front Street, 6th Floor
P.O. Box 83720
Boise, ID 83720

☒ (X) U.S. Mail, Postage Prepaid
☐ () Hand Delivered
☐ () Overnight Mail
☐ () Facsimile

Allen Merritt, Water Rights Supervisor
Nathan Erickson, Field Technician
IDAHO DEPARTMENT OF WATER RESOURCES
Southern Region Office
1341 Fillmore Street, Suite 200
Twin Falls, ID 83301-3380

☐ () U.S. Mail, Postage Prepaid
☒ (X) Hand Delivered
☐ () Overnight Mail
☐ () Facsimile



Andrew J. Waldera

Water Usage

Date	Well Begin	End	Total 65,755,200	City-Cold Storage Begin	End	Total 620,700	City-Warehouse Begin	End	Total 47,341,100	City Total 47,961,800	Total 97,116,000
25-Jul			-			-			-		-
26-Jul			-			-			-		-
27-Jul	860,454	870,499	1,004,500	246,599	246,731	13,200	1,934,971	1,939,780	480,900	494,100	1,498,600
28-Jul	870,499	881,852	1,135,300	246,731	246,891	16,000	1,939,780	1,946,778	699,800	715,800	1,851,100
29-Jul	881,852	893,266	1,141,400	246,891	247,021	13,000	1,946,778	1,954,142	736,400	749,400	1,890,800
30-Jul	893,266	904,253	1,141,400	247,021	247,125	10,400	1,954,142	1,962,721	857,900	868,300	2,009,700
31-Jul	904,253	916,475	1,222,200	247,125	247,206	8,100	1,962,721	1,966,404	368,300	376,400	1,598,600
1-Aug			-			-			-		-
2-Aug			-			-			-		-
3-Aug	919,539	924,250	471,100	247,304	247,358	5,400	1,970,719	1,971,361	64,200	69,600	540,700
4-Aug	924,250	931,903	714,500	247,358	247,438	8,000	1,971,361	1,978,082	672,100	680,100	1,394,600
5-Aug	931,903	938,326	642,300	247,438	247,529	9,100	1,978,082	1,987,292	921,000	930,100	1,572,400
6-Aug	938,326	948,905	1,057,900	247,529	247,614	8,500	1,987,292	1,991,291	399,900	408,400	1,466,300
7-Aug	948,905	951,685	278,000	247,614	247,717	10,300	1,991,291	1,995,208	391,700	402,000	680,000
8-Aug	959,685	970,365	1,068,000	247,717	247,813	9,600	1,995,208	1,997,784	257,600	267,200	1,335,200
9-Aug			-			-			-		-
10-Aug	970,365	979,519	915,400	247,813	247,957	14,400	1,997,784	2,003,285	550,100	564,500	1,479,900
11-Aug	979,519	985,109	559,000	247,957	248,020	6,300	2,003,285	2,007,072	378,700	385,000	944,000
12-Aug	985,109	992,944	783,500	248,020	248,115	9,500	2,007,072	2,011,426	435,400	444,900	1,228,400
13-Aug	992,944	1,001,557	861,300	248,115	248,190	7,500	2,011,426	2,017,645	621,900	629,400	1,490,700
14-Aug	1,001,557	1,009,126	756,900	248,190	248,253	6,300	2,011,426	2,017,645	621,900	628,200	1,385,100
15-Aug	1,009,126	1,010,586	146,000	248,253	248,323	7,000	2,021,715	2,023,687	197,200	204,200	350,200
16-Aug	1,010,586	1,014,412	382,600	248,323	248,383	6,000	2,023,687	2,025,723	203,600	209,600	592,200
17-Aug	1,014,412	1,025,462	1,105,000	248,383	248,442	5,900	2,025,723	2,031,272	554,900	560,800	1,665,800
18-Aug	1,025,462	1,029,455	396,300	248,442	248,503	6,100	2,031,272	2,035,186	391,400	397,500	793,800
19-Aug	1,029,455	1,038,462	900,700	248,503	248,601	9,800	2,035,186	2,041,243	605,700	615,500	1,516,200
20-Aug	1,038,462	1,049,650	1,118,800	248,602	248,682	8,000	2,041,243	2,049,935	869,200	877,200	1,996,000
21-Aug	1,049,650	1,059,779	1,002,300	248,682	248,775	9,300	2,049,935	2,056,364	642,900	652,200	1,654,500
22-Aug	1,059,779	1,068,692	891,300	248,775	248,857	8,200	2,056,364	2,063,460	709,600	717,800	1,609,100
23-Aug	1,068,692	1,069,568	87,600	248,857	248,937	8,000	2,063,460	2,071,057	759,700	767,700	855,300
24-Aug	1,069,568	1,081,026	1,145,800	248,937	249,006	6,900	2,071,057	2,078,690	763,300	770,200	1,916,000
25-Aug	1,081,026	1,092,785	1,175,900	249,006	249,094	8,800	2,078,690	2,086,107	741,700	750,500	1,926,400
26-Aug	1,092,785	1,096,015	323,000	249,094	249,185	9,100	2,086,107	2,092,817	671,000	680,100	1,003,100
27-Aug	1,096,015	1,106,534	1,051,900	249,185	249,292	10,700	2,092,817	2,099,652	683,500	694,200	1,746,100
28-Aug	1,106,534	1,118,004	1,147,000	249,292	249,398	10,600	2,099,652	2,107,943	829,100	839,700	1,986,700
29-Aug	1,118,004	1,127,549	954,500	249,398	249,481	8,300	2,107,943	2,112,137	419,400	427,700	1,382,200
30-Aug	1,127,549	1,135,460	791,100	249,481	249,525	4,400	2,112,137	2,116,500	436,300	440,700	1,231,800
31-Aug	1,135,460	1,141,649	618,900	249,525	249,597	7,200	2,116,500	2,119,266	276,600	283,800	902,700
1-Sep	1,141,649	1,146,841	519,200	249,597	249,664	6,700	2,119,266	2,122,602	333,600	340,300	859,500
2-Sep	1,146,841	1,158,473	1,163,200	249,664	249,747	8,300	2,122,602	2,130,648	804,600	812,900	1,976,100
3-Sep	1,158,473	1,169,474	1,100,100	249,747	249,857	11,000	2,130,648	2,138,130	748,200	759,200	1,859,300
4-Sep	1,169,474	1,181,209	1,173,500	249,857	249,947	9,000	2,138,130	2,145,613	748,300	757,300	1,930,800
5-Sep	1,181,209	1,192,310	1,110,100	249,947	250,035	8,800	2,145,613	2,153,450	783,700	792,500	1,902,600
6-Sep	1,192,310	1,201,645	933,500	250,035	250,118	8,300	2,153,450	2,161,470	802,000	810,300	1,743,800
7-Sep	1,201,645	1,208,132	648,700	250,118	250,196	7,800	2,161,470	2,168,490	702,000	709,800	1,358,500
8-Sep	1,208,132	1,212,742	461,000	250,196	250,265	6,900	2,168,490	2,173,847	535,700	542,600	1,003,600
9-Sep			-			-			-		-
10-Sep	1,212,742	1,217,327	458,500	250,265	250,358	9,300	2,173,847	2,175,870	202,300	202,300	202,300
11-Sep	1,217,327	1,228,369	1,104,200	250,358	250,402	4,400	2,180,118	2,186,956	683,600	688,200	1,792,400
12-Sep	1,228,369	1,229,650	128,100	250,402	250,463	6,100	2,186,956	2,194,070	711,400	717,500	845,600
13-Sep	1,229,650	1,239,656	1,000,600	250,463	250,556	9,300	2,194,070	2,201,620	755,000	764,300	1,764,900
14-Sep	1,239,656	1,251,492	1,183,600	250,556	250,641	8,500	2,201,620	2,210,350	873,000	881,500	2,065,100
15-Sep	1,251,492	1,261,784	1,029,200	250,641	250,723	8,200	2,210,350	2,218,410	806,000	814,200	1,843,400
16-Sep	1,261,784	1,269,196	741,200	250,723	250,796	7,300	2,218,410	2,226,488	807,800	815,100	1,556,300
17-Sep	1,269,196	1,278,482	928,600	250,796	250,857	6,100	2,226,488	2,234,635	814,700	820,800	1,749,400
18-Sep	1,278,482	1,289,928	1,044,600	250,857	250,916	5,900	2,234,635	2,243,237	860,200	866,100	1,910,700
19-Sep	1,289,928	1,300,185	1,125,700	250,916	250,999	8,300	2,243,237	2,252,236	899,900	908,200	2,033,900
20-Sep	1,300,185	1,311,554	1,136,900	250,999	251,124	12,500	2,252,236	2,260,160	792,400	804,900	1,941,800
21-Sep	1,311,554	1,322,526	1,097,200	251,124	251,229	10,500	2,260,160	2,269,255	909,500	920,000	2,017,200
22-Sep	1,322,526	1,333,318	1,079,200	251,229	251,326	9,700	2,269,255	2,278,350	909,500	919,200	1,998,400
23-Sep	1,333,318	1,344,719	1,140,100	251,326	251,410	8,400	2,278,350	2,284,256	590,600	599,000	1,739,100
24-Sep			1,000,000	251,410	251,483	7,300	2,284,256	2,287,682	342,600	349,900	1,349,900
25-Sep	1,344,719	1,361,200	1,648,100	251,483	251,561	7,800	2,287,982	2,290,383	240,100	247,900	1,896,000
26-Sep			-			-			-		-
27-Sep	1,361,200	1,370,519	931,900	251,561	251,731	6,400	2,290,383	2,294,832	444,900	451,300	1,383,200
28-Sep	1,370,519	1,382,405	1,188,600	251,731	251,835	10,400	2,294,832	2,297,585	275,300	285,700	1,474,300
29-Sep	1,382,405	1,390,889	848,400	251,835	251,936	10,100	2,297,585	2,301,783	419,800	429,900	1,278,300
30-Sep	1,390,889	1,402,240	1,135,100	251,936	252,039	10,300	2,301,783	2,307,575	579,200	589,500	1,724,600
1-Oct	1,402,240	1,412,475	1,023,500	252,039	252,134	9,500	2,307,575	2,316,220	864,500	874,000	1,897,500
2-Oct	1,412,475	1,420,475	778,500	252,134	252,224	9,000	2,316,220	2,325,575	935,500	944,500	1,723,000
3-Oct	1,420,475	1,431,058	1,058,300	252,224	252,312	8,800	2,325,575	2,333,981	840,600	849,400	1,907,700
4-Oct	1,431,058	1,440,780	972,200	252,312	252,379	6,700	2,333,981	2,341,473	840,600	847,300	1,819,500
5-Oct	1,440,780	1,451,800	1,102,000	252,379	252,438	5,900	2,341,473	2,348,302	682,900	688,800	1,790,800
6-Oct	1,451,800	1,463,003	1,120,300	252,438	252,499	6,100	2,348,302	2,355,061	675,900	682,000	1,802,300
7-Oct	1,463,003	1,474,381	1,137,800	252,499	252,557	5,800	2,355,061	2,361,310	624,900	630,700	1,768,500
8-Oct	1,474,381	1,485,510	1,112,900	252,557	252,609	5,200	2,361,310	2,369,328	801,800	807,000	1,919,900
9-Oct	1,485,510	1,496,614	1,110,400	252,609	252,709	10,000	2,369,328	2,374,515	518,700	528,700	1,638,100
10-Oct	1,496,614	1,508,613	1,199,900	252,709	252,802	9,300	2,374,515	2,378,914	439,900	449,200	1,649,100
11-Oct	1,508,613	1,519,502	1,088,900	252,802	252,912	11,000	2,378,914	2,384,269	535,500	546,500	1,635,400
12-Oct	1,519,502	1,529,813	1,031,100	252,912	253,011	9,900	2,384,269	2,388,897	462,800	472,700	1,503,800
13-Oct	1,529,813	1,541,316	1,150,300	253,011	253,108	9,700	2,388,897	2,395,075	617,800	627,500	1,777,800
14-Oct	1,541,316	1,551,125	980,900	253,108	253,195	8,700	2,395,075	2,399,376	430,100	438,800	1,419,700
15-Oct			-			-			-		-
16-Oct	1,551,125	1,562,053	1,092,800	253,195	253,357	16,200	2,403,045	2,405,051	200,600	216,800	1,309,600
17-Oct	1,562,053	1,567,429	567,429								

Water Usage

Date	Well Begin	End	Total 4,750,200	Minus SSP	City-Cold Storage Begin	End	Total	City-Warehouse Begin	End	Total 20,444,400	City Total 2,180,075	Minus SSP	Total 6,920,275
19-Jul	806,441	813,693	725,200		267,763	267,868	10,500	2,524,529	2,524,955	42,600	53,100		778,300
20-Jul	813,693	822,059	836,600	501,960	267,868	267,989	12,100	2,524,955	2,530,360	540,500	552,600	331,560	1,389,200
21-Jul	822,059	830,874	881,500	528,900	267,989	268,105	11,600	2,530,360	2,534,689	432,900	444,500	266,700	1,326,000
22-Jul	830,874	840,006	913,200	684,900	268,105	268,211	10,600	2,534,689	2,541,432	674,300	285,375	214,031	1,598,100
23-Jul	840,006	845,855	584,800		268,211	268,304	9,300	2,541,432	2,549,584	815,200	824,500		1,409,400
24-Jul	845,855	854,043	916,600		268,304	268,450	14,600	2,549,584	2,558,389	880,500	895,100		1,713,900
25-Jul	854,043	863,569	952,600		268,450	268,564	11,400	2,558,389	2,565,095	670,600	682,000		1,634,600
26-Jul	863,569	873,782	1,021,300		268,564	268,678	11,400	2,565,095	2,570,460	536,500	547,800		1,569,200
27-Jul	873,782	883,940	1,015,800		268,678	268,811	13,300	2,570,460	2,577,389	692,900	706,200		1,722,000
28-Jul	883,940	891,860	792,000		268,811	268,928	11,700	2,577,389	2,582,505	511,600	523,300		1,315,300
29-Jul	891,860	892,548	68,800		268,928	269,022	9,400	2,582,505	2,585,039	253,400	262,800		331,600
30-Jul	892,548	892,548	-		269,022	269,022	-	2,585,039	2,585,039	-	-		-
1-Aug	892,548	892,548	-		269,022	269,022	-	2,585,039	2,585,039	-	-		-
2-Aug	892,548	905,935	1,338,700		269,022	269,385	36,300	2,585,039	2,590,049	501,000	537,300		1,876,800
3-Aug	905,935	915,884	994,900		269,385	269,478	9,300	2,590,049	2,594,374	432,500	441,800		1,436,700
4-Aug	915,884	923,431	754,700		269,478	269,640	16,200	2,594,374	2,597,133	275,900	292,100		1,046,800
5-Aug	923,431	933,101	967,000		269,640	269,810	17,000	2,597,133	2,602,694	556,100	573,100		1,540,100
6-Aug	933,101	943,176	1,007,500		269,810	269,984	17,400	2,602,694	2,607,732	503,800	521,200		1,528,700
7-Aug	943,176	954,085	1,090,900		269,984	270,169	18,500	2,607,732	2,615,058	732,600	751,100		1,842,000
8-Aug	954,085	964,202	1,011,700		270,169	270,320	15,100	2,615,058	2,623,730	867,200	882,300		1,894,000
9-Aug	964,202	974,783	1,058,100		270,320	270,440	12,000	2,623,730	2,633,431	970,100	982,100		2,040,200
10-Aug	974,783	984,990	1,020,700		270,440	270,558	11,800	2,633,431	2,643,224	979,300	991,100		2,011,800
11-Aug	984,990	995,656	1,065,600		270,558	270,661	10,300	2,643,224	2,654,682	1,145,800	1,156,100		2,222,700
12-Aug	995,656	1,005,836	1,018,000		270,661	270,839	17,800	2,654,682	2,664,611	992,900	1,010,700		2,028,700
13-Aug	1,005,836	1,016,222	1,038,600		270,839	271,015	17,600	2,664,611	2,675,325	1,071,400	1,089,000		2,127,600
14-Aug	1,016,222	1,027,247	1,102,500		271,015	271,173	15,800	2,675,325	2,685,383	1,005,800	1,021,600		2,124,100
15-Aug	1,027,247	1,037,808	1,056,100		271,173	271,343	17,000	2,685,383	2,695,057	967,400	984,400		2,040,500
16-Aug	1,037,808	1,047,726	991,800		271,343	271,468	12,500	2,695,057	2,705,152	1,009,500	1,022,000		2,013,800
17-Aug	1,047,726	1,058,616	1,089,000		271,468	271,577	10,900	2,705,152	2,710,714	556,200	567,100		1,656,100
18-Aug	1,058,616	1,066,907	829,100		271,577	271,672	9,500	2,710,714	2,713,556	284,200	293,700		1,122,800
19-Aug	1,066,907	1,076,864	955,700		271,672	271,829	15,700	2,713,556	2,714,958	140,200	155,900		1,151,600
20-Aug	1,076,864	1,082,728	586,400		271,829	271,966	13,700	2,714,958	2,716,321	136,300	150,000		736,400
21-Aug	1,082,728	1,092,692	956,400		271,966	272,073	10,700	2,716,321	2,719,952	363,100	373,800		1,370,200
22-Aug	1,092,692	1,102,396	970,400		272,073	272,168	9,500	2,719,952	2,723,611	385,900	395,400		1,365,800
23-Aug	1,102,396	1,109,012	661,600		272,168	272,326	15,800	2,723,611	2,723,813	200	16,000		677,600
24-Aug	1,109,012	1,116,902	789,000		272,326	272,454	12,800	2,723,813	2,725,603	179,000	191,800		980,800
25-Aug	1,116,902	1,127,393	1,049,100		272,454	272,605	15,100	2,725,603	2,728,973	337,000	352,100		1,401,200
26-Aug	1,127,393	1,138,079	1,068,600		272,605	272,746	14,100	2,728,973	2,733,497	452,400	466,500		1,535,100
27-Aug	1,138,079	1,148,684	1,060,500		272,746	272,883	13,700	2,733,497	2,739,301	580,400	594,100		1,654,800
28-Aug	1,148,684	1,159,494	1,081,000		272,883	273,092	20,900	2,739,301	2,747,269	796,800	817,700		1,898,700
29-Aug	1,159,494	1,170,149	1,085,500		273,092	273,177	8,500	2,747,269	2,753,641	637,200	645,700		1,711,200
30-Aug	1,170,149	1,180,974	1,082,500		273,177	273,311	13,400	2,753,641	2,760,725	708,400	721,800		1,804,300
31-Aug	1,180,974	1,191,780	1,080,600		273,311	273,455	14,400	2,760,725	2,768,684	795,900	810,300		1,890,900
1-Sep	1,191,780	1,202,602	1,082,200		273,455	273,578	12,300	2,768,684	2,774,703	601,900	614,200		1,696,400
2-Sep	1,202,602	1,213,461	1,085,900		273,578	273,723	14,500	2,774,703	2,781,583	688,000	702,500		1,788,400
3-Sep	1,213,461	1,224,410	1,084,900		273,723	273,856	13,300	2,781,583	2,788,044	646,100	659,400		1,754,300
4-Sep	1,224,410	1,235,191	1,078,100		273,856	273,990	13,400	2,788,044	2,795,005	796,100	809,500		1,887,600
5-Sep	1,235,191	1,246,257	1,106,800		273,990	274,144	15,400	2,795,005	2,803,967	796,200	811,600		1,918,200
6-Sep	1,246,257	1,256,964	1,070,700		274,144	274,288	14,400	2,803,967	2,811,205	723,800	738,200		1,808,900
7-Sep	1,256,964	1,267,683	1,071,900		274,288	274,447	15,900	2,811,205	2,817,020	581,500	597,400		1,669,300
8-Sep	1,267,683	1,278,523	1,084,000		274,447	274,583	13,600	2,817,020	2,823,697	667,700	681,300		1,765,300
9-Sep	1,278,523	1,289,279	1,075,600		274,583	274,719	13,600	2,823,697	2,828,823	512,600	526,200		1,601,800
10-Sep	1,289,279	1,300,238	1,095,900		274,719	274,863	14,400	2,828,823	2,834,671	584,800	599,200		1,695,100
11-Sep	1,300,238	1,311,042	1,090,400		274,863	275,016	15,300	2,834,671	2,840,635	596,400	611,700		1,692,100
12-Sep	1,311,042	1,321,951	1,090,900		275,016	275,163	14,700	2,840,635	2,846,472	783,700	798,400		1,889,300
13-Sep	1,321,951	1,332,735	1,078,400		275,163	275,316	15,300	2,846,472	2,854,752	628,000	643,300		1,721,700
14-Sep	1,332,735	1,343,613	1,087,800		275,316	275,461	14,500	2,854,752	2,861,959	720,700	735,200		1,823,000
15-Sep	1,343,613	1,353,975	1,036,200		275,461	275,586	12,500	2,861,959	2,864,608	264,900	277,400		1,313,600
16-Sep	1,353,975	1,364,159	1,018,400		275,586	275,716	13,000	2,864,608	2,870,009	540,100	553,100		1,375,700
17-Sep	1,364,159	1,374,537	1,037,800		275,716	275,852	13,600	2,870,009	2,872,384	237,500	251,100		1,571,500
18-Sep	1,374,537	1,385,235	1,069,800		275,852	275,992	14,000	2,872,384	2,878,039	565,500	579,500		1,288,900
19-Sep	1,385,235	1,394,366	913,100		275,992	276,112	12,000	2,878,039	2,882,545	450,600	462,600		1,649,300
20-Sep	1,394,366	1,405,479	1,111,300		276,112	276,268	15,600	2,882,545	2,888,211	566,800	582,200		1,375,700
21-Sep	1,405,479	1,415,007	952,800		276,268	276,350	8,200	2,888,211	2,892,840	462,900	471,100		1,693,500
22-Sep	1,415,007	1,425,484	1,047,700		276,350	276,472	12,200	2,892,840	2,896,627	378,700	390,900		1,438,600
23-Sep	1,425,484	1,435,541	1,055,700		276,472	276,598	12,600	2,896,627	2,898,681	205,400	218,000		1,223,700
24-Sep	1,435,541	1,446,065	1,052,400		276,598	276,718	12,000	2,898,681	2,901,178	249,700	261,700		1,314,100
25-Sep	1,446,065	1,455,841	977,600		276,718	276,838	12,000	2,901,178	2,902,857	167,900	179,900		1,157,500
26-Sep	1,455,841	1,465,935	1,009,400		276,838	276,961	12,300	2,902,857	2,904,701	184,400	196,700		1,206,100
27-Sep	1,465,935	1,475,537	960,200		276,961	277,081	12,000	2,904,701	2,906,383	168,200	180,200		1,140,400
28-Sep	1,475,537	1,486,590	1,105,300		277,081	277,202	12,100	2,906,383	2,907,390	100,700	112,800		1,218,100
29-Sep	1,486,590	1,495,235	864,500		277,202	277,327	12,500	2,907,390	2,908,236	84,600	97,100		961,600
30-Sep	1,495,235	1,504,108	887,300		277,327	277,455	12,800	2,908,236	2,909,286	105,000	117,800		1,005,100
1-Oct	1,504,108	1,511,202	709,400		277,455	277,574	11,900	2,909,286	2,909,307	2,100	14,000		723,400
2-Oct	1,511,202	1,514,887	368,500		277,574	277,689	11,500	2,909,307	2,910,250	94,300	105,800		474,300
3-Oct	1,514,887	-	(151,488,700)		2								

Message

Page 1 of 1

DOUG THORSON

From: CLAY MONTGOMERY
Sent: Wednesday, August 02, 2006 10:30 AM
To: DOUG THORSON
Cc: BOB SEVERA; CLAY MONTGOMERY
Subject: FW: [SPAM] - Untitled.PDF - Bayesian Filter detected spam

From: AWDS [mailto:info@andrewwelldrill.com]
Sent: Wed 8/2/2006 10:16 AM
To: CLAY MONTGOMERY
Cc: 'Roger'
Subject: [SPAM] - Untitled.PDF - Bayesian Filter detected spam

Clay,

Please find attached the 7 stage performance curves for the pump you now have installed. Please note that it has an impellor trim on it, so it was designed for a 800 gpm @ 500 TDHF, if you go over to the 1000 gpm flow on the curve, it should do approximately 434 TDHF @ 1000 gpm with a 350 foot pumping level. That leaves you with 84 feet for pressure or 36 psi for pressure at the pump discharge.

84 feet
 $2.31\text{ft/psi} = 36\text{ psi}$

pqm x total head feet
 $3960 \times \text{pump efficiency} = \text{HP}$

800 gpm x 500 feet
 $3960 \times .75 \text{ (overall pump efficiency)} = 134.6 \text{ HP}$

1000 gpm x 436 feet
 $3960 \times .75 = 141 \text{ HP}$

You are capable of pumping 1000 gpm out of you well as long as you use the lower pressure.

Sincerely,

Roger Buchanan

8/5/2006

Exhibit B

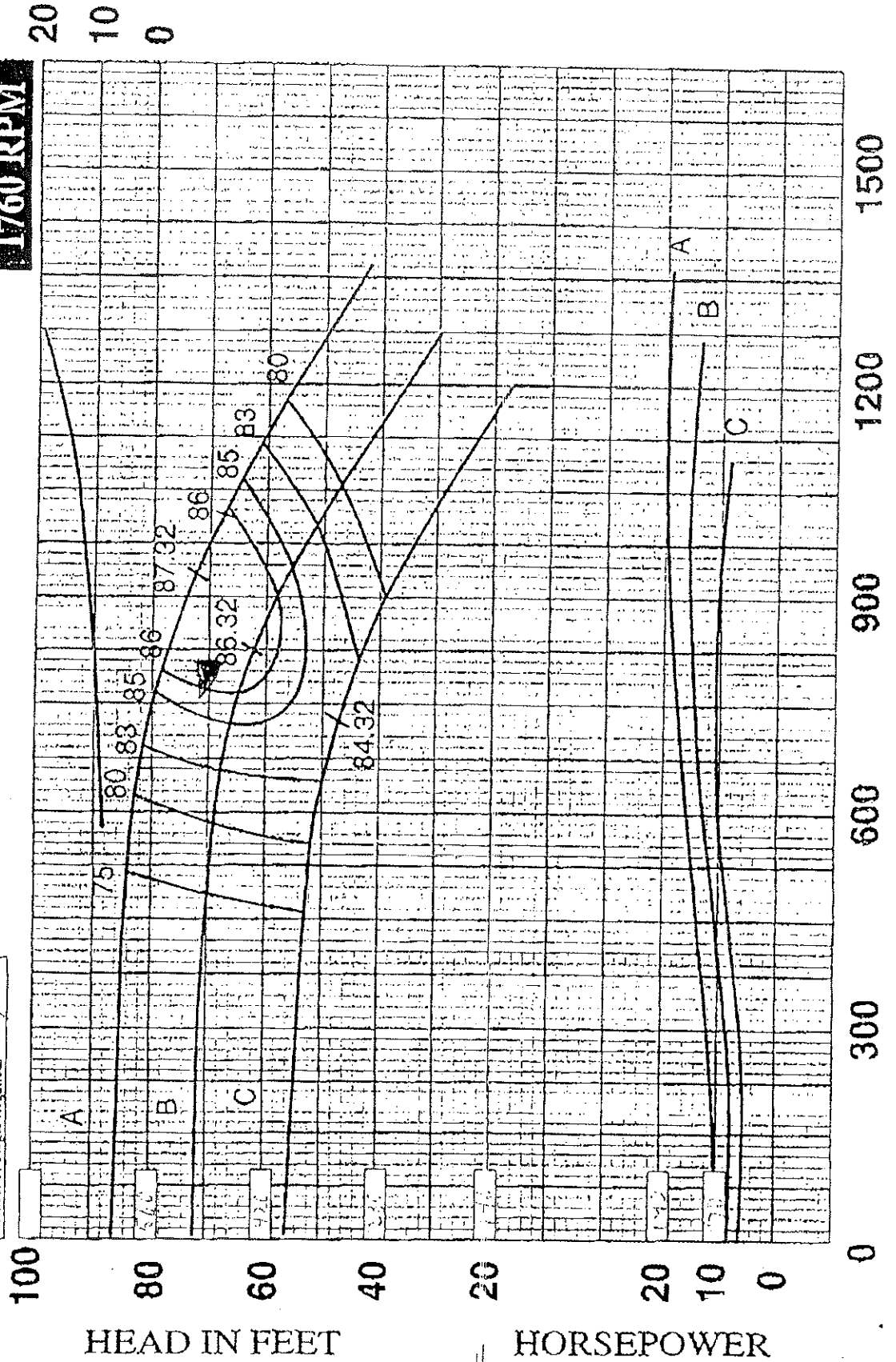


Performance Curves

12-M-100

1760 RPM

Number of Stages Required: 7



N.P.S.H.

20
10
0

HEAD IN FEET

HORSEPOWER