

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

JAN 24 2008

A. GENERAL INFORMATION

Permit No. 63-31261 Department of Water Resources

1. Owner: Daniel and/or Karen Hansen Phone No.: 208-890-2552

Current Address: KD Bar Ranch, 6500 SE 7th Ave, Caldwell, ID 83607

2. Accompanied by: Mark Needs EXAM DATE: September 5, 2007

Address: Same as above Phone No. 208-405-1387

Relationship to Permit Holder: Ranch Manager

3. Source: Ground Water tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 65-13933, Black Canyon Irrigation District

2. Other water rights with the same point of diversion: 63-12569

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident No.	Gov't Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
			NW	SE	7	6N	3W	Payette	Field Exam, GPS

2. Place(s) of Use:

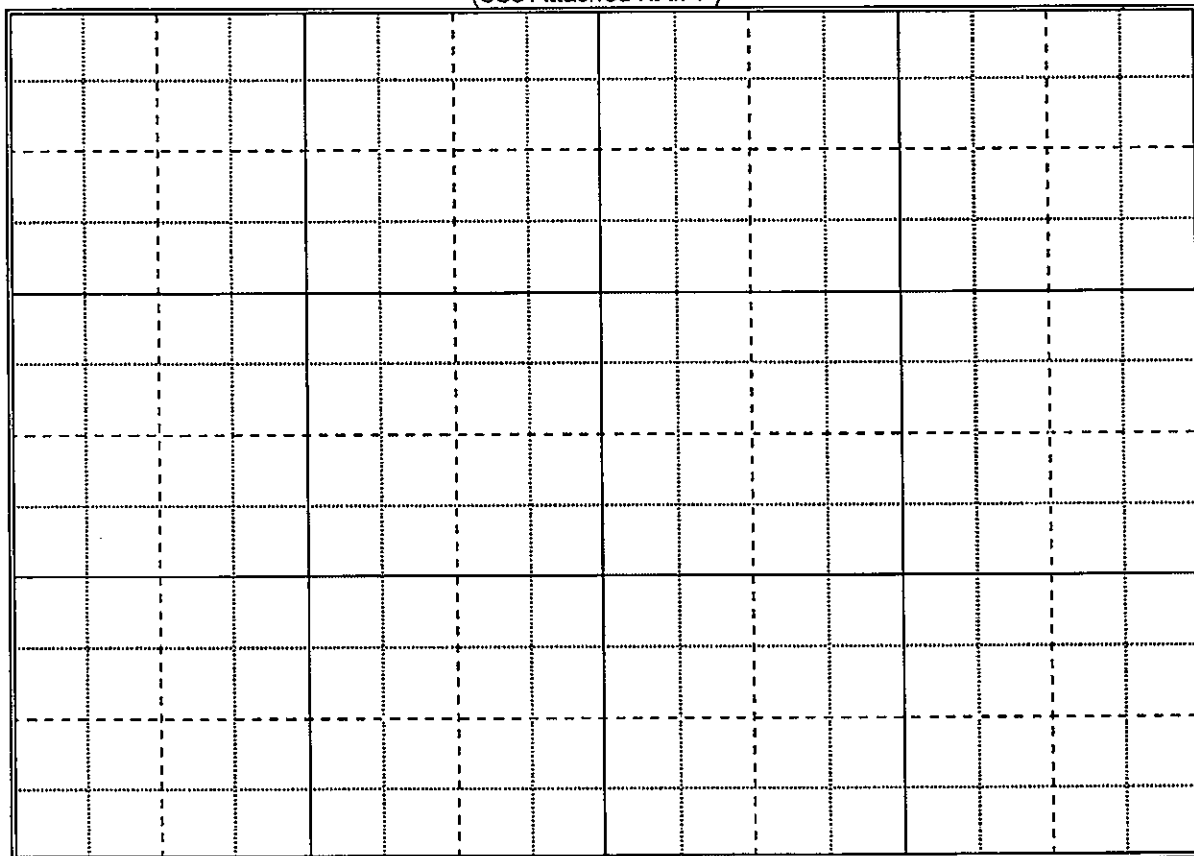
Indicate Method of Determination Field Exam, Aerial
Photography (NAIP 2006)

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
6N	3W	6															36	36	
		7	36		40	35							4		33	31		179	
		18	8	8	8		39	38	39	40								180	
				C	C			Lt 1	Lt 2										

Total Acres 395

3. **Delivery System Diagram:** Indicate all major components and distances between components.
Indicate weir size/ditch size/pipe id as applicable.

(See Attached NAIPP)



Scale: 1" = _____

X Copy of USGS Quadrangle Attached Showing location(s) of point(s) of diversion and place(s) of use (required).

X Aerial Photo Attached (required for irrigation of 10+ acres)

X Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well No. 2	Baldor 3,550 rpm	200	H0106260003	Goulds	11CLC, 2-stage, full trim
Booster No. 1	Baldor 1,800 rpm	50	A150950-55 42f060w38861	Cornell	4RB, 12.75" Diameter
Booster No. 2	US Electric 1,770 rpm	75	E02-S334A-H AZ	Fairbanks Morse Vertical Turbine	FM TURB60.MPC v. 1 3-stage, 8.875" Diameter
Booster No. 3	Baldor 1,800 rpm	50	0000314 A150960-55	Cornell	4RB, 12" Diameter
Booster No. 4	Baldor 1,800 rpm	50	F001121	Cornell	4RB, 12.75" Diameter
Booster No. 5	Baldor 3,600 rpm	7.5	F0703103694	Berkeley	B2TPM, 5-5/8" Trim and Diameter

*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
Pump Curve						

2. Measurements: 1,800 gpm at 360' TDH (250' pwl, 20' friction loss, 39 psi discharge)

Boosters provide 40 to 100 psi pressure increase for sprinklers

E. NARRATIVE/REMARKS/COMMENTS

A 16-inch well (aka Well #2) equipped with a 200-hp pump supplies irrigation water to 395 acres. The ground water from this well is diverted in the Boise River drainage. A 2nd well in Section 18 (aka Well #1, permit 65-13933) also provides additional ground water to the system for irrigation of the same 395 acres and dust control. Ground water from this well is diverted in the Payette River drainage. Although part of a common system, the wells cannot be listed together because of the separate basins.

The complete irrigation system consists two wells with pumps, five booster pumps that supply ground water to one full 9-tower pivot and two half 9-tower pivots. The pivots operate between 50 and 65 psi. Ground water is also provided to portable hand lines, wheel lines and two Kifco water wheel sprinklers used to irrigate the pivot corners and small fields. The hand line and wheel line sprinklers, along with the smaller (B210) Kifco water wheel sprinkler operate at 75 psi. The larger "Big Gun" Kifco water wheel sprinkler operates at 100 psi. The irrigation system was not in use at the time of the exam. Pressure amounts were provided by Mark Needs.

Linda McCommell with Black Canyon Irrigation District (BCID) confirmed that Dan Hansen is assessed for 126 acres BCID surface water for irrigation of a 3/4ths 9-tower pivot and three corners in the NE and a pivot corner in the SENW, Section 18. The ground water supplements BCID water only on the pivot corners in Section 18 for a total of 32 acres. The other 363 acres are irrigated only with ground water.

The ground water is also used for dust control on roads and the indoor arena. Because less acres were developed than permitted, the amount of water used for dust control does not exceed the original permit parameters regarding water quantity. An *Application for Amendment of Permit* and associated \$50 fee are attached to account for the dust control use. Dust is controlled on the entrance road in the N ½ N ½ NW, Section 18 and the roads, parking and indoor arena areas in the W ½ SE, Section 7. A completed *Proof of Beneficial Use* form (due 10/01/2011) is also attached.

Well #2 includes a 7.5-hp submersible pump that serves permit 63-12569 for domestic and stockwater uses.

Well logs, well pump curves and booster pump curves for the entire system are attached. Riverside Inc. drilled the wells and installed their pumps. Dave Cleaver with Riverside Inc. supplied the attached well pump curves. Agri-Lines designed the irrigation system and installed the booster pumps. Dave Stubbs with Agri-Lines supplied the attached booster pump curves and system diagram.

See attached 2006 NAIPP photo, camera photos and system diagram for details.

This right, when combined with right 65-13933, will be limited to 7.9 cfs and 1777.5 afa for irrigation of 395 acres.

Have conditions of permit approval been met? X yes ___ no

F. FLOW CALCULATIONS

Yes Additional Computation Sheets Attached
(Pump Curve)

Measured Method:

Per pump curve: 1800 gpm pumping capacity or 4.01 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 395 \times 4.5 = 1777.5$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 4.01 \times 260 \times 1.9835 = 2068.0$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1777.5$$

2. Volume Calculations for Other Uses:

Dust Control

Indoor Arena: 3" fire hose, 70 psi, 100 gpm (.22 cfs)
120 minutes/day = 1200 gpd x 365 days/325,850 = 1.3 afa

Roads: 4" fire hose, 70 psi, 100 gpm (.22 cfs)
Hose fills 18' x 10' truck water tank once/day, 65 days/year
 $r = 10'/2$
 $A = \pi(5')^2 = 78.54$
 $V = 18' \times 78.54 \times 7.48 = 10,575 \text{ gallon tank}$
 $10,575 \times 65 \text{ days}/325,850 = 2.1 \text{ afa}$

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	3/1	11/15	4.01	1777.5
Commercial	1/1	12/31	.22	3.4
Totals			4.01	1780.9

2. Recommended Amendments

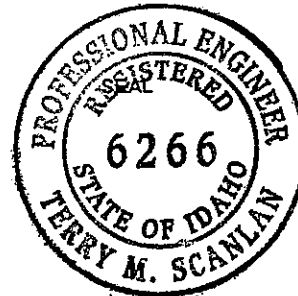
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None
☒ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ Other (add commercial use for dust control)

I. AUTHENTICATION

Field Examiner's Name Terry M. Scanlan Date 1-22-68

Field Examiner's Signature *Terry M. Scanlan*

Reviewer _____ Date _____



CWRE#08-129

CloseIDAHO DEPARTMENT OF WATER RESOURCES
Water Permit Report

07/27/2007

WATER RIGHT NO. 63-31261

Owner Type	Name and Address
Current Owner	DANIEL B. HANSEN
Current Owner	KAREN L. HANSEN
	1717 CHISHOLM DR
	NAMPA, ID 83687
	(208)890-2552

Priority Date: 06/05/2001
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use From	To	Diversion Rate	Volume
IRRIGATION	03/01	11/15	4 CFS
Total Diversion			4 CFS

Location of Point(s) of Diversion:

GROUND WATER | NWS | Sec. 07 | Township 06N | Range 03W | PAYETTE County

IRRIGATION Use:
Acre Limit: 200

Place(s) of use:

Place of Use Legal Description: IRRIGATION PAYETTE County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
06N	03W	6		SESE	40									
		7		NENE	40		SWNE	40		SENE	40			
				NWSE	40		SWSE	40						
		8		NENW	40		NWNW	40		SWNW	40		SENW	40

Total Acres: 400

Conditions of Approval.

- 1 26A Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
- 2 046 Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
- 3 01N After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
- 4 121 The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.
- 5 X35 Rights 65-19933 and 63-31261 when combined shall not exceed a total diversion rate of 8.00 cfs, a total annual maximum diversion volume of 1800.0 af at the field headgate, and the irrigation of 400 acres.
- 6 X27 This right is limited to the irrigation of 200 acres within the place of use described above in a single irrigation season.
- 7 R65 This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 4.5 afa per acre at the field headgate for irrigation of the lands above.
- 8 Water bearing zone to be appropriated is 340 to 520 feet.

Dates:

Proof Due Date: 10/01/2011
 Proof Made Date:
 Approved Date: 09/18/2001
 Moratorium Expiration Date:
 Enlargement Use Priority Date:
 Enlargement Statute Priority Date:
 Application Received Date: 06/05/2001
 Protest Deadline Date: 08/06/2001
 Number of Protests: 0
 Field Exam Date:
 Date Sent to State Off:
 Date Received at State Off

Other Information:

State or Federal:
 Owner Name Connector: And/Or
 Water District Number:
 Generic Max Rate per Acre: 0.02
 Generic Max Volume per Acre: 4.5

(Internet)

SEP 25 2006

For Office Use Only
\$50 Fee Received by 50.00
Date 9-25-06
Receipt No. 206 2239

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

REQUEST FOR EXTENSION OF TIME

TO PROVIDE ADDITIONAL TIME IN WHICH TO SUBMIT PROOF OF
BENEFICIAL USE FOR A WATER RIGHT PERMIT

The Idaho Department of Water Resources will consider this form as a request that the permit holder(s) be granted an additional period of time under the provisions of Section 42-204, Idaho Code in which to complete development of a water right

Permit No. 63-31261

Name(s) of Permit Holder: Daniel B Hansen and/or Karen L Hansen
Mailing Address: 8393 Cherry Ln Nampa, Idaho 83687
Date Proof is Due: 10/1/2006 Telephone No. 208-890-2552

Describe what work has been completed toward the development of this water right:

(This must be filled out! If no work has been completed, show "none".)

One new 16-inch, 520-ft deep well was completed in 2001. The well is equipped with a 200 hp submersible pump rated to produce about 1800 gpm, and serves an irrigation system consisting of center-pivots and moveable laterals watering over 350 acres.

Costing: >\$ 500,000.00

The permit holder(s) has been unable to complete the remainder of the work for the following reasons:

Applicant is negotiating with adjacent landowners for acquisition of land more conducive to irrigated agriculture. Additional time is requested to complete development of the irrigation system to the extent authorized by this permit.

Permit holder(s) request an extension to October 1, 2011

FEE: \$50.00

(Signature)*

*If other than permit holder, Power of Attorney must be supplied.

ACTION OF THE DEPARTMENT OF WATER RESOURCES

IT IS HEREBY ORDERED that the above request for extension of time be APPROVED and the time within which to submit proof of beneficial use is extended to October 1, 2011.

Signed this 19th day of October .. 2006

Gary Spackman
GARY SPACKMAN

Permit 63-31261
2006 Naip Photography



0 0.15 0.3
Miles



Water Engineering, LLC
water resource consultants
100 S. River Road Lane Ste. 100 Bonanza, Idaho 83701
tel 208.363.4140 fax 208.363.4150

Legend

-  Well #1
-  Well #2
-  Booster #1
-  Booster #2
-  Booster #3
-  Booster #4
-  Booster #5

 Irrigation Place of use

T6N R3W

6

7

18



Permit 63-31261



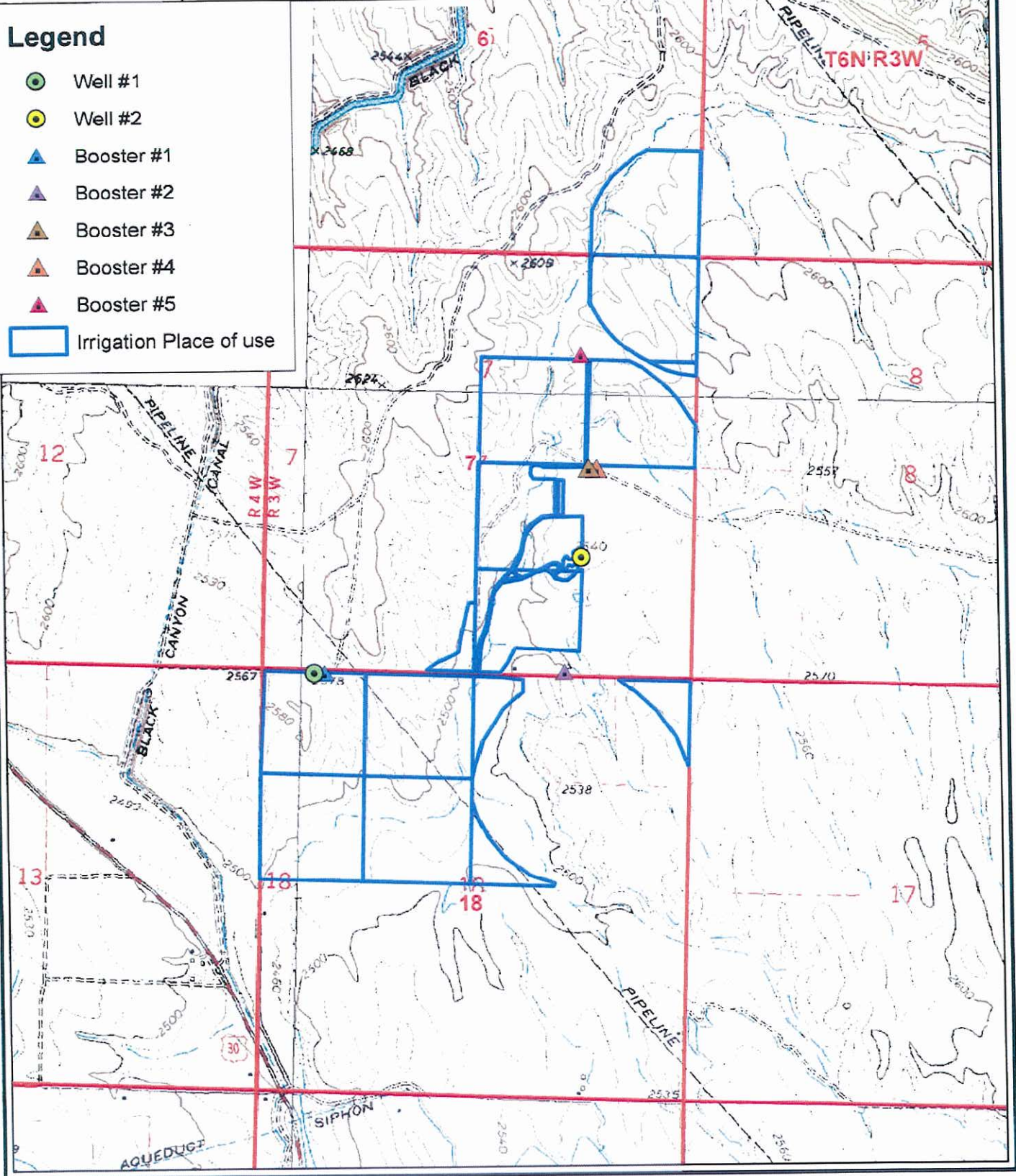
0 0.15 0.3
Miles



Water Engineering, LLC
water resource consultants
PO Box 1000, P.O. Box 1000, P.O. Box 1000
PO Box 1000, P.O. Box 1000, P.O. Box 1000

Legend

-  Well #1
-  Well #2
-  Booster #1
-  Booster #2
-  Booster #3
-  Booster #4
-  Booster #5
-  Irrigation Place of use



IRRIGATION WELL #1

Log and Pump Curve

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____
Lat: _____ Long: _____

1. WELL TAG NO. D 15828
DRILLING PERMIT NO. _____
Other IDWR No. _____

2. OWNER:
Name Daniel & Karen Hansen
Address PO Box 337
City Nampa State ID Zip 83653

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

North ☒ or South ☐
East ☐ or West ☒
Twp. 10 Rge. 3 Sec. 18
Gov't Lot _____ County _____
Lat. _____ Long. _____
Address of Well Site 1 mile NE
Black Canyon - 9400 ft City Sand Hollow

Li. _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other Reverse

7. SEALING PROCEDURES

SEAL/FILTER PACK	AMOUNT	METHOD
Material	From To	Spots of Pounds
<u>Bentonite 5/8</u>	<u>0 320</u>	<u>10025#</u>
<u>Bentonite 5/8</u>	<u>320 410</u>	<u>3700#</u>
<u>Bentonite</u>	<u>530 535</u>	<u>100#</u>

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) _____

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>110"</u>	<u>72</u>	<u>324</u>	<u>3.25</u>	<u>Steel</u>	☒	☐	☒	☐
<u>110"</u>	<u>324</u>	<u>388</u>	<u>3.75</u>	<u>Steel</u>	☒	☐	☒	☐
<u>110"</u>	<u>388</u>	<u>4110</u>	<u>3.625</u>	<u>Steel</u>	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe 10'

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens Screen Type SS Johnson

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>324</u>	<u>354</u>	<u>1/8"</u>		<u>110"</u>	<u>SS</u>	☒	☐
<u>388</u>	<u>388</u>	<u>1/8"</u>		<u>110"</u>	<u>SS</u>	☒	☐
<u>4110</u>	<u>451</u>	<u>1/8"</u>		<u>110"</u>	<u>SS</u>	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

205 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: 2" access pipe

11. WELL TESTS:

yield gal/min.	Drawdown	Pumping Level	Time
<u>1800</u>	<u>82</u>	<u>287'</u>	<u>8 hrs</u>

Water Temp. 105° Bottom hole temp. _____
Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>98"</u>	<u>0</u>	<u>12</u>	<u>Sand</u>		
	<u>12</u>	<u>43</u>	<u>Sandy Clay</u>		
	<u>43</u>	<u>815</u>	<u>Coarse Sand & Shale</u>		
	<u>815</u>	<u>300</u>	<u>Tan Clay & Sand Shale</u>		
	<u>300</u>	<u>310</u>	<u>Med Sand</u>		
	<u>310</u>	<u>313</u>	<u>Tan Clay</u>		
	<u>313</u>	<u>321</u>	<u>Sand & Clay</u>		
	<u>321</u>	<u>353</u>	<u>Mud Sand</u>		
	<u>353</u>	<u>3110</u>	<u>Tan Clay</u>		
	<u>3110</u>	<u>395</u>	<u>Med Sand</u>		
	<u>395</u>	<u>4110</u>	<u>Tan then Blue Clay</u>		
	<u>4110</u>	<u>451</u>	<u>Coarse to Med Sand</u>		
	<u>451</u>	<u>498</u>	<u>Blue Clay</u>		
	<u>498</u>	<u>521</u>	<u>Mud Sand</u>		
	<u>521</u>	<u>5810</u>	<u>Blue Clay Shale Sand</u>		

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FEB 20 2001

Department of Water Resources

Pump test results as required by condition #10.

Completed Depth 530' (Measurable)
Date: Started 11-1-00 Completed 12-15-00

13. DRILLER'S CERTIFICATION

We certify that all minimum well construction standards were complied with at the time the rig was removed.

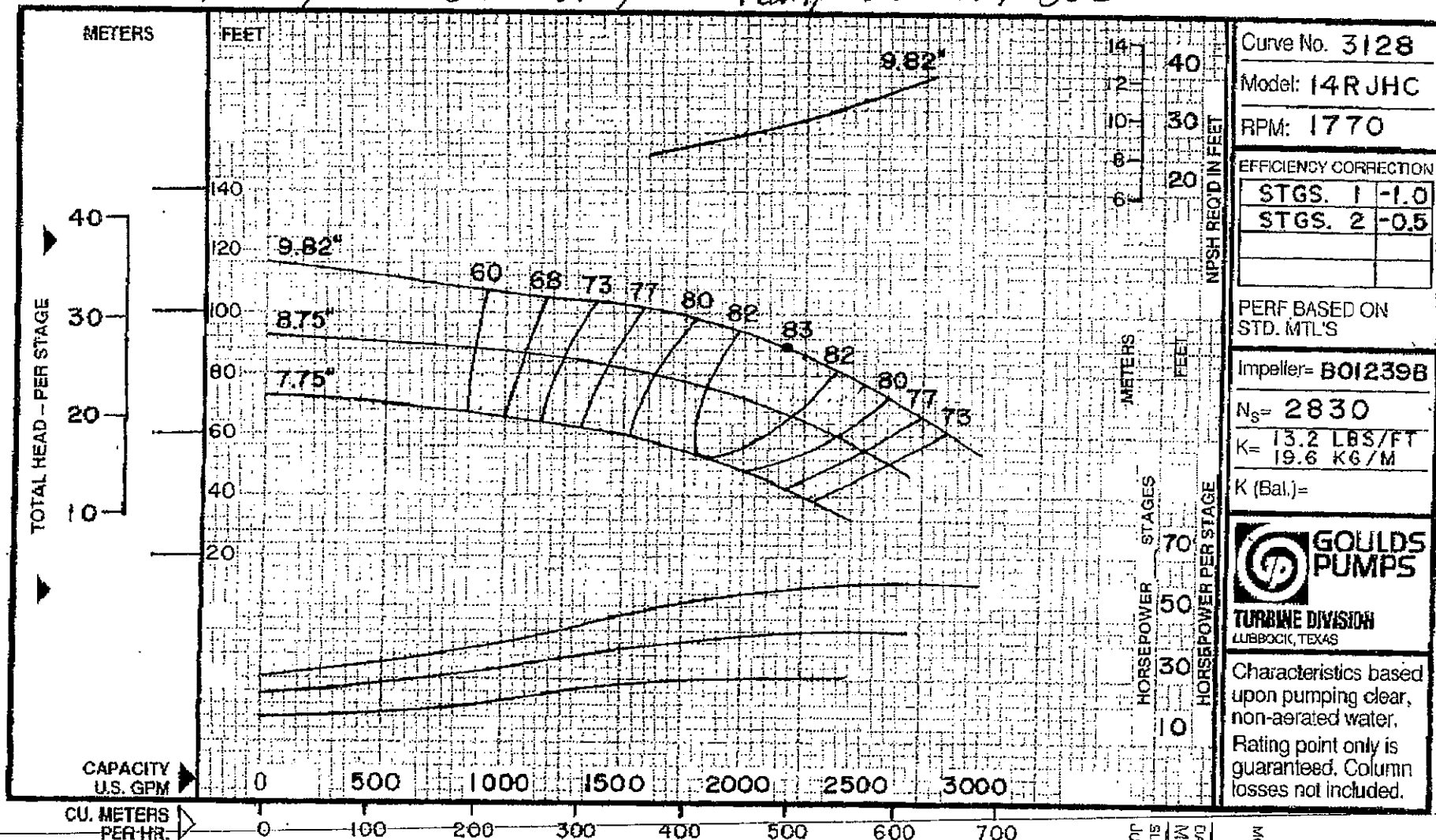
Company Name Riverside Inc. Firm No. 333

Firm Official _____ Date _____
and _____
Driller or Operator _____ Date 2-15-00
(Sign Once as Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

GOULDS PROPOSAL NO.	GOULDS S.O. NO.	INQUIRY NO.	CUSTOMER P.O. NO.	P.O. DATE	ITEM NO.	CUSTOMER	
PROJECT <i>Dan Hansen</i>			SERVICE		GPM CAPACITY <i>2100</i>	F.T. TDH <i>375</i>	% EFFICIENCY <i>1720</i>

4 stages Full D.A. Pump set AT 350'



WELL #1

IRRIGATION WELL #2

Log and Pump Curve

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

RECEIVED

Office Use Only

Inspected by

Twp. Rge. Sec.

1/4 1/4 1/4

Lat. : : Long. : :

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian1. WELL TAG NO. D 15829

DRILLING PERMIT NO.

Other IDWR No. 63-12569

11. WELL TESTS:

☐ Pump ☐ Bailer☐ Air☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
2200	73'	251	7 hrs.

Water Temp.

Bottom hole temp.

Water Quality test or comments:

Depth first Water Encounter

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
28	0	4	Top Soil		
28	4	8	Coarse to Med tan Sand		
28	8	12	Coarse to Med tan Sand		
28	12	36	Coarse to fine Sand w/ clay		
28	36	41	lt. Gray Clay		
28	41	50	Coarse to Med lt. Gray Sand		
28	50	60	Med lt. Brown Sand w/ clay		
28	60	67	Med to coarse lt. Gray Sand		
28	67	70	tan Clay		
28	70	76	Sandy lt. Brown Clay		
28	76	80	tan Clay		
28	80	84	Coarse to Med lt. Gray Sand		
28	84	85	Brown Clay		
28	85	88	Med. Brown Sand		
28	88	90	Gray Clay		
28	90	93	Gray Clay		
28	93	101	Coarse to Med lt. Gray Sand		
28	101	109	tan Clay		
28	109	119	Coarse to Med lt. Brown Sand		
28	119	130	Med to coarse lt. Brown Sand		
28	130	139	Coarse to Med tan Sand		
28	139	143	tan Clay		
28	143	160	Med to coarse Sandy tan Clay		
28	160	169	Fine to Med tan Sand		
28	169	185	Coarse to Med tan Sand		
28	185	187	tan Clay		
28	187	195	Coarse to Med tan Sand		
28	195	200	lt. Brown Clay		
28	200	216	Med to coarse tan Sand		
28	216	218	tan Clay		
28	218	240	Coarse to Med lt. Brown Sand		
Completed			Depth 320' (Measurable)		
Date: Started 3/6/01			Completed 5/12/01		

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Riverside, Inc. Firm No. 333

Firm Official

Date

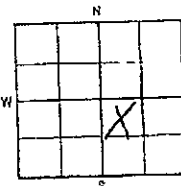
and

Driller or Operator

Date

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Twp. 6 North ☒ or South ☐
Rge. 3 East ☐ or West ☒
Sec. 7 1/4 NW 1/4 SE 1/4
Gov't Lot _____ County Payette
Lat. : : Long. : :
Address of Well Site 1 mile NE
Black Canyon T-84 Exit City Sand Hollow
(Give at least some of road + distance to road or landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other Stock5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other Reverse

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Spks or Pounds	
2" Bentonite	0	330	60,000	over bore
2" Bentonite	331	382	2900	over bore
2" ESS	330	371	362,991	over bore
2" ESS	382	397	397	over bore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16"	2	340'	325	Steel	☒	☐	☒	☐
16"	380'	387'	325	Steel	☐	☐	☒	☐
16"	397'	437'	375	Steel	☒	☐	☒	☐

Length of Headpipe _____ Length of Tailpipe 10'

9. PERFORATIONS/SCREENS

Perforations Method Tobacco
Screens Screen Type Wire wrap

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
340'	380'	.035		16"	SS	☒	☐
387'	397'	.035		16"	SS	☒	☐
437'	457'	.035		16"	SS	☒	☐
470'	505'	.035		16"	SS	☒	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

126' ft. below ground Artesian pressure _____ lb.Depth flow encountered _____ ft. Describe access port or control devices: 1 1/2" pipe

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat: _____ Long: _____

1. WELL TAG NO. D 15829
DRILLING PERMIT NO. _____
Other IDWR No. 03-12509 JUN 14 2001

2. OWNER:
Name Daniel Karen Hansen
Address P.O. Box 337
City Nampa State ID Zip 83653

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N
W E S
Twp. 10 North ☒ or South ☐
Rge. 3 East ☐ or West ☒
Sec. 7 1/4 NW 1/4 SE 1/4
Gov't Lot _____ County Prayette
Lat: _____ Long: _____
Address of Well Site _____
City _____
(Give at least name of road & distance to road or landmark)

Lt. _____ Bk. _____ Sub. _____ Name _____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☐ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK	AMOUNT		METHOD
	From	To	
Material			

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☐ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Perforations _____ Method _____
Screens _____ Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

_____ ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

Yield gal/min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

Depth first Water Encounter _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Date	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
28	240	242	Tan Clay		
28	242	244	Coarse to med tan Sand		
28	244	250	Tan Sandy Clay		
28	250	253	Med to coarse Brown Sand		
28	253	256	Sandy Brown Clay		
28	256	260	Tan Clay		
28	260	270	Med to Brown Sand & tan Clay		
28	270	283	Coarse to med tan Sandy Clay		
28	283	327	Coarse to med Sandy tan Clay		
28	327	334	Med to coarse tan Sandy Clay		
28	334	378	Coarse to med tan Sandy Clay		
28	378	385	Blue Clay		
28	385	395	Coarse to med Gray Sand		
28	395	397	Blue Clay		
28	397	400	Coarse to med Gray Sand		
28	400	409	Blue Clay w/ thin Sand streaks		
28	409	411	Coarse to med Gray Sand		
28	411	420	Blue Clay w/ thin Sand streaks		
28	420	428	Coarse to med Gray Sand		
28	428	447	Med to coarse Blue Sandy Clay		
28	447	459	Med to coarse Gray Sandy Clay		
28	459	470	Med to coarse Blue Sandy Clay		
28	470	515	Coarse Sand w/ some Clay		
28	515	530	Blue Clay		

Completed _____ Depth 530' (Measurable)
Date: Started 3/6/01 Completed 5/17/01

13. DRILLER'S CERTIFICATION

(We certify that all minimum well construction standards were complied with at the time the rig was removed.)

Company Name _____ Firm No. _____

Firm Official _____ Date _____

and Driller or Operator _____ Date _____

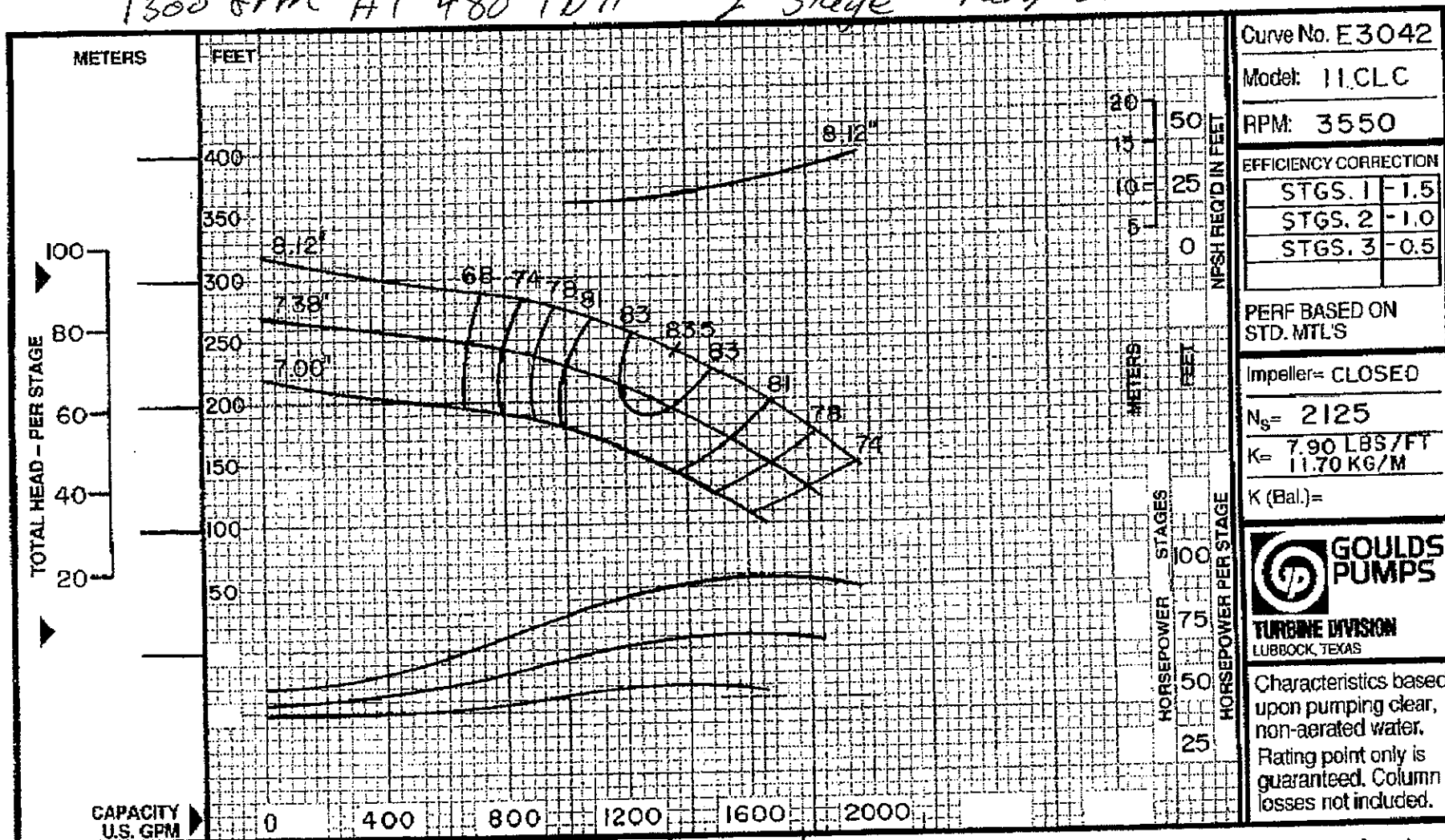
(Sign once & Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

see 7 well

GOULDS PROPOSAL NO.	GOULDS S.O. NO.	INQUIRY NO.	CUSTOMER P.O. NO.	P.O. DATE	ITEM NO.	CUSTOMER
PROJECT			SERVICE	GPM CAPACITY	F.T. TDH	% EFFICIENCY
1400 gpm @ 340' TDH						RPM 3550

1300 GPM AT 480 TDH 2 Stage Pump Set AT 350'



WELL #2

MODEL
11CLC
 DATE
 April, 1994
 SUPERCEDES
 February, 1993

CL1C1C.1

BOOSTER PUMP CURVES

BOOSTER #1

3RC - 1800 RPM

SINGLE VOLUTE

Speed	Impeller Dia	Style	Solids Dia	N _s	Suction	Discharge	No. Vanes
1775	Various	Enclosed	0.50"	915	5.0	3.0	7

Max. Impeller Dia. Non-overloading		
HP	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
30	12.19"	12.75"
25	11.56"	12.06"
20	11.00"	11.31"
15	10.25"	10.56"
10	9.00"	9.44"

performances shown are for
cool water, close-coupled
electric configuration with
ycoscal®. Other mounting
styles or liquids may require
horsepower and/or perform-
ance adjustments.

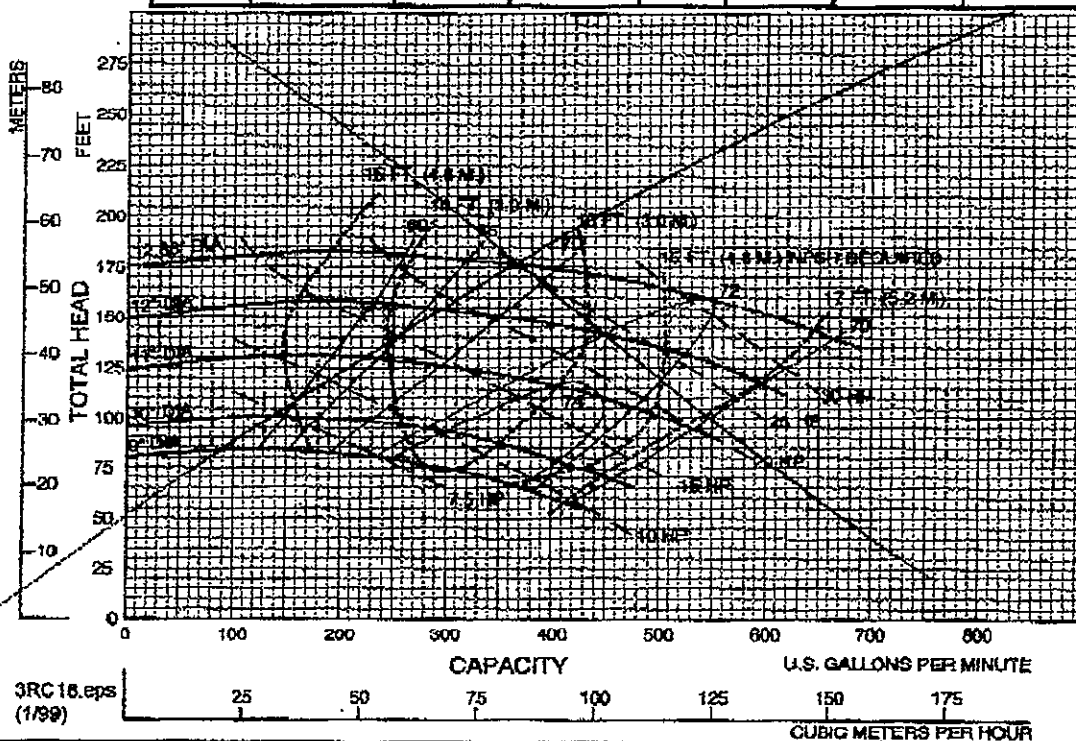
ft x .305 = Meters

inches x 25.4 = Millimeters

*M x .227 = Cubic Meters/Hour

*M x 3.785 = Liters/Minute

* x .746 = KW



IRB - 1800 RPM

SINGLE VOLUTE

Speed	Impeller Dia	Style	Solids Dia	N _s	Suction	Discharge	No. Vanes
1775	Various	Enclosed	0.84"	1332	6.0	4.0	7

Max. Impeller Dia. Non-overloading		
HP	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
30	12.75"	13.25"
25	12.00"	12.62"
20	11.00"	11.50"
15	10.50"	10.75"
10	9.75"	10.25"
7.5	8.94"	9.36"
5	8.00"	8.38"

performances shown are for
cool water, horizontal frame
configuration with packing.
Other mounting styles or liq-
uids may require horsepower
and/or performance adjust-
ments.

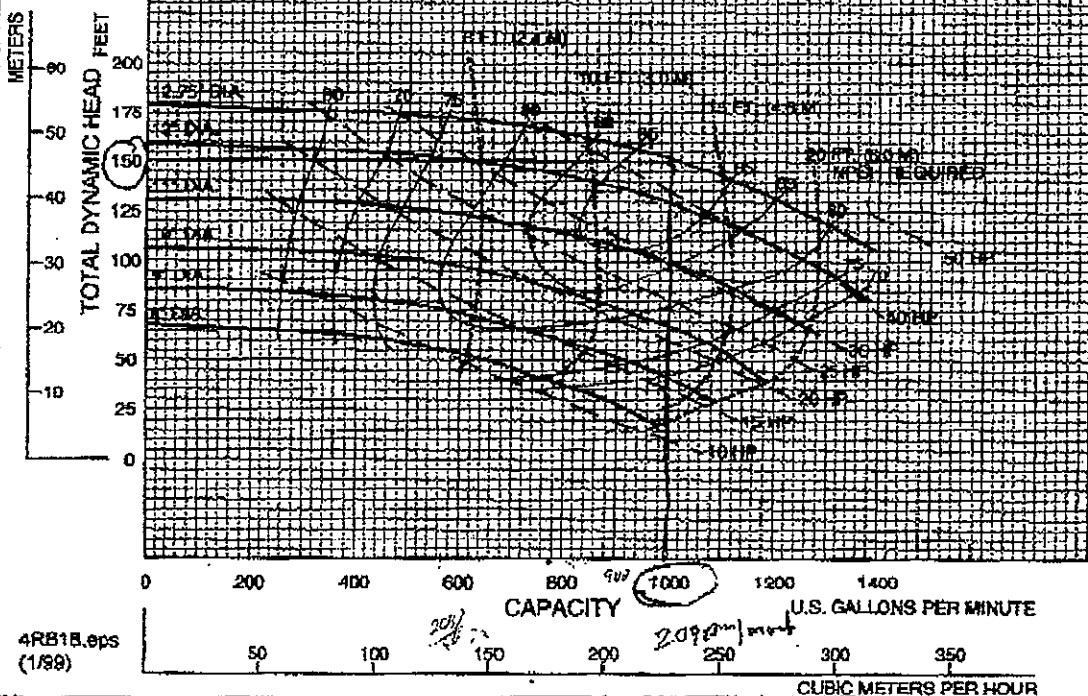
ft x .305 = Meters

inches x 25.4 = Millimeters

* x .227 = Cubic Meters/Hour

* x 3.785 = Liters/Minute

* x .746 = KW



Cornell Pump Company • Portland, Oregon

I-A-3-40

1000gpm @ 150' TDH 12.75" dia
KD Bar B. Pump #1
50HP

09/05/2007 15:18

208-466-0927

DAVID STUBBS

PAGE 06/06

Date/Time

JUN-02-2006(FRI) 14:50

5592665341

P. 002

06/02/2006 03:15

5592665341

FAIRBANKS MORSE

PAGE 02/02

BOOSTER #2

H2Optimize ver: 8.041
06/02/06

FAIRBANKS MORSE

mmiller

AGRI LINES IRRIGATION (DAVE STUBBS)

PUMP DATA SHEET
FAIRBANKS MORSE, 60 Hz

Selection file: (untitled)

Catalog: FMTURB60.MPC v.1

Design Point: Flow: 1280 US gpm
Head: 190 ftPump: VENT. TURBINE - 1800 Size: 12M (3 stages)
Speed: 1770 rpm Dia: 8.875 inLimits: Temperature: 150 °F Sphere size: 0.94 in
Pressure: 380 psi_g Power: 344 bhp

Specific Speed: Ns: — Nss: —

Vertical Turbine: Bowl Size: 12.28 in Max Lateral: 0.92 in
Thrust K Factor: 6.33Motor: 100 hp Speed: 1800 Frame: 405T
NEMA Standard TEFC Enclosure
sized for Max Power on Design Curve

Fluid: Water

Temperature: 60 °F

SG: 1

Viscosity: 1.122 cP

Vapor pressure: 0.2568 psi_aAtm pressure: 14.7 psi_a

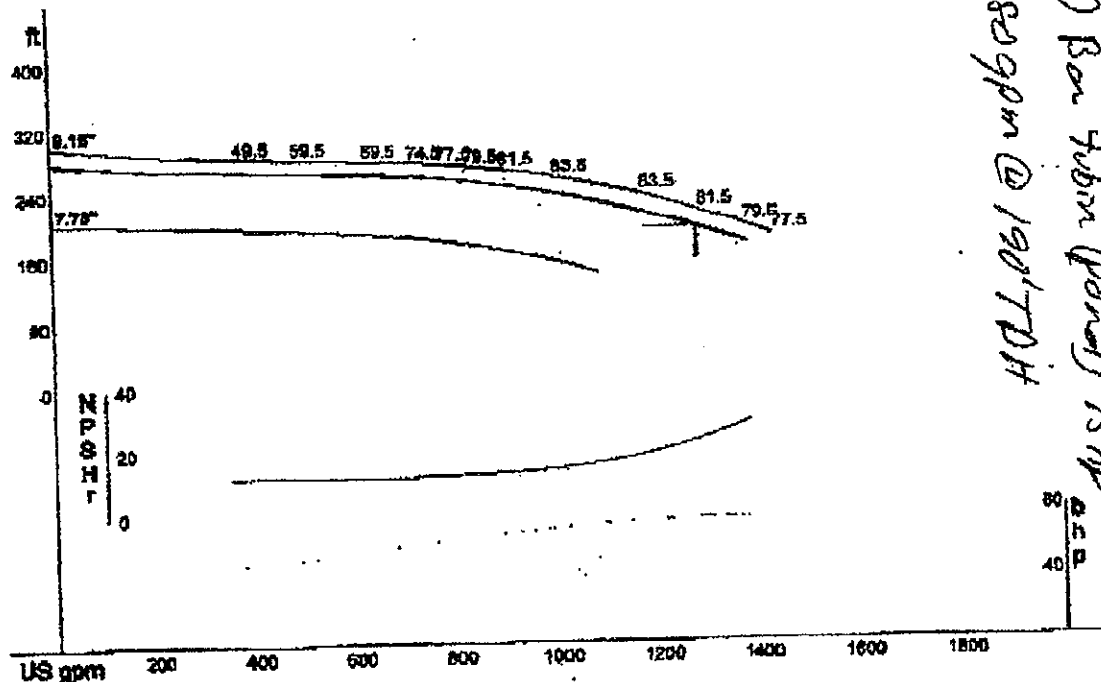
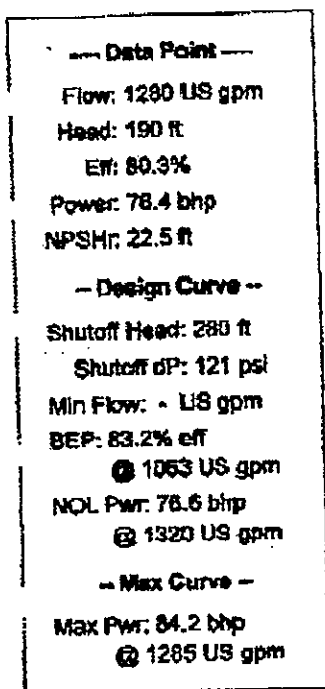
NPSHa: — ft

Piping: —

System: —

Suction: — in

Discharge: — in



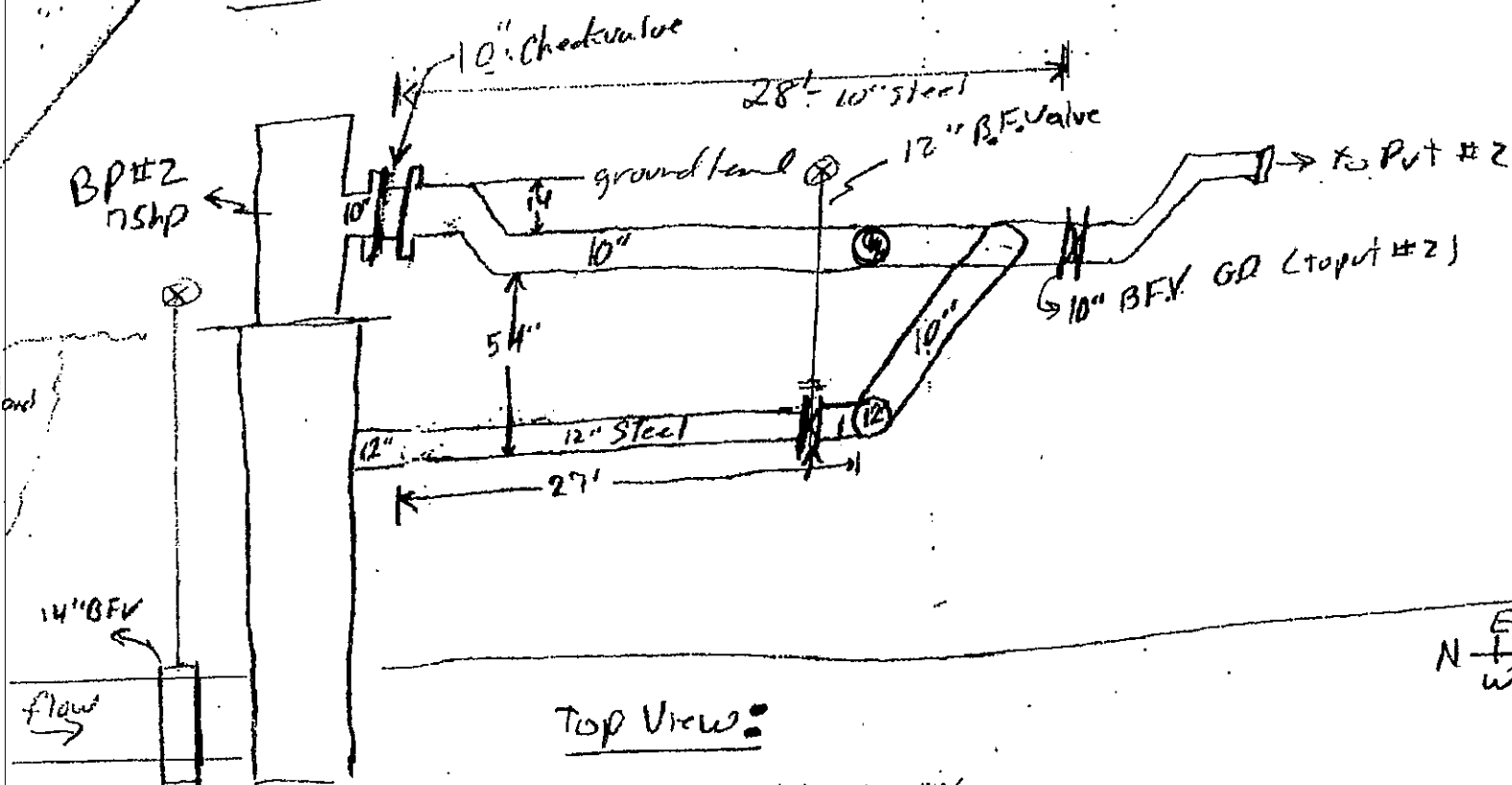
KD Bar Turbin (pound) 75hp
1280gpm @ 190' TDH

— PERFORMANCE EVALUATION —

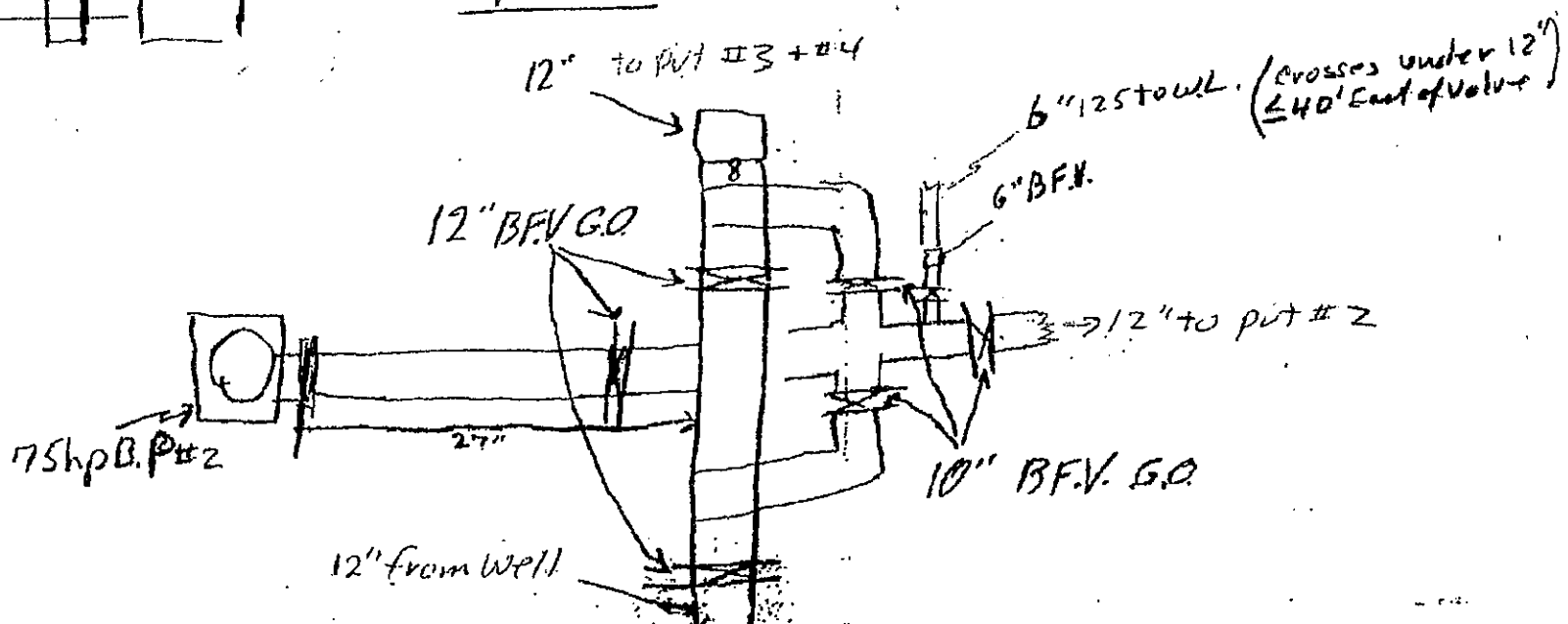
Flow US gpm	Speed rpm	Head ft	Pump %eff	Power bhp	NPSHr ft	Motor %eff	Motor kW	Hrs/yr	Cost /kWh
1636	Flow Rate is Out of Range for this Pump								
1280	1770	190	80.3	78.4	22.5				
1024	1770	232	82.7	72.3	14.6				
768	1770	255	77.4	63.8	12.2				
512	1770	263	82.4	54.2	12				

van Housen
As Build
Booster Pump #2
12-01

Side View:



Top View:



BOOSTER #2 DIAGRAM

BOOSTER #3**3RC - 1800 RPM**

SINGLE VOLUTE

Speed	Impeller Dia	Style	Solids Dia	N _s	Suction	Discharge	No. Vanes
1775	Various	Enclosed	0.50"	915	5.0	3.0	7

Max. Impeller Dia. Non-overloading		
HP	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
30	12.18"	12.75"
25	11.56"	12.06"
20	11.00"	11.31"
15	10.25"	10.56"
10	9.00"	9.44"

Performances shown are for cool water, close-coupled electric configuration with Cyclo Seal®. Other mounting styles or liquids may require horsepower and/or performance adjustments.

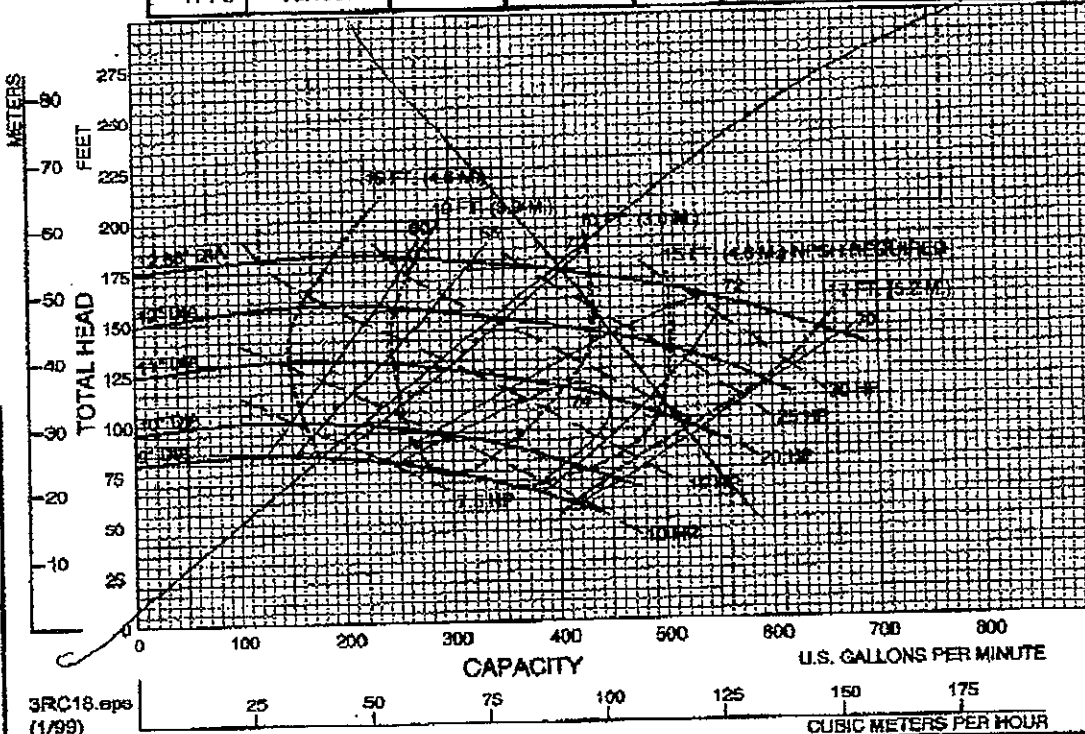
Feet x .305 = Meters

Inches x 25.4 = Millimeters

GPM x .227 = Cubic Meters/Hour

GPM x 3.785 = Liters/Minute

HP x .746 = KW

**4RB - 1800 RPM**

SINGLE VOLUTE

Speed	Impeller Dia	Style	Solids Dia	N _s	Suction	Discharge	No. Vanes
1775	Various	Enclosed	0.84"	1332	6.0	4.0	7

Max. Impeller Dia. Non-overloading		
HP	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
50	12.75"	12.62"
40	12.00"	12.62"
30	11.00"	11.50"
25	10.50"	10.75"
20	9.75"	10.25"
15	8.94"	9.38"
10	8.00"	8.38"

Performances shown are for cool water, horizontal frame configuration with packing. Other mounting styles or liquids may require horsepower and/or performance adjustments.

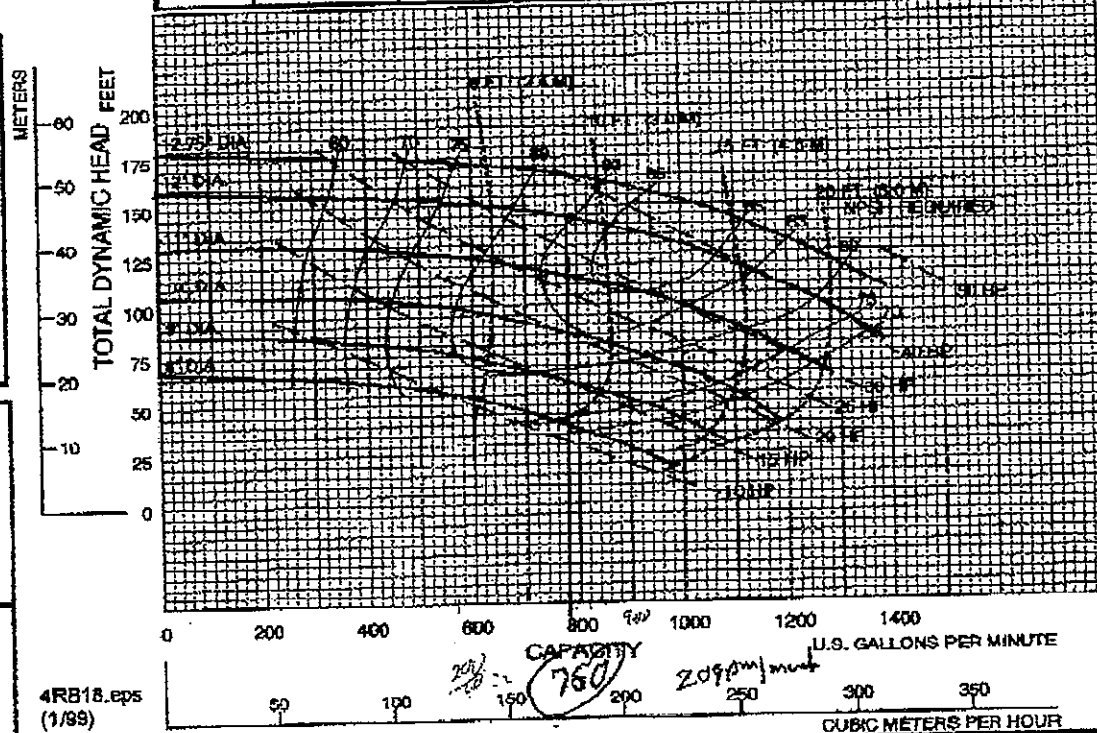
Feet x .305 = Meters

Inches x 25.4 = Millimeters

GPM x .227 = Cubic Meters/Hour

GPM x 3.785 = Liters/Minute

HP x .746 = KW

**Cornell Pump Company • Portland, Oregon****I-A-3-40**

Handwritten notes:
 KD Bar B Pump #3
 780 gpm @ 145' TDH 12" Dia
 50 per exam
 6/4/07

BOOSTER #4

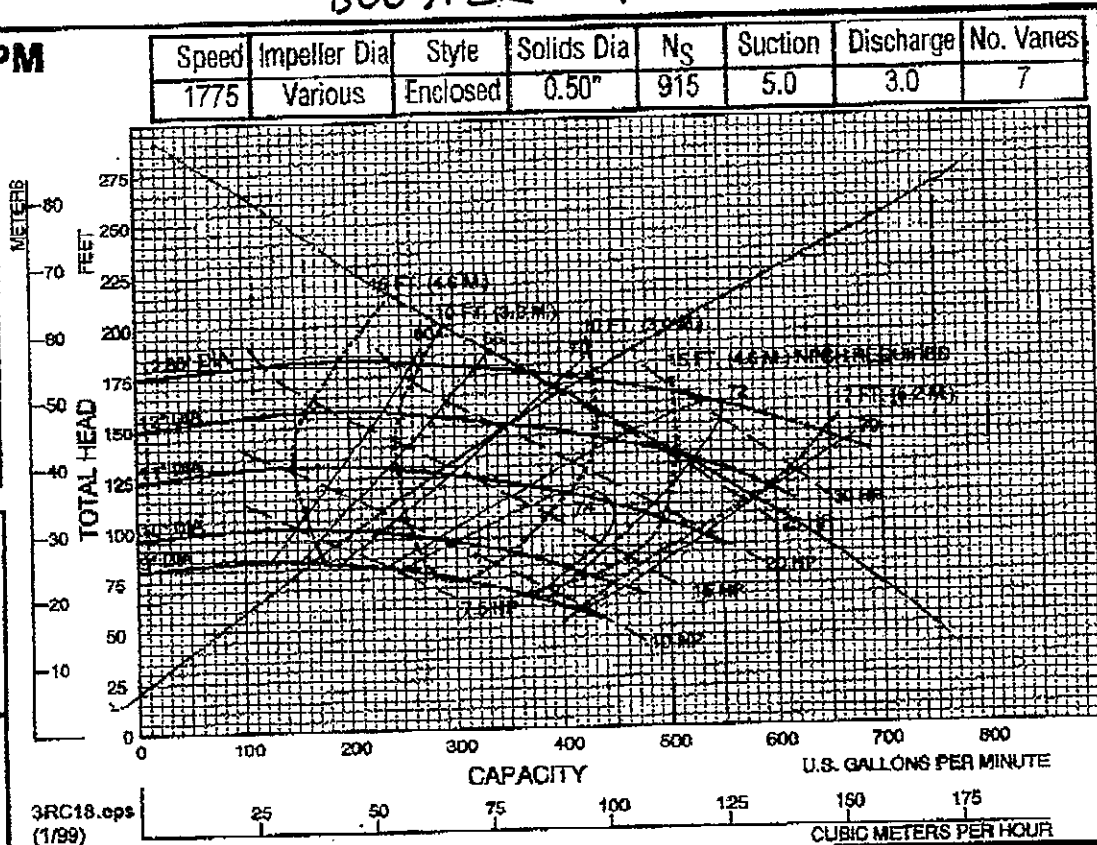
3RC - 1800 RPM

SINGLE VOLUTE

HP	Max. Impeller Dia. Non-overloading	
	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
30	12.19"	12.75"
25	11.56"	12.08"
20	11.00"	11.31"
15	10.25"	10.55"
10	9.00"	9.44"

Performances shown are for cool water, close-coupled electric configuration with Cyclo Seal®. Other mounting styles or liquids may require horsepower and/or performance adjustments.

Feet x .305 = Meters
Inches x 25.4 = Millimeters
GPM x .227 = Cubic Meters/Hour
GPM x 3.785 = Liters/Minute
HP x .746 = KW

3RC18.eps
(1/99)

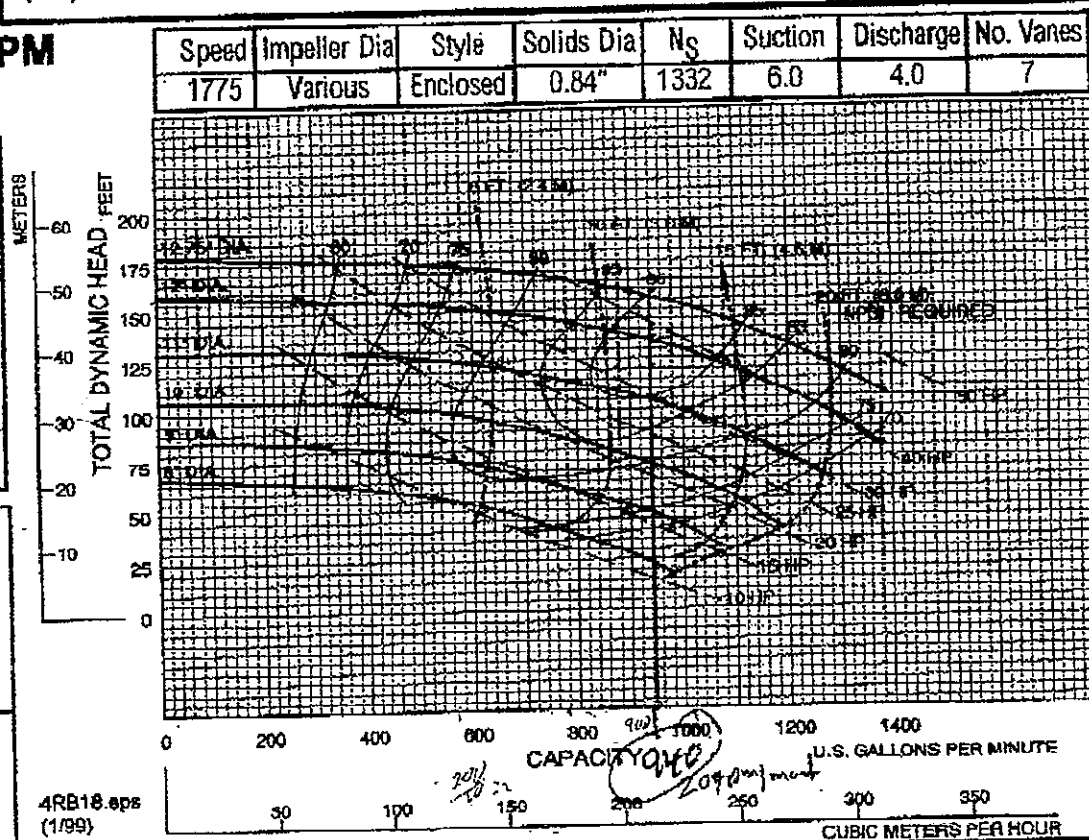
4RB - 1800 RPM

SINGLE VOLUTE

HP	Max. Impeller Dia. Non-overloading	
	Full Motor Load 1.0 S.F.	Full Motor Load 1.15 S.F.
50	12.75"	12.62"
40	12.00"	12.62"
30	11.00"	11.50"
25	10.50"	10.75"
20	9.75"	10.25"
15	8.94"	9.38"
10	8.00"	8.38"

Performances shown are for cool water, horizontal frame configuration with packing. Other mounting styles or liquids may require horsepower and/or performance adjustments.

Feet x .305 = Meters
Inches x 25.4 = Millimeters
GPM x .227 = Cubic Meters/Hour
GPM x 3.785 = Liters/Minute
HP x .746 = KW

4RB18.eps
(1/99)

CORNELL Pump Company • Portland, Oregon

I-A-3-40

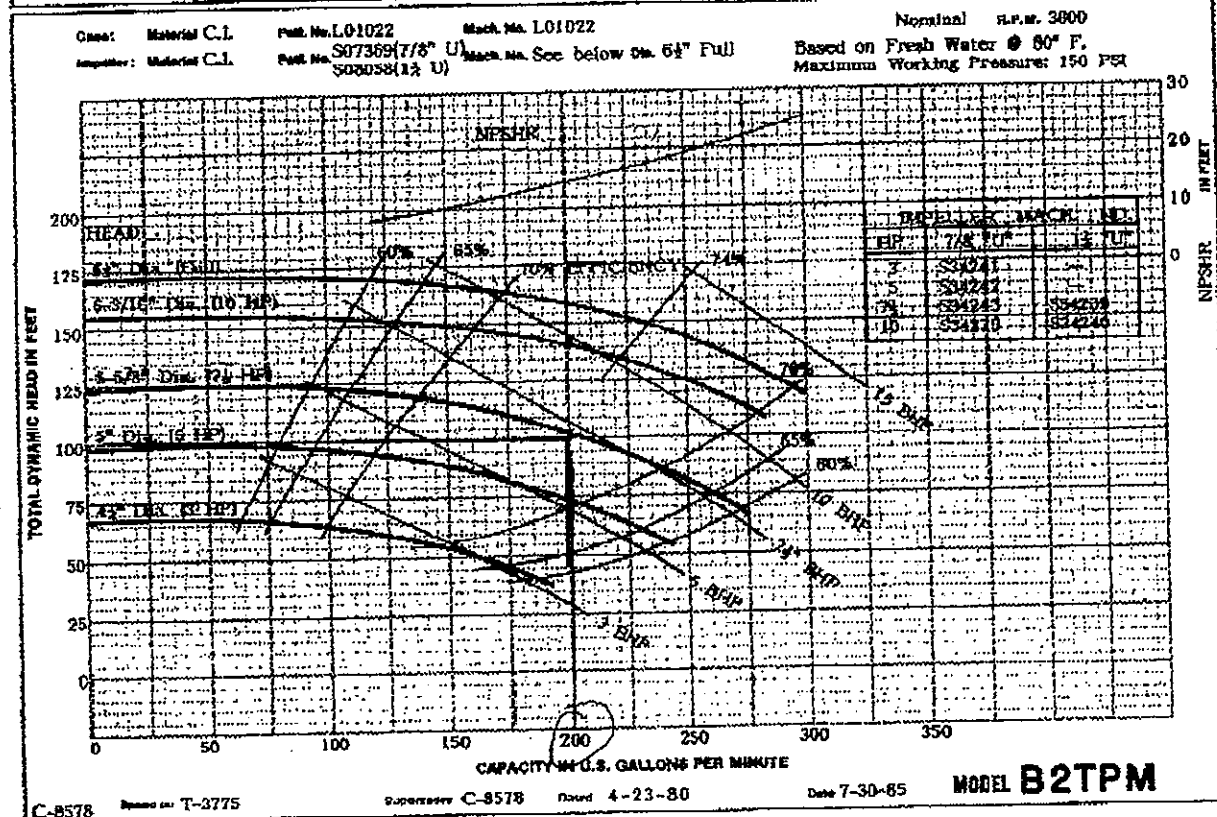
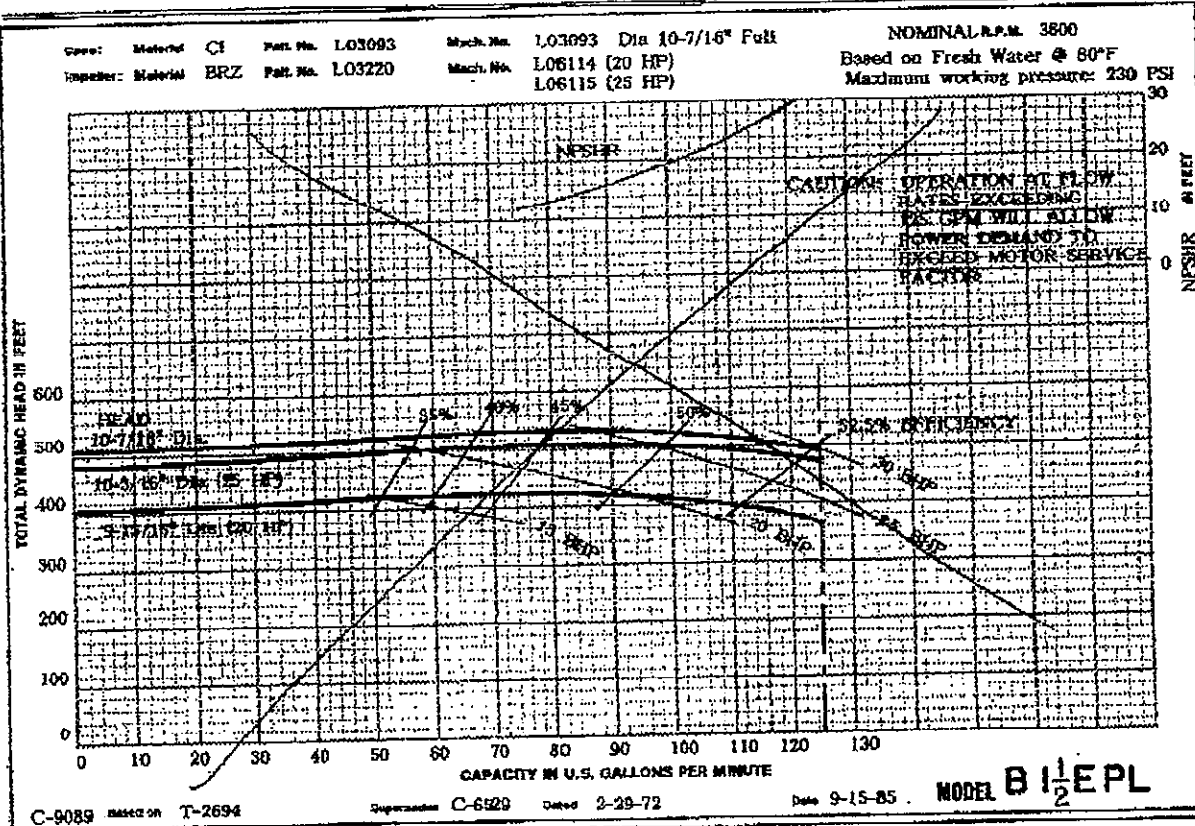
KUBAR R.R. #4 5440
940 gpm @ 155' TDH 12.75" Dia.

BOOSTER #5 **BERKELEY PUMPS** Pump Division—Transamerica Delaval Inc.



TYPE "B" RATING CURVES **MOTOR DRIVE**

CURVE	4075
DATE	1-2-86
PAGE	2.02
SUPERSEDES	
All previously issued	
4075 Curves	

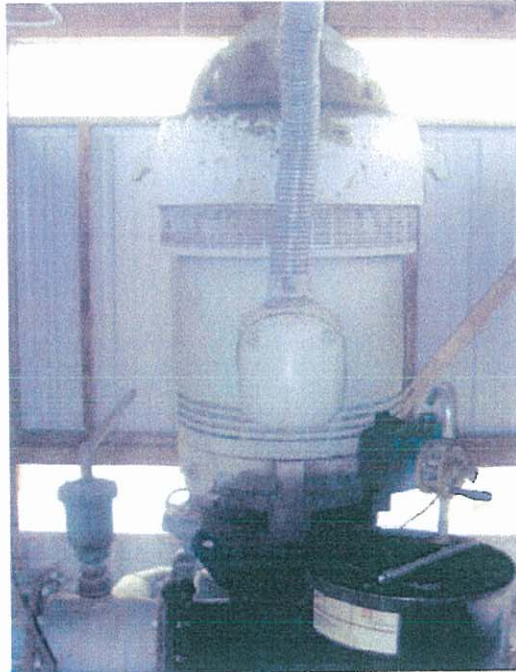


KID Bar
 Kibed/Big gun Booster Pump 17.5HP
 5 5/8" diam 200gpm @ 100' H_{td}. 576' H₀

AGRI-LINES SYSTEM DIAGRAM

FIELD EXAM PHOTOS

Permits 65-13933 & 63-31261
9/5/2007 Exam Photos



Well #1: 16-inch Casing , 300-hp Turbine Pump
NWNW, Section 18 (Gov Lt 1)



Booster #1: 50-hp
NWNW, Section 18 (Gov Lt 1)



Booster #2: 75-hp
SWSE, Section 7

Pump can be valved separate surface water system to divert Black Canyon Irrigation water from pond to the pivot in the NE Section 18 or, valved to separate ground water system to booster ground water to hand line sprinklers for irrigation of pivot corners in Section NE Section 18.



Well #2: 16-inch Casing, 200-hp Submersible Pump
NWSE, Section 7
(also contains 7.5-hp submersible pump for permit 63-12569)



Boosters #3 & #4: Each 50-hp
NESE, Section 7



Booster #5: 7.5-hp
NWNE, Section 7
Used for Kifco "Big Gun" Water Wheel Sprinkler



Indoor Arena Building
NWSE, Section 7



Inside Dust Control Area



Outside Dust Control Area
NWSE, Section 7