

Permit No: 63-11704

RECEIVED
NOV - 4 2004
DEPARTMENT OF
WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11704

Exam Date: 9/30/04

1. Current Owner: HAL HATCH
2055 N TEN MILE RD
MERIDIAN ID 83642
(208)888-2044

2. Accompanied by:

Phone No:

Address:

Relationship to Permit Holder:

3. **SOURCE**

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Nampa Meridian Irrigation District Water, 63-3217
2. Other water rights with the same point of diversion: No

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

SW1/4SW1/4

Sec. 5, Twp 03N, Rge 01W, B.M.

CANYON County

Method of Determination: Maps, Exam

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
03N	01W	5												19.3					19.3

Total Acres: 19.3

Method of Determination:

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

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
		10		Dempster	7.5 hp Submersible

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Theoretical						
Pump Curve	Dempster					

2. Measurements: Frank Skinner with SOS Well Drilling drilled the well and installed the pump. Frank stated that the pump has a 10 hp motor (dry end) and a 7.5 hp pump (wet end). The system is mismatched to allow optional sprinkler irrigation, which would require additional motor hp for head pressure. 7.5 hp is sufficient for open discharge irrigation. 7.5 hp was used in a theoretical calculation comparison because the 10 hp motor is limited to the wet end RPMs. Frank stated that the system is limited to ~520 gpm capacity which the theoretical and pump curve supports.

E. FLOW CALCULATIONS

Measured Method:

Y Additional Computation Sheets Attached
See attached pump curve: Pumping
capacity = 520 gpm or 1.16 cfs

Well Depth: 63'

Static: 5'

Pump Set @ 40' (per well log estimate and owner)

Pumping level = 30'

Include 10' for friction loss (open discharge)

Theoretical: $\frac{8.8 \times .7 \times 7.5}{40} = 1.16 \text{ cfs}$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 19.3 \times 4.5 = 87 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .39 \text{ cfs} \times 246 \times 1.9835 = 190.3 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 87 \text{ afa}$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

An 8 inch well equipped with a 7.5 hp submersible pump with a 10 hp motor provides ground water to 19.3 acres via open discharge, cement ditch and siphon tubes. Shares from Nampa Meridian Irrigation District are the primary source of water used for irrigation and enter the farm in the middle of the south end of the SWSW quarter. Please refer to the attached system diagram for further detail. 1994 and 2000 arc view photos were used to determine the acreage. A measuring device was not found.

Tenmile Drain flows through the center of the SWSW quarter. The acres listed on this permit are located south of the drain. Currently, license 63-3217 overlaps this permit. This right was licensed in 1963 for .70 cfs and 40 acres irrigation in the SWSW quarter from an artesian well located in the NESWSW (the well used for this permit is located in the SESWSW).

According to Mr. Hatch, production from the artesian well has significantly diminished over the years. Water from the artesian well is no longer delivered to the acres south of the drain. Whatever water is available from the artesian well is only used to supplement acres north of the drain. Rather than limit this permit to .10 cfs because of overlapping ground water right 63-3217, Mr. Hatch amended his SRBA claim 63-3217 10/13/2004 to list only 20 acres north of the drain so that the 19.3 acres south of the drain can be licensed at one inch per acre from the SESWSW well per this permit. Mr. Hatch stated that if he wishes to combine the two wells into a common system later, he would file a transfer at that time.

Have conditions of permit approval been met? ☐ Yes ☒ No (The license will need condition 01M. Currently measurement and reporting are not required by IDWR for basin 63 irrigation wells.)

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	3/15 to 11/15	0.39 CFS	87.0
	<u>Totals:</u>	0.39 CFS	87.0

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 Lon Granger Date 10/18/04

Reviewer _____ Date _____

%16

20:12 9661-90-20W



DRESSER INDUSTRIES INC.

3500 RPM
SINGLE STAGE PERFORMANCE

1 STAGES REQUIRED

Section 4

Page 4.1

Curve No. 880808

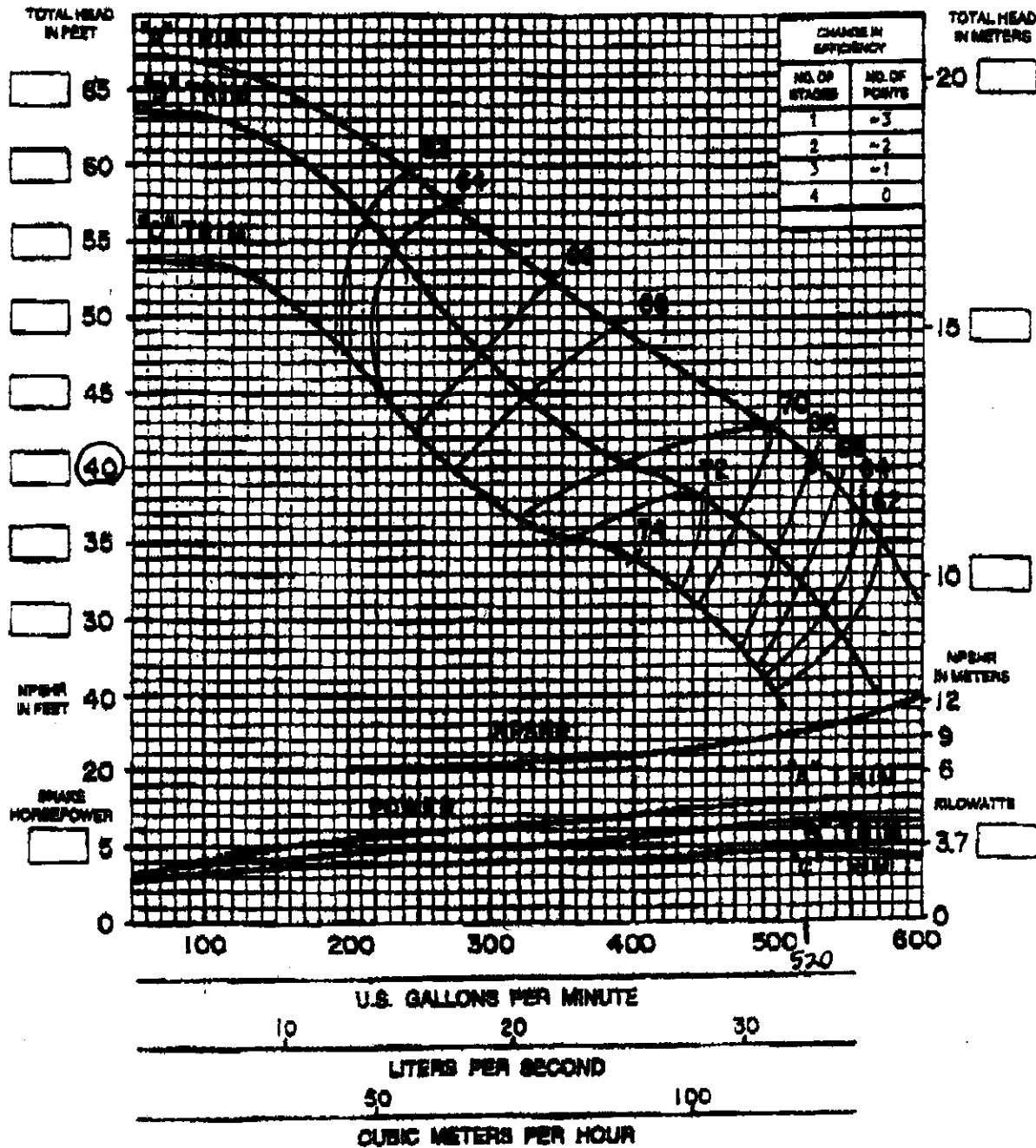
Effective May 1991

Supersedes Sept. 1984

MODEL 6CCH

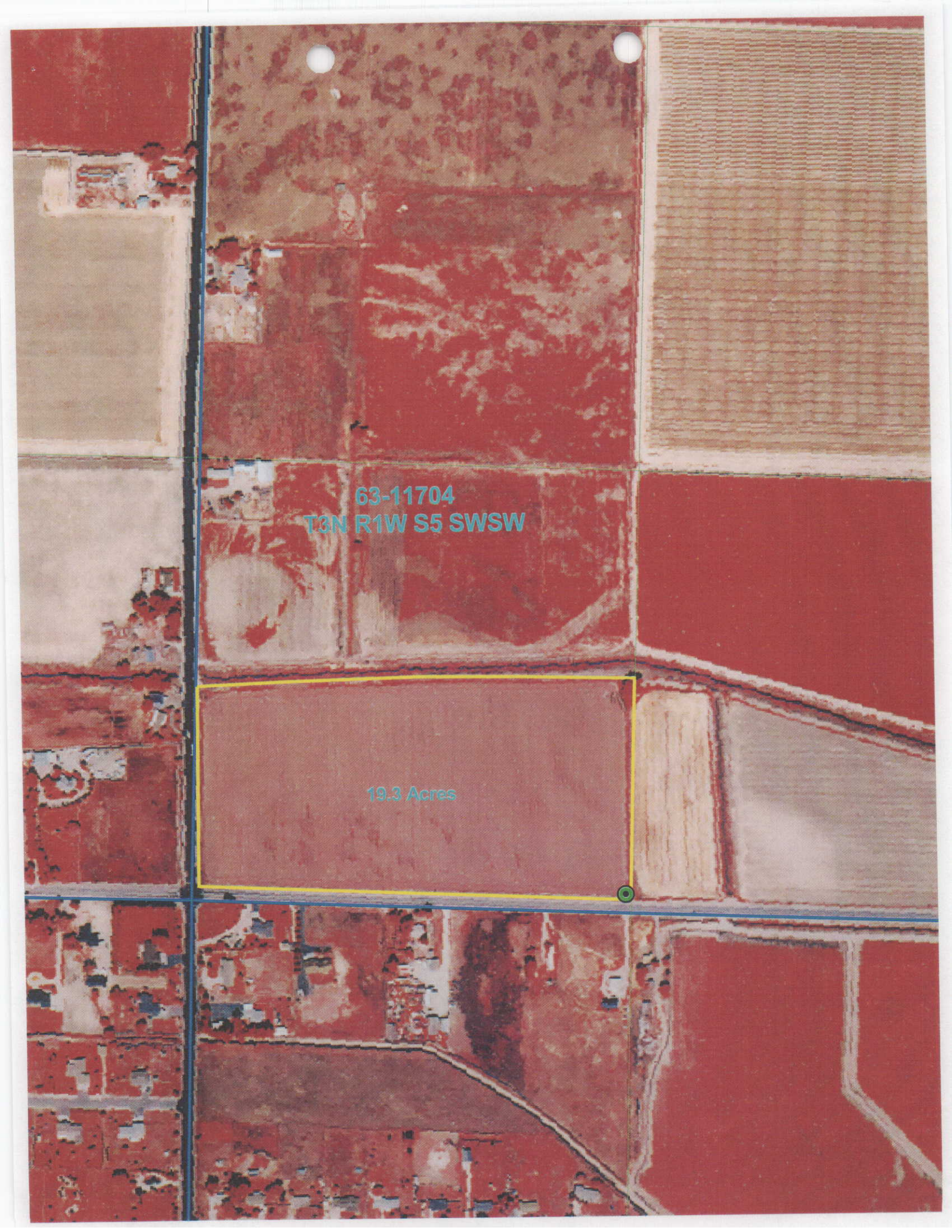
STANDARD CONSTRUCTION

See reverse side for detailed information.



Pump hydraulic performance is based on handling cold clear, fresh nonagitated water, free of foreign materials.

Customer: NORMAN SUPPLY
 Item No.: _____
 Capacity: 300 GPM TDH 40 FT. Head HP _____

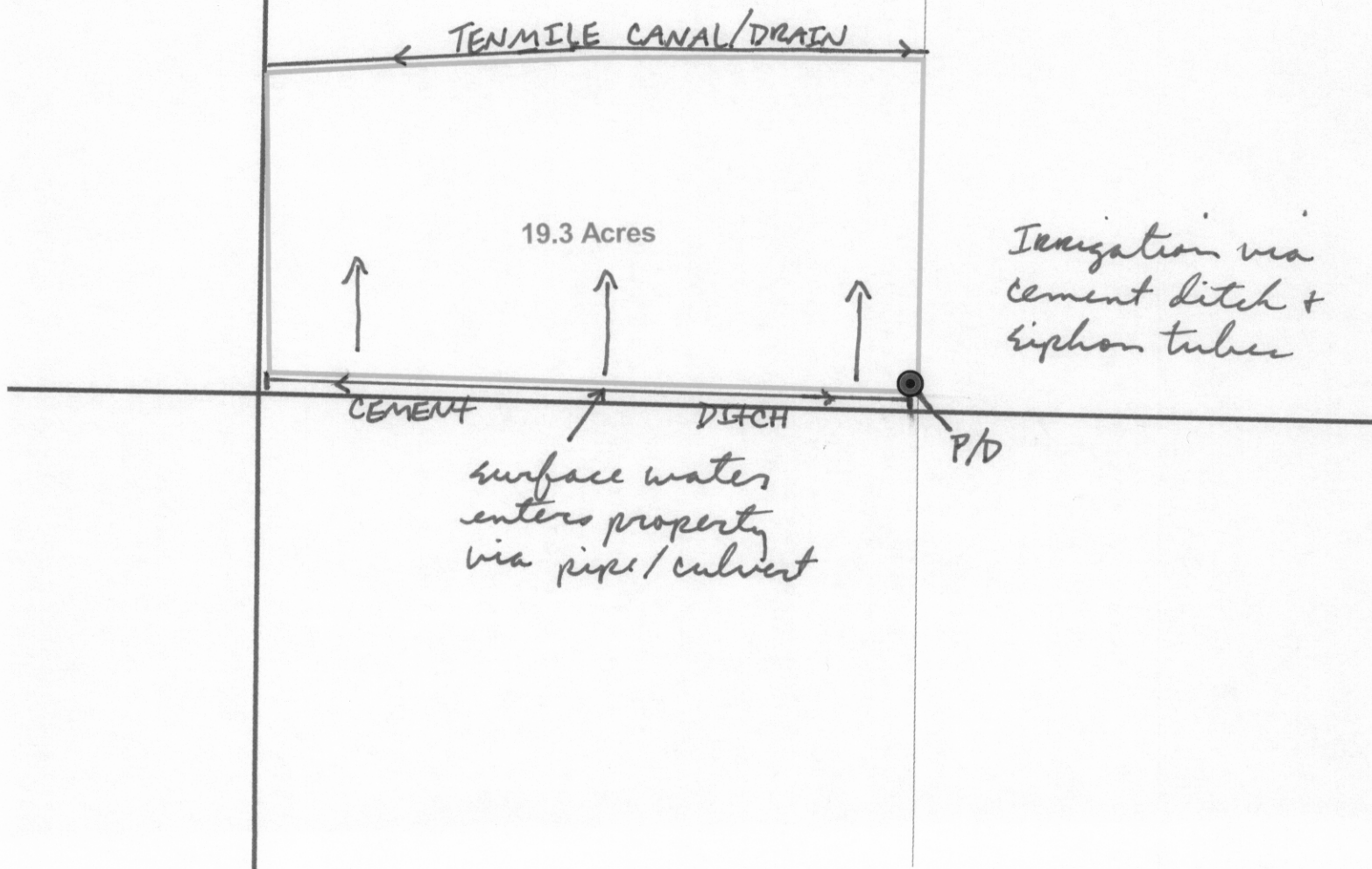
An aerial photograph of a rural landscape, likely in the Midwest, showing a grid of agricultural fields. A large, rectangular field in the center is outlined with a yellow border. The text "63-11704" and "T3N R1W S5 SWSW" is overlaid in blue on the field above the yellow boundary. The text "19.3 Acres" is overlaid in blue on the yellow-outlined field. A small green circle is located on the right side of the yellow boundary. The surrounding fields are in various shades of brown and tan, indicating different crops or soil types. Some fields show signs of irrigation or drainage patterns. The overall image has a slightly grainy, vintage quality.

63-11704
T3N R1W S5 SWSW

19.3 Acres

SYSTEM DIAGRAM

63-11704
T3N R1W S5 SWSW



TEN MILE CANAL/DRAIN

19.3 Acres

Irrigation via
cement ditch +
siphon tubes

CEMENT

DITCH

P/D

surface water
enters property
via pipe/culvert

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

1. DRILLING PERMIT NO: 63-95-W-0488 OTHER APPLICABLE NO: 63-11704
2. OWNER: Hal Hatch Phone: _____
Address: _____
3. WELL LOCATION: Twp 3N, Rge. 1W, Sec. 5, SW 1/4 SW 1/4
County Canyon (Provide sketch map and photo on reverse.)
4. DRILLER: SOS Lic. No. 212
When Drilled? drilled in 1992
Modified in 1995
5. WELL CONSTRUCTION:
Casing Diameter 8 inches Water tight cap? ☒ Yes ☐ No Access Port: ☒ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☒ Yes ☐ No - Describe _____
Depth of Casing 41 ft. Method Drilled air rotary
Condition of Well Casing: ☐ Good ☒ Fair ☐ Poor Describe _____
Control Valve? ☐ Yes ☒ No Pressure Gauge: ☐ Yes ☒ No
Condition of Piping and Valving OK
Auger to a depth of _____ ft. Evidence of Annular Seal ☐ Yes ☒ No
Are there obvious construction problems that may be a source for contamination or waste of water?
* ☒ Yes ☐ No (Describe in Remarks and Attach Photo - On Reverse)
6. HYDROLOGIC INFORMATION:
Depth to Static Water 5 ft. Water Temperature cold °F
Flowing Artesian ☐ Yes ☒ No Pressure: _____ (psi)
Water Sample Taken? ☐ Yes ☒ No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____
7. WELL USE:
☐ Domestic ☒ Irrigation ☐ Stock
☐ Test ☐ Municipal ☐ Industrial
☐ Abandoned ☐ Waste Disposal/Injection ☐ Not Used
☐ Other: _____

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☒ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

9. REMARKS:

access port pipe broken off, leaving
a small opening on side of casing.
Owner stated 10/8/04 that he was
going to weld/fix the problem

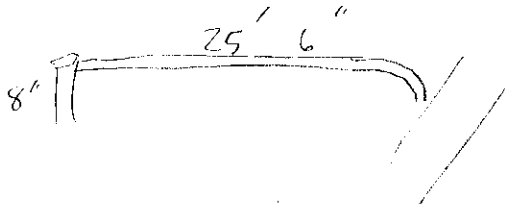
Loi Greener

Signature of Dept. Representative & Title

9/30/04

Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name HATCH, HAL
Address 2055 N. TEN MILE
MERIDIAN, ID 83642
Drilling Permit No. 62-92-0-040
Water Right Permit No. 103-11704

7. WATER LEVEL

Static water level 5 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality _____
Describe artesian or temperature zones below.

2. NATURE OF WORK

- ☒
- New well
- ☐
- Deepened
- ☐
- Replacement
-
- ☐
- Well diameter increase
- ☐
- Modification
-
- ☐
- Abandoned (describe abandonment or modification procedures
-
- such as liners, screen, materials, plug depths, etc. in lithologic
-
- log, section 9.)

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
500	10	4

3. PROPOSED USE

- ☐
- Domestic
- ☒
- Irrigation
- ☐
- Monitor
-
- ☐
- Industrial
- ☐
- Stock
- ☐
- Waste Disposal or Injection
-
- ☐
- Other _____ (specify type)

4. METHOD DRILLED

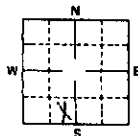
- ☒
- Rotary
- ☒
- Air
- ☐
- Auger
- ☐
- Reverse rotary
-
- ☐
- Cable
- ☐
- Mud
- ☐
- Other _____
-
- (backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____
Thickness Diameter From To
250 inches 10 inches + 1 feet 39 feet
250 inches 8 inches 2 feet 43 feet
_____ inches _____ inches _____ feet _____ feetWas casing drive shoe used? ☐ Yes ☒ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch ☐ Gun
Size of perforation? _____ inches by _____ inches
Number From To_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feet
_____ perforations _____ feet _____ feetWell screen installed? ☒ Yes ☐ No
Manufacturer HOUSTON STAINLESS PIPESIZE _____
Top Packer or Headpipe 40 FEET
Bottom of Tailpipe NONEDiameter 6 Slot size 30 Set from 43 feet to 63 feet
Diameter _____ Slot size _____ Set from _____ feet to _____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feetSurface seal depth 20 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Pudding clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☐ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded
☐ Solvent Weld ☐ Cemented between strataDescribe access port 2" PIPE W/PLUG

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name _____

Lot No. _____ Block No. _____

County CANYONAddress of Well Site CHERRY LN & STAR RD
(give at least name of road)T. 3 ☒ or S ☐
S.E. 1/4 SW 1/4 Sec. 5 R. 1 E ☐ or W ☒

10.

Work started 6/10/92 finished 6/12/92

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were
complied with at the time the rig was removed.Firm Name SOS Well Drilling Firm No. 212Address 4145 N. Black Oak Road
Meridian, Idaho 83642Signed by Drilling Supervisor _____
and _____(Operator) _____
(If different than the Drilling Supervisor)

63-11704

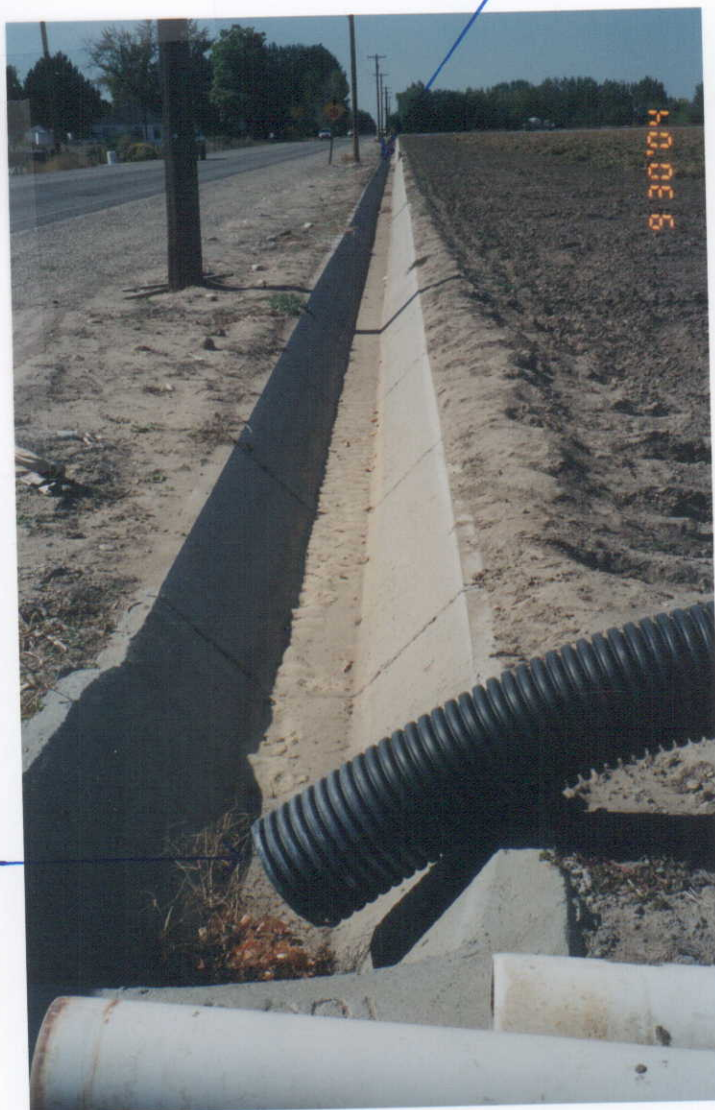
8" WELL

10HP MOTOR (DRY END) } SUBMERSIBLE
7.5HP PUMP (WET END)

T3N R1W S5 SESWSW



SURFACE WATER
ENTRANCE



GROUND WATER
ENTRANCE