

Permit No: 63-11794

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DEPARTMENT OF
WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11794

Exam Date: 9/10/2004

1. Current Owner: LEON H SWENSON
18822 DEAN LN
NAMPA ID 83687
(208)466-4088

2. Accompanied by: Lee Swenson

Phone No: (208) 465-0613

Address: 18822 Dean Lane

Relationship to Permit Holder: Son of permit holder and trustee in Swenson Family Trust

3. SOURCE

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

- Other water rights with the same place of use: NONE
- Other water rights with the same point of diversion: 63-26069 and Pioneer Irrigation District water rights.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER

SW1/4NE1/4

Sec. 36, Twp 04N, Rge 02W, B.M.

CANYON County

Method of Determination:

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
04N	02W	36	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	71.5
				33.2	38.3														

Total Acres: 71.5

Method of Determination:

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.

YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

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

YES Photo of Diversion and System Attached

4.
4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
WELL	DEUTZ DIESEL CORP	UNKNOWN	C106 SP5	40 Hp Randolph Gear Drive	HI 6DL 7100 DFI

*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>
N/A						

2. Measurements:

The pump wasn't operational at time of exam. The pump hadn't run in some time, so cleaning up the motor and getting it to a point where a measurement could be made would not be feasible.

E. FLOW CALCULATIONSYES Additional Computation Sheets Attached

Measured Method:

Theoretical Calculation → 1.89 cfs
 Permit allows → 1.46 cfs
 Acre limit 0.02 cfs/ac X 71.5 acres → 1.43 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 71.5 \times 4.5 = 321.8 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.43 \times 260 \times 1.9835 = 737.5 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 321.5 \text{ afa}$$

2. Volume Calculations for Other Uses:

Please note: This application should be limited to the inch per acre limitation of 1.43 cfs.

G. NARRATIVE/REMARKS/COMMENTS

The water for this permit is diverted from a well located in the SWNE of S36 T4N R2W by a gear drive pump system with a 40 Hp gear head. The horsepower of the diesel motor connected to the gear drive head is not known. The water is diverted into an approximately 30 ft long 8" mainline that travels in a southeasterly direction. In the middle of this mainline is a valve and down spout that open discharges into a ditch. The water in the ditch can be diverted due west to irrigate the field directly north of the canal lateral or it can be diverted due south to irrigate the middle field and the northern most field. All the fields are irrigated with gravity irrigation. The end of the mainline diverts directly into the canal company's lateral. There is a check dam in the lateral used to backup the lateral to divert into the ditch south of the lateral. This ditch irrigates the field south of the canal lateral.

There are two overlapping water rights for this property. The first right is the applicant's domestic right that isn't connected to the system. The other right is a group of rights belonging to Pioneer Irrigation District. This permit is supplemental water to the Pioneer water rights, so there should be no problem with overlapping water rights.

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

Please note: There is no measurement device on this system, but with the open discharge system, the time clock method can easily be incorporated to determine the volume used on the system if needed.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 11/15	1.430 CFS	321.80 AF
<u>Totals:</u>		1.430 CFS	321.80 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

DANIEL A. NELSON – SENIOR AGENT

Field Examiner's Name Daniel A. Nelson Date 9-15-04

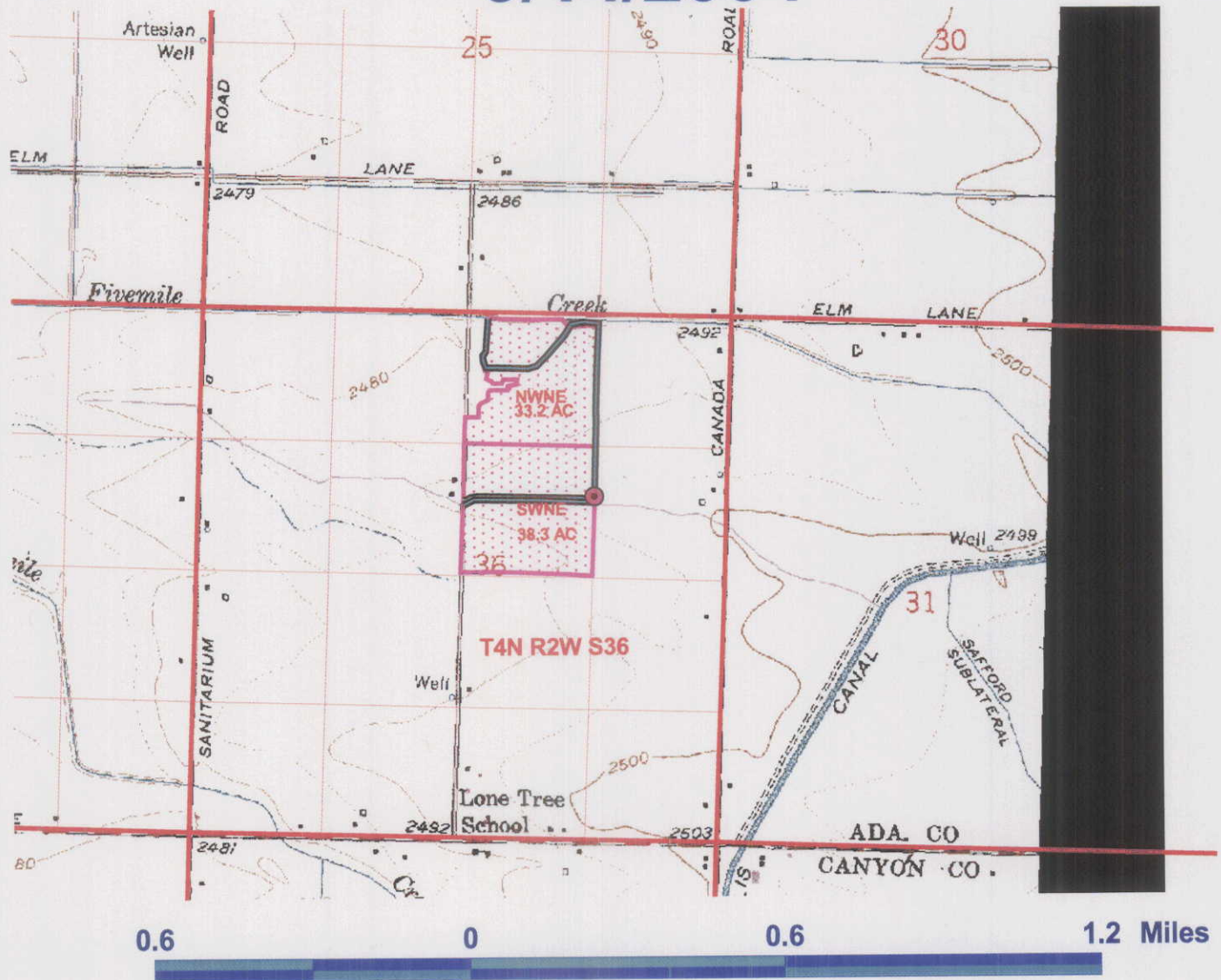
Reviewer _____ Date _____

SEAL

FIELD EXAM 63-11794

BY DAN NELSON

9/14/2004



- WELL
- ≡ DITCHES
- IRRIGATED LANDS
- SECTION LINES
- 1/4 1/4 LINES



FIELD EXAM 63-11794

BY DAN NELSON

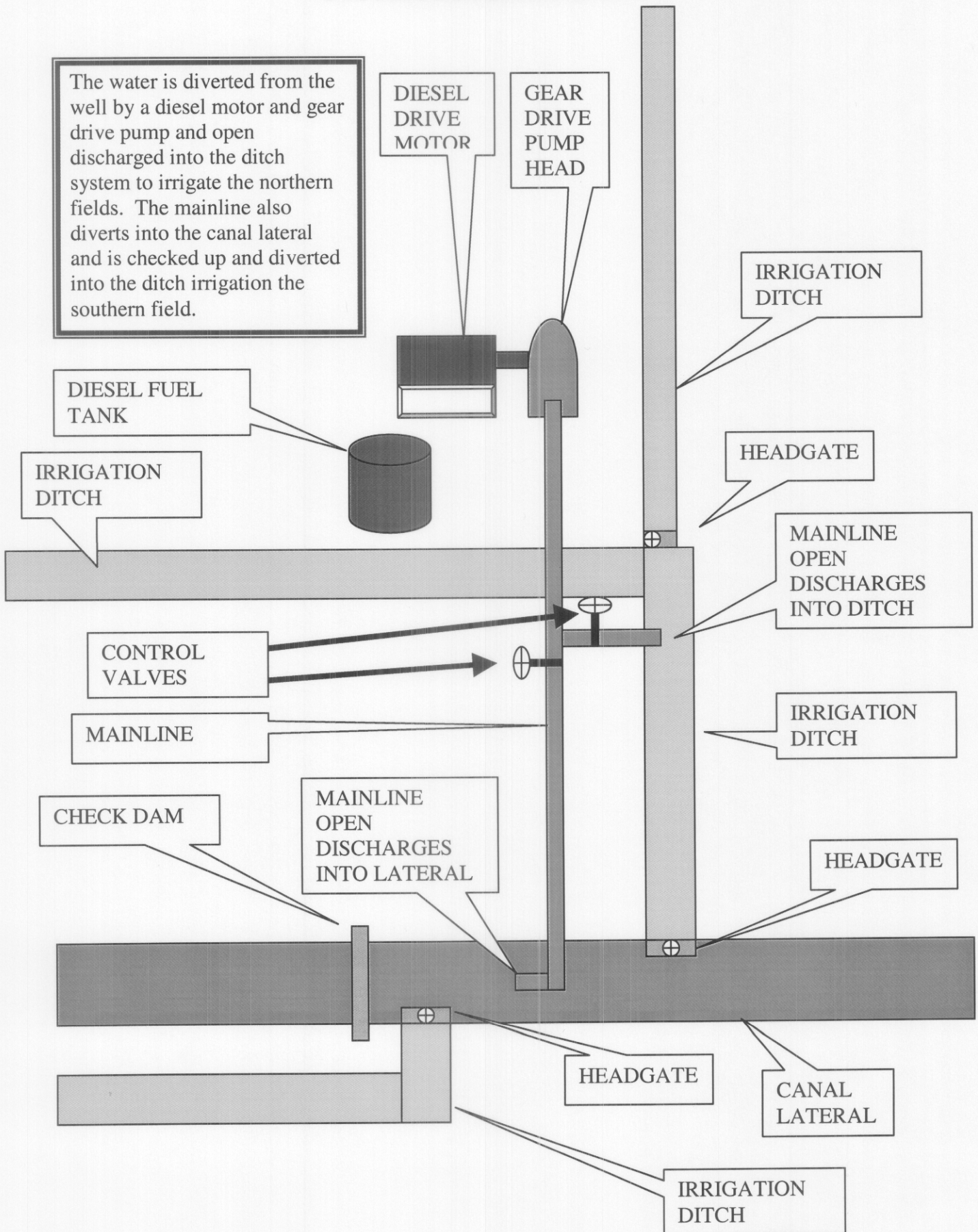
9/14/2004



-  WELL
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-  IRRIGATED LANDS
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SYSTEM DIAGRAM 63-11794



GROUNDWATER THEORETICAL ANNALYSIS

FILE: 63- 11794

DATE: 9-10-04

BY: DANIEL A. NELSON

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times (\text{HP}) \times (\text{EFF.}))}{\text{TDH}}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

Q = $\frac{(8.8 \times (40 \text{ Hp}) \times (0.70))}{246.4} = 1.89 \text{ cfs.}$

$[(107.5 \text{ FT}) + (10 \text{ psi} \times 2.31)] 130.6$

LIFT FROM:

Measurement ()

Owner ()

Area estimate (X)

Well Logs ()

PSI FROM:

Measurement ()

Owner ()

Estimate (X)

Owner Gage ()

Booster (Y) (N)

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: The psi was estimated at 10 psi for
the open discharge.
A pumping level was estimated by subtracting
the static water level of 2.5 ft from
the total well depth of 240 ft and
dividing by 2 (240-2.5)/2 = 107.5 pumping
water level

40 Hp was the rating listed on the gear drive.
There was no Hp rating on the motor.
Therefore, I used the maximum capacity.

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

1. DRILLING PERMIT NO: 63-92-C-161 OTHER APPLICABLE NO: 63-11794
2. OWNER: Svenson Family Trust Phone: 465-0613
Address: 18822 Dean Lane, Nampa ID 83687
3. WELL LOCATION: Twp 4N, Rge. 2W, Sec. 36, SW 1/4 NE 1/4
County Canyon (Provide sketch map and photo on reverse.)
4. DRILLER: Adanson Pump Lic. No. 457
When Drilled? 9-2-92 TO 9-8-92
5. WELL CONSTRUCTION: TURBINE
Casing Diameter 10 inches Water tight cap? ☐ Yes ☒ No Access Port: ☒ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☐ Yes ☒ No - Describe TURBINE ON CEMENT PAD
Depth of Casing UNKNOWN ft. Method Drilled AIR ROTARY (well log)
Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____
Control Valve? ☒ Yes ☐ No Pressure Gauge: ☐ Yes ☒ No
Condition of Piping and Valving GOOD
Auger to a depth of 0 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 UNKNOWN ft. Water Temperature UNKNOWN °F
Flowing Artesian ☐ Yes ☒ No Pressure: UNKNOWN (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: THIS well LOOKS TO be in Reasonably
GOOD condition

David A. Nelson Senior Agent
Signature of Dept. Representative & Title

9-10-04
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:

see Field Exam

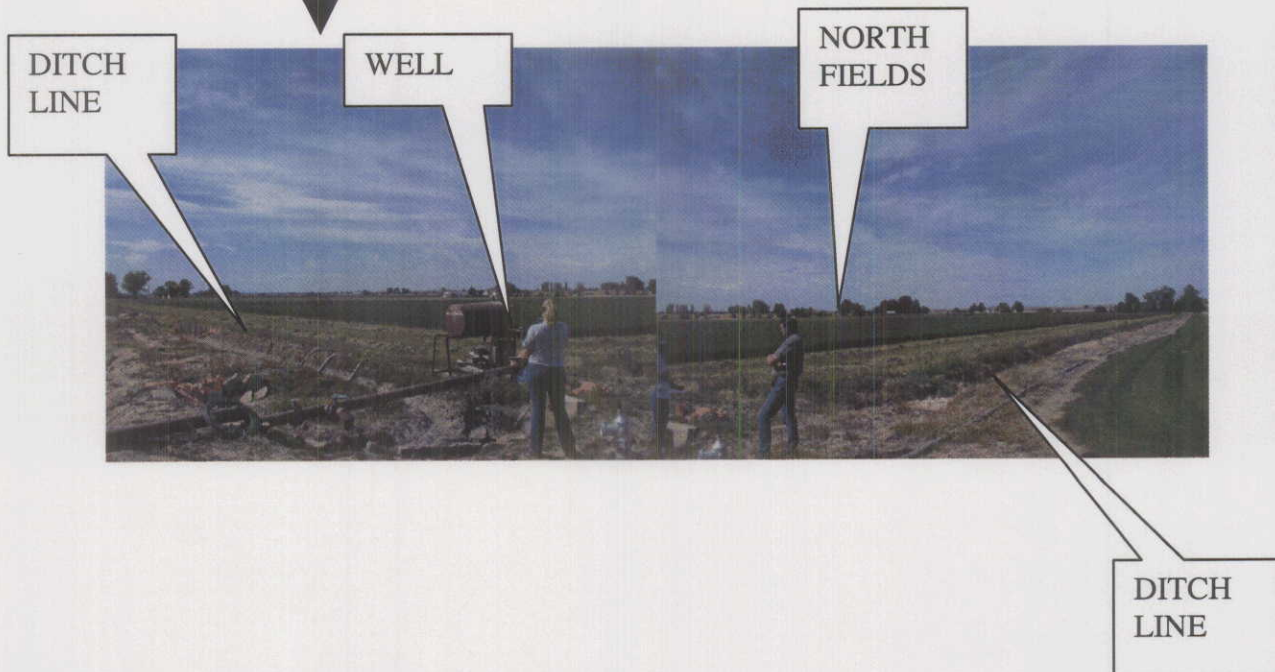
PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 9/14/2004

FILE NUMBER 63-11794



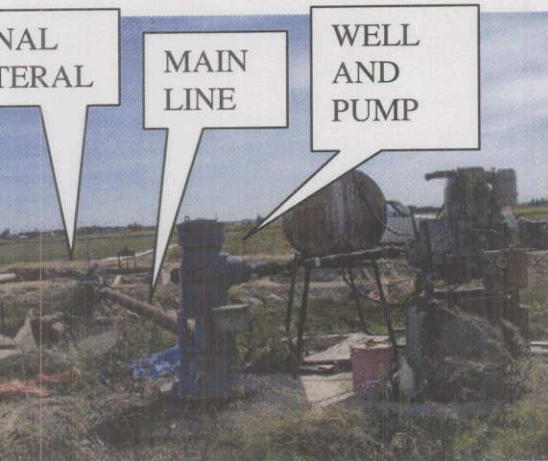
The picture above is of the southern field.

The picture below is of the northern fields.



PHOTOGRAPHER AND DATE OF PHOTOS DANIEL A NELSON 9/14/2004

E NUMBER 63-11794



← This is a photo of the well.

These are photos of the well and the mainline. The mainline can divert into a ditch the feeds the north side of lateral or it can divert directly through the lateral and immediately through a headgate to the ditch on the south side of the lateral to irrigate the southern field.

