

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 29-13467

Exam Date: 1/7/2007

1. Current Owner: BIG SKY WATER USERS ASSN C/O JIM FITZGERALD
1880 TRUCKERVILLE RD
POCATELLO ID 83204
(208)233-3444
2. Accompanied by: Jim Fitzgerald
Phone No: 208-233-3444
Address: 1880 TRUCKERVILLE RD
POCATELLO ID 83204
Relationship to Permit Holder: President of Association

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 29-7723
2. Other water rights with the same point of diversion: 29-7723

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

GROUND WATER	SW1/4NW1/4SE1/4	Sec. 6,	Twp 06S,	Rge 33E, B.M.
POWER County				
GROUND WATER	SE1/4NE1/4SE1/4	Sec. 6,	Twp 06S,	Rge 33E, B.M.
POWER County				

Method of Determination: GPS

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
06S	33E	6													X	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.

<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>
Well 1 AO018296		15			0.34cfs
Well 2 AO07671		7.5			0.16cfs

*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					15Hp	
Theoretical					7.5Hp	

2. Measurements:

See additional computation sheets for theoretical pump flow calculations.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses:

$$0.6\text{afa} \times 24\text{homes} = 14.4\text{afa}$$

G. NARRATIVE/REMARKS/COMMENTS

Jim Fitzgerald President of Big Sky Water Users Assn. accompanied Skip and I on 1-25-07.
This system is composed of 2 wells for the subdivision Well #1 and Well #2

Well #1

GPS Tag A0018296
15 HP 183 ft deep
16 ft static water
12 inch casing
pressure guage showed 65 PSI
GPS Reading taken 10 ft north of well. Northing 2610749 Easting 1303684
PumpCo. in American Falls has pump specs #226-5242 ask for Matt

Well #2

GPS Tag A007671
Reading taken 22 ft north of well. Northing 2611334 Easting 1303637
7 and a half HP
Pressure guage read 67 PSI
about 190 ft deep
12 inch casing
May need to contact pumpco in American falls to verify specs given for this well.

Each well pumps to 2 pressure tanks and then to 122 lots that are stubed in.

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>
DOMESTIC	01/01 to 12/31	0.220 CFS	14.40 AF
<u>Totals:</u>		0.220 CFS	14.40 AF

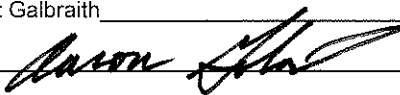
2. Recommended Amendments

☐ 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 Trent Galbraith Date 1-25-2007

Reviewer Aaron Golart  Date 3-1-2007

E. NARRATIVE/REMARKS/COMMENTS

well #2 { GPS tag A007671 7 1/2 Hp 190 Feet deep
 Picture Facing South 67 psi Backup well well #2
 well casing 12 inches
 2 wells + pumps to 122 lots 4 pressure tanks

well #2 { GPS Reading taken ~~22~~ feet north of well
 2611334 waypoint
 1303637 291346

Well #1

GPS Tag A0018296
 Photo taken South Facing
 15 Hp ~~190 feet deep~~ 183 Feet Deep
 65 psi
 GPS Reading taken $\approx$ 10 feet North of well
 2610749 ~~2610749~~
 1303684 waypoint 2913413

16" static water level
 12" casing
 Pump co in American Falls for pump specs. 226-S242
 Have conditions of permit approval been met? ☐ yes ☐ no ask for Matt

Called pump co 1-29-07 talked to Matt
 well #1 10 Hp 33 static 160 ft pumping level
 well #2 5 Hp 33 static 63 ft pumping level

Comment Report

29-13467

1. tgalbraith 1/26/2007 Field Report Narrative

Comment: Jim Fitzgerald President of Big Sky Water Users Assn. accompanied Skip and I on 1-25-07.

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16 ft static water

12 inch casing

pressure guage showed 65 PSI

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Well #2

GPS Tag A007671

Reading taken 22 ft north of well. Northing 2611334 Easting 1303637

7 and a half HP

Pressure guage read 67 PSI

about 190 ft deep

12 inch casing

May need to contact pumpco in American falls to verify specs given for this well.

Each well pumps to 2 pressure tanks and then to 122 lots that are stubed in.

2. agolart 2/21/2007 POD

Comment: Updated shape

3. agolart 2/21/2007 POD

Comment: Updated PLS

4. agolart 2/21/2007 POD

Comment: Updated shape

5. agolart 2/21/2007 POD

Comment: Updated PLS

6. agolart 2/21/2007 POU

Comment: Updated Shape

7. agolart 2/21/2007 POU

7. agolart 2/21/2007 POU

Comment: Updated PLS

8. agolart 2/26/2007 Overlaps

Comment: POU and PODs overlap with WR 29-7723 for domestic and stock. In regards to PODs the POD that is recorded in the NWSE has a different points in spatial data in ArcView. I spoke with Jim Fitzgerald about this and he said they only have two PODs for Domestic water and Trent documented them using GPS for 29-13467 field exam. It seems the spatial data for 29-7723 in ArcView is incorrect. 29-7722 is for stockwater and irrigation and has its own POD.

9. agolart 2/26/2007 POD

Comment: Correlated PODID 586733 from SpatialDataID 384047 to SpatialDataID 351447

10. dgibson 3/4/2003 Permit Review

Comment: This permit is being issued for 24 lots for in-house domestic use only. Two rights in the same place of use are: licensed water right no. 29-7723 is for 96 lots in the same place of use, and water right permit no. 29-7722 is for stockwater and irrigation.

Type	WR #	Owner	Source	TRS	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total
Right	27 2035	US DEPT OF INTE	BLACKFC	06S33E6																	0
Right	29 7075	LYNN THOMPSON	GROUND	06S33E6	38		35	40	38												151
Right	29 7932	DONALD V MILLS,	GROUND	06S33E6																	3
Right	29 12160	JAMES CATES,	GROUND	06S33E6														X			0
Right	29 10272	LYNN THOMPSON	GROUND	06S33E6																	0
Right	29 10272	LYNN THOMPSON	GROUND	06S33E6	X																0
Right	29 12251	KENNETH K FORI	GROUND	06S33E6	X													X			0
Right	29 7569	KENT A CARTER,	GROUND	06S33E6																	0
Right	29 7532	GARY A GUNDER,	GROUND	06S33E6																2.1	2.1
Right	29 7075A	BETTY L THOMPS	GROUND	06S33E6																	3
Right	29 7723	BIG SKY WATER I	GROUND	06S33E6			4.5		1.9												6.4
Permit	29 13467	BIG SKY WATER I	GROUND	06S33E6													X	X	X	X	0
Right	29 13729	BIG SKY WATER I	GROUND	06S33E6													X	X	X	X	0
Right	29 13729	BIG SKY WATER I	GROUND	06S33E6													X	X	X	X	0
Right	29 13730	STEPHEN TOMLIN	GROUND	06S33E6													26	27	34	28.5	115.5
Right	29 13467	BIG SKY WATER I	GROUND	06S33E6																0.5	0.5
Right	29 13467	BIG SKY WATER I	GROUND	06S33E6													X	X	X	X	0

Well #1

THEORETICAL PUMP FLOW CALCULATIONS

Formula:

$$Q_{cfs} = [(Hp)(8.814)(Eff)] \div [Lift + (psi \times 2.308)]$$

$$Hp = \text{Horsepower} = \underline{10}$$

$$Eff = \text{Efficiency} = \underline{.7} \quad (\text{Usually } 70\%)$$

$$\text{Lift: (Static Level + Assumed Draw down)}$$

$$\text{Static Water Level} = \underline{33} \text{ ft.}$$

$$\text{Assumed Draw down} = + \underline{\quad} \text{ ft.}$$

$$\text{Lift} = \underline{33}$$

OR

$$\text{Measured Dynamic Water Level} = \underline{\quad} \text{ ft.}$$

$$psi = \text{Operating Pressure} = \underline{67} \text{ psi}$$

$$Q_{cfs} = \left[\frac{10}{Hp} \times 8.814 \times \frac{.7}{Eff} \right] \div \left[\frac{33}{Lift} + \left(\frac{65}{psi} \times 2.308 \right) \right]$$

$$Q_{cfs} = \left[\underline{61.70} \right] \div \left[\underline{183.02} \right]$$

$$Q_{cfs} = \underline{.34} \text{ cfs}$$

PERMIT NO. 29-13467
Well #1

THEORETICAL PUMP FLOW CALCULATIONS

Formula:

$$Q_{cfs} = [(Hp)(8.814)(Eff)] \div [Lift + (psi \times 2.308)]$$

$$Hp = \text{Horsepower} = \underline{5}$$

$$Eff = \text{Efficiency} = \underline{.7} \quad (\text{Usually } 70\%)$$

$$\text{Lift: (Static Level + Assumed Draw down)}$$

$$\text{Static Water Level} = \underline{33} \text{ ft.}$$

$$\text{Assumed Draw down} = + \underline{\quad} \text{ ft.}$$

$$\text{Lift} = \underline{33}$$

OR

$$\text{Measured Dynamic Water Level} = \underline{\quad} \text{ ft.}$$

$$psi = \text{Operating Pressure} = \underline{67} \text{ psi}$$

$$Q_{cfs} = \left[\frac{5}{Hp} \times 8.814 \times \frac{.7}{Eff} \right] \div \left[\frac{33}{Lift} + \left(\frac{67}{psi} \times 2.308 \right) \right]$$

$$Q_{cfs} = \left[\underline{30.85} \right] \div \left[\underline{187.64} \right]$$

$$Q_{cfs} = \underline{.16} \text{ cfs}$$

PERMIT NO.

29-13467
well #2

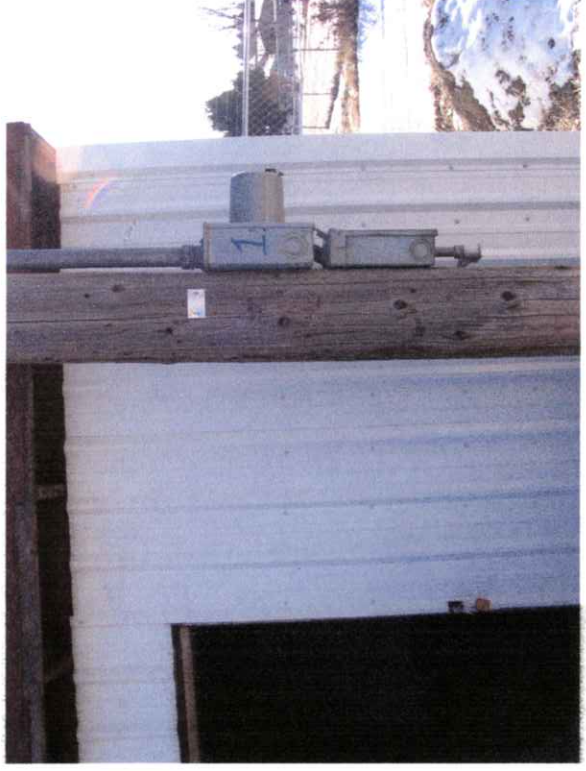
29-13467



well #1



well #2

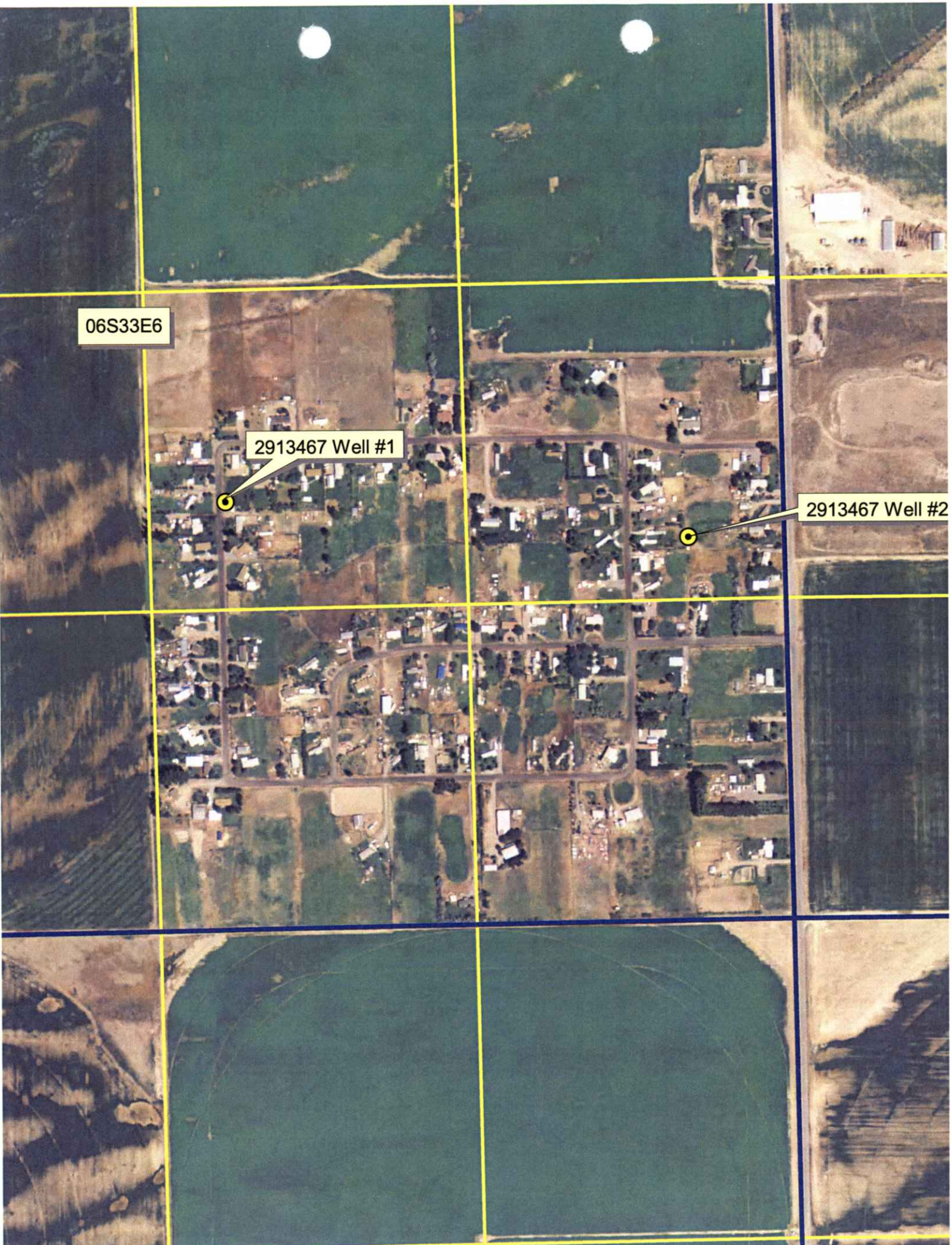


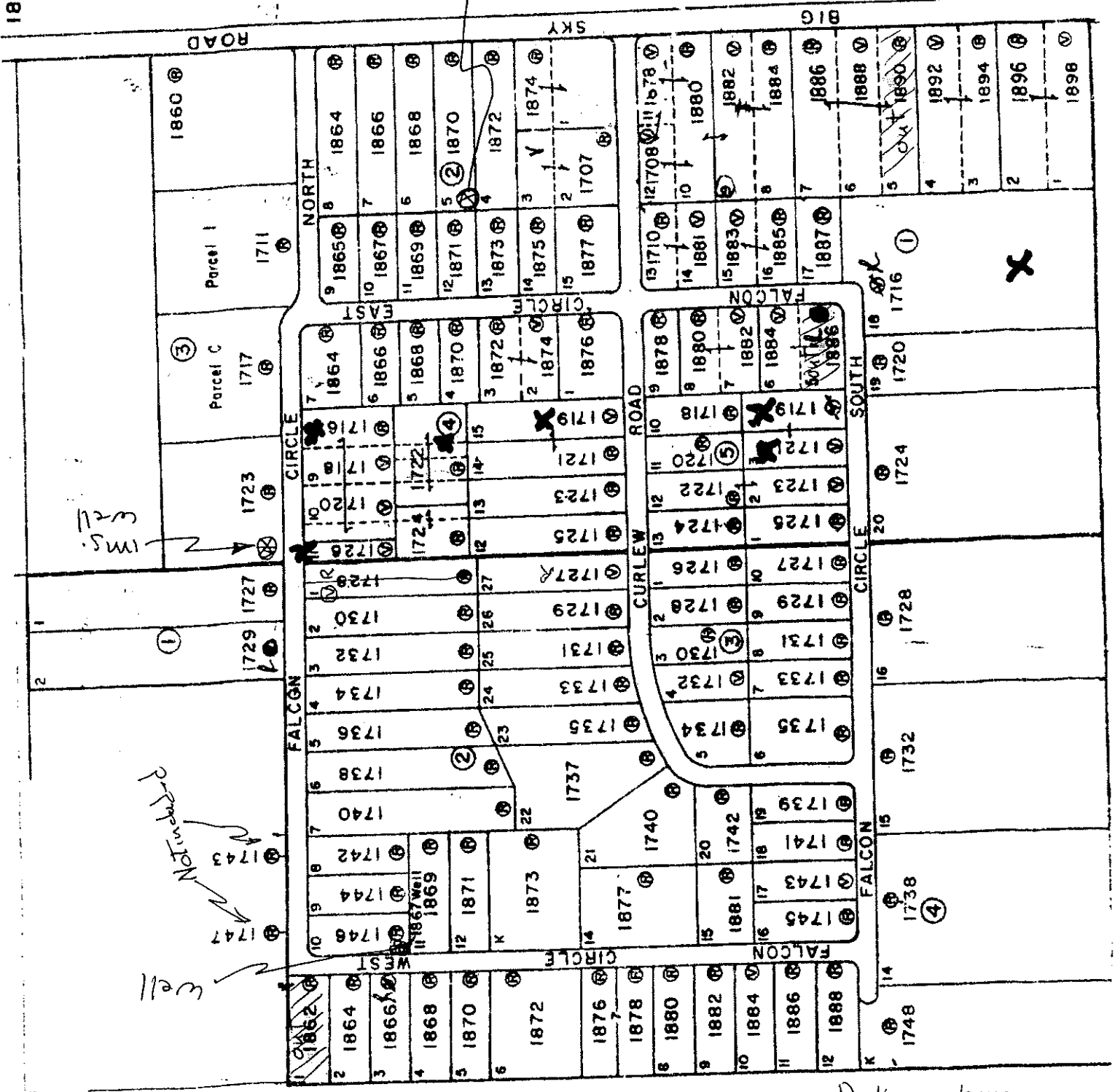
well #1

06S33E6

2913467 Well #1

2913467 Well #2





Need license for 103
 Capability for 120

V = Vacant
 Lots
 to be added
 in

(Light yellow)
 new lots
 others not
 identified
 for total
 24

- Dark yellow = own wells
- 129 lots total (3 on private wells)
- No additional wells.
- Red are additional lots
- V vacant lot