

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

AUG 13 2015

DEPARTMENT OF
WATER RESOURCES

A Beneficial Use Field Report is prepared by a water right examiner as the result of an examination to clearly confirm and establish the extent of the beneficial use of water established in connection with a permit during the development period authorized by the permit and any extensions of time previously approved.

A. GENERAL INFORMATIONPermit No. 34-137631. Owner 6X Ranch, LLCPhone No. 562-463-4001Current address c/o Blake Quinn, PO Box 226789, Los Angeles, CA 900222. Examiner's name Peter Cooper, P.E. (Examiner 15-155)EXAM DATE 7/3/20153. Accompanied by Mike Seal/Mason McAfeeEmail seal6x@gmail.comAddress 4905 Highway 93, Mackay, ID 83251Relationship to permit holder Ranch Manager/Ranch HandPhone No. 208-940-2020/541-40504. Source Ground Water

tributary to _____

B. OVERLAP REVIEW1. Other water rights with the same place of use 34-483B (mitigation)2. Other water rights with the same source and point of diversion None**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
Well			NW	SW	25	8N	22E	Custer	Exam, GIS Aerial photo (2013)

2. Place(s) of Use:

Method of determination Exam, GIS Aerial photo (2013)

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
8N	22E	25							37			38							75

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ 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
D0058535	U.S. Motors	30	1030443	unknown	6-inch

*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
Portable Flowmeter	Ultrasonic	GE	PT878	7140	various	March 30, 2015
Permanent Flowmeter	Mag	Seametric	AG2000	unknown	6-inch	unknown

2. **Measurements:** _____

Examiner measured 1.87 cfs from the NWSW well @ 24 psi with the Portable Flowmeter

The permanent flow meter read 1.88 cfs

E. NARRATIVE/REMARKS/COMMENTS

The examiner found the NWSW well equipped with a 30 hp vertical turbine constant speed pump with a measured system capacity of 1.87 cfs and theoretical system capacity of 1.83 cfs. Ground water from the NWSW well supplies water to a 6-inch above ground steel pipeline equipped with a 6-inch Seametrics AG-2000 flow meter. The pipeline transitions to buried 10-inch PVC downstream of the well and runs east to supply water to 75 acres through a pressurized irrigation system. Approximately 200 feet east of the well, the mainline branches into two 8-inch pvc lines to serve the two pivots. Also at this location, a riser provides water to a 4-inch above ground aluminum mainline that can be moved around the property to provide handline irrigation to areas not covered by the pivots. During the exam, the system was operating at 24 psi which was sufficient to operate both pivots and end guns. Pivot corners are not currently being irrigated, but have been irrigated during the February 2010 to December 2014 development period as evidenced by the September 2010 aerial photography map included in Appendix D.

Based on the exam findings, permit 34-13763 is recommended to be licensed for one well at 1.50 cfs and 75 acres.

Attachment A: permit and proof of beneficial use

Attachment B: well driller's report

Attachment C: measured and theoretical system capacity flow calculation

Attachment D: topographical map, 2013 aerial photo, and 2010 Google Earth photo

Attachment E: photos of place of use and well

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

6-inch Seametrics flow meter is installed on well discharge.

Mitigation requirements as outlined in the permit conditions have been achieved and can be regulated by the watermaster for Water District No. 34.

F. FLOW CALCULATIONS☒ Additional computation sheets attached

Measured Method:

1.83 cfs theoretical system capacity at 24 psi (See Attachment C)

1.87 cfs measured capacity at 24 psi

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I,R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 75 \times 3.5 = 262.5 \text{ afa}$$

$$V_{D,R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.50 \times 168 \times 1.9835 = 499.8 \text{ afa}$$

$$V = \text{Smaller of } V_{I,R} \text{ and } V_{D,R} = 262.5 \text{ afa}$$

2. Volume Calculations for Other Uses:

H. RECOMMENDATIONS

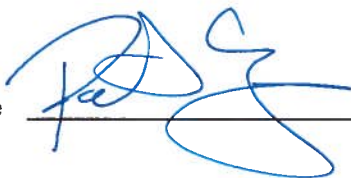
1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	5/1	10/15	1.50 cfs	262.5 afa
Totals:			1.50 cfs	262.5 afa

2. Recommended Amendments

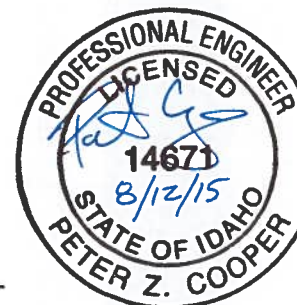
☐ Change P.D. as reflected on page 1☐ Add P.D. as reflected on page 1☒ None☐ Change P.U. as reflected on page 1☐ Add P.U. as reflected on page 1☐ Other**I. AUTHENTICATION**

Field Examiner's Signature



Date

8/12/15



SEAL

Reviewer

Date

ATTACHMENT A

PERMIT RECORD AND PROOF OF BENEFICIAL USE

Permit to Appropriate Water

NO. 34-13763

Priority: July 29, 2002

Maximum Diversion Rate: 1.50 CFS

**This is to certify, that 6 X RANCH LLC
C/O BLAKE QUINN
PO BOX 226789
LOS ANGELES CA 90022**

has applied for a permit to appropriate water from:

Source: GROUND WATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
IRRIGATION	05/01 to 10/15	1.50 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER NW1/4SW1/4 Sec. 25, Twp 08N, Rge 22E, B.M. CUSTER County

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>Totals</u>
08N	22E	25								36.0				39.0					75.0

Total Acres: 75

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before January 01, 2015.
2. Subject to all prior water rights.
3. Prior to diversion of water under this right, the right holder shall install and maintain a measuring device and lockable controlling works of a type acceptable to the Department as part of the diverting works.
4. 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 the permit holder had no control.
5. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.

State of Idaho
Department of Water Resources

Permit to Appropriate Water

NO. 34-13763

6. To mitigate for the depletion of water resulting from the use of water under this right and to prevent injury to senior water right holders, the right holder shall cease diverting and using water as authorized by the following water right for the purposes and amounts specified below. Moreover, the official record for the following water right will be changed to show that diversion and use of water is not authorized because the right, or portion thereof, is being dedicated to mitigation purposes.

Right Nos.	Use Changed to Mitigation	Mitigation Rate	Mitigation Volume	Mitigation Acres
34-483B	Irrigation	1.50 cfs	262.5 ac-ft	75

The land that will no longer be irrigated under this right is located within the SWNW, Section 25, Township 08N, Range 22E, B.M. and NWSW, Section 25, Township 08N, Range 22E, B.M.

Diversion under this right is authorized only during those times when the full rate of mitigation water (1.50 CFS) is available for delivery from Warm Springs Creek. If the specified mitigation right, or portion thereof, is sold, transferred, leased, used on any place of use, or is not deliverable due to a shortage of water or a priority call, then the diversion of ground water under this right shall cease in its entirety.

In addition, the place of use on the official record for associated water rights 34-123B and 34-124B will be reduced to exclude the 75 acres authorized for irrigation under this right.

The official record for associated water right 34-125B will be changed by reducing the place of use by the 75 acres authorized for irrigation under this right. In order to prevent injury to other users on Neilsen Ditch, the diversion rate for 34-125B will not be reduced.

Existing combined use limitations will be revised as well. Rights 34-123B, 34-124B, 34-125B, 34-483B, and 34-2320 when combined shall not exceed a total diversion rate of 4.96 cfs, a total annual maximum diversion volume of 785.8 af at the field headgate, and the irrigation of 219.5 acres.

7. Use of water under this right will be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. At the time of this approval, this water right is within State Water District No. 34.
8. This right when combined with all other rights shall provide no more than 0.02 cfs per acre nor more than 3.5 afa per acre at the field headgate for irrigation of the lands above.
9. This right does not authorize the irrigation of land not previously irrigated.
10. Any license issued by IDWR pursuant to the right or portion thereof for the use of trust water is subject to a term review of 20 years after the date of this approval to determine availability of water for the use and to re-evaluate the public interest at the end of the term.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 16th day of February, 2010.

Shelley W. Keen
for GARY SPACKMAN, Interim Director

DEC 31 2014

DEPARTMENT OF

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE

FOR OFFICE USE ONLY	
Amt. of Fee \$	125.00
Receipt No.	6029779
Receipt By:	DP
Date Received:	12/29/14

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been completed and that water has been applied to beneficial use to the extent described below. This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner. Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an Assignment of Permit form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

- Permit No.: 34-13763 Telephone No.: (562) 463-4024
- Name of Permit Holder(s): 6X Ranch, LLC
- Mailing Address: P.O. Box 226789 City: Los Angeles
State: CA Zip: 90601 Email: bquinn6X@gmail.com
- Source of Water: Groundwater If **GROUND WATER** (well), Date Drilled: mo. 08 / yr. 2010
Well Driller: Independent Drilling Drilling Permit Number: D0058535
- Extent of use(s) completed (as authorized by the water right permit):
Domestic (No. of households): _____ Stockwater (No. and type of stock): _____
Irrigation (No. of acres): 75 Other: _____
- Total rate of diversion or storage volume for which proof is submitted: 1.50 cfs OR _____ acre-feet.
- Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.
Measuring Device: Is a measuring device required? Yes ☒ No ☐
If yes, has the measuring device been installed? Yes ☒ No ☐
Lockable Controlling Device: Is a lockable device required to control the diversion? Yes ☒ No ☐
If yes, has the lockable device been installed? Yes ☒ No ☐
Other Conditions of Permit: Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information.

Completed? Yes ☐ No ☒
- Fee Enclosed: \$ 125.00 See fee schedule on back of the instructions for filing proof of beneficial use. Proofs filed without an appropriate fee, will be considered incomplete.
- Person to contact to accompany the Department representative during field examination of the water system.
Name: Mike Seal Telephone Number: (208) 940-2020
Mailing Address: 4905 Highway 93 City: Mackay
State: ID Zip: 83251 Email: seal6X@gmail.com

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder: [Signature] Jonathan Monroe Date: 12/29/2014
(Include your title, if on behalf of company or organization)

Mackay - Financial Planning
Mail to: Idaho Department of Water Resources, PO Box 83720, Boise, ID 83720-0098

ATTACHMENT B
WELL DRILLER'S REPORT

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Use Typewriter or Ballpoint pen

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

34

1 WELL TAG NO.

DRILLING PERMIT NC

Other IDWR NO. D0058535

2 OWNER:

Name: 6X Ranch LLC (Blake Quinn)

Address: PO Box 226789

City: Los Angeles State: CA Zip 90022

3 LOCATION OF WELL by legal description.

N
Twp 8 ☒ North ☐ South
Rge 22 ☒ East ☐ West
Sec 25
1/4 NW 1/4 SW 1/4
10 Acres 40 Acres 160 Acres
Gov't Lot _____ County Custer
Lat: 43:59.678 Long: 113:46.237

Address of Well Site: Vic Johnson Loop Rd

City: Mackey

(Give at least name of Road + Distance to Road or Landmark)

Lot No. _____ Blk No. _____ Subd. Name: _____

4 USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other

5 TYPE OF WORK:

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6 DRILL METHOD:

☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other

7 SEALING PROCEDURES:

SEAL/FILTER PACK		AMOUNT		Method
From	To			
Bentonite	0	-38'	27 Bags/1350 Lbs	Annular

Was drive shoe used? ☒ Yes ☐ No Shoe Depth(s) -123'

Was drive shoe seal tested? ☐ Yes ☒ No How? _____

8 CASING/LINER:

Dia.	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12"	+1'	-123'	0.25	Steel	☒	☐	☒	☐
					☐	☐	☐	☐

Length of headpipe: _____ Length of Tailpipe: _____

9 PERFORATIONS/SCREENS:

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
-50'	-115'	1/2	230	12	Steel	☒	☐
Mills Knife						☐	☐

STATIC WATER LEVEL OR ARTESIAN PRESSURE:

10 ft below ground Artesian Pressure: _____ lb

Describe access port or control devices: Welded plate & 1 1/4 Access Pipe

11 WELL TESTS:

☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Flowing Artesian

Yield	Drawdown	Pumping Level	Time
		Needs Test Pumped	

Water Temp _____ Cold _____ Bottom hole temp _____

Water Quality test or comments: _____

12 LITHOLOGIC LOG:

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
16	0	1	Topsoil		X
16	1	40	Cobble & Gravel	X	
12	40	55	Cobble & Gravel	X	
12	55	56	Sand	X	
12	56	62	Cobble & Gravel	X	
12	62	64	Sand & Gravel	X	
12	64	85	Cobble & Gravel	X	
12	85	87	Small Gravel		
12	87	101	Cobble & Gravel	X	
12	101	103	Sand	X	
12	103	117	Gravel	X	
12	117	121	Sand	X	
12	121	123	Sand & Gravel	X	
			5' Plug @ Bottom		

Completed Depth: 118 ft

Date Started: 07/12/10

Date Completed: 08/20/10

13 DRILLER'S CERTIFICATION:

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

Firm: Independent Drilling BF Firm No. 343

Firm Official: Robert J. ... Date: 8/20/2010

and _____

Supervisor/Operator: ... Date: 8/20/2010

ATTACHMENT C

**SYSTEM CAPACITY FLOW CALCULATION
THEORETICAL AND MEASURED**

Field Report, Item F: Theoretical Flow Calculations

NWSE Well	(per well log)	
depth:		118 ft
static:		10 ft
Assumed dynamic pumping level		60 ft
Motor:		30 hp
Assumed efficiency		80 %

$$\frac{(3960) * (30 \text{ hp}) * (0.80)}{60 \text{ ft} + (24 \text{ psi} * 2.31)} = 823 \text{ gpm} = 1.83 \text{ cfs}$$

Permit: 34-13763
Owner: 6X Ranch, LLC.
Site Name: NWSW Well
POD Location: T8N R22E Section 25 NWSW
Tag No: D0058535
Meter: GE TransPort PT878
Type: Portable Ultrasonic Time Flight Liquid Flow Meter
Serial Number: 7140
Calibration Date: 3/30/2015
Operator: Peter Cooper, P.E.

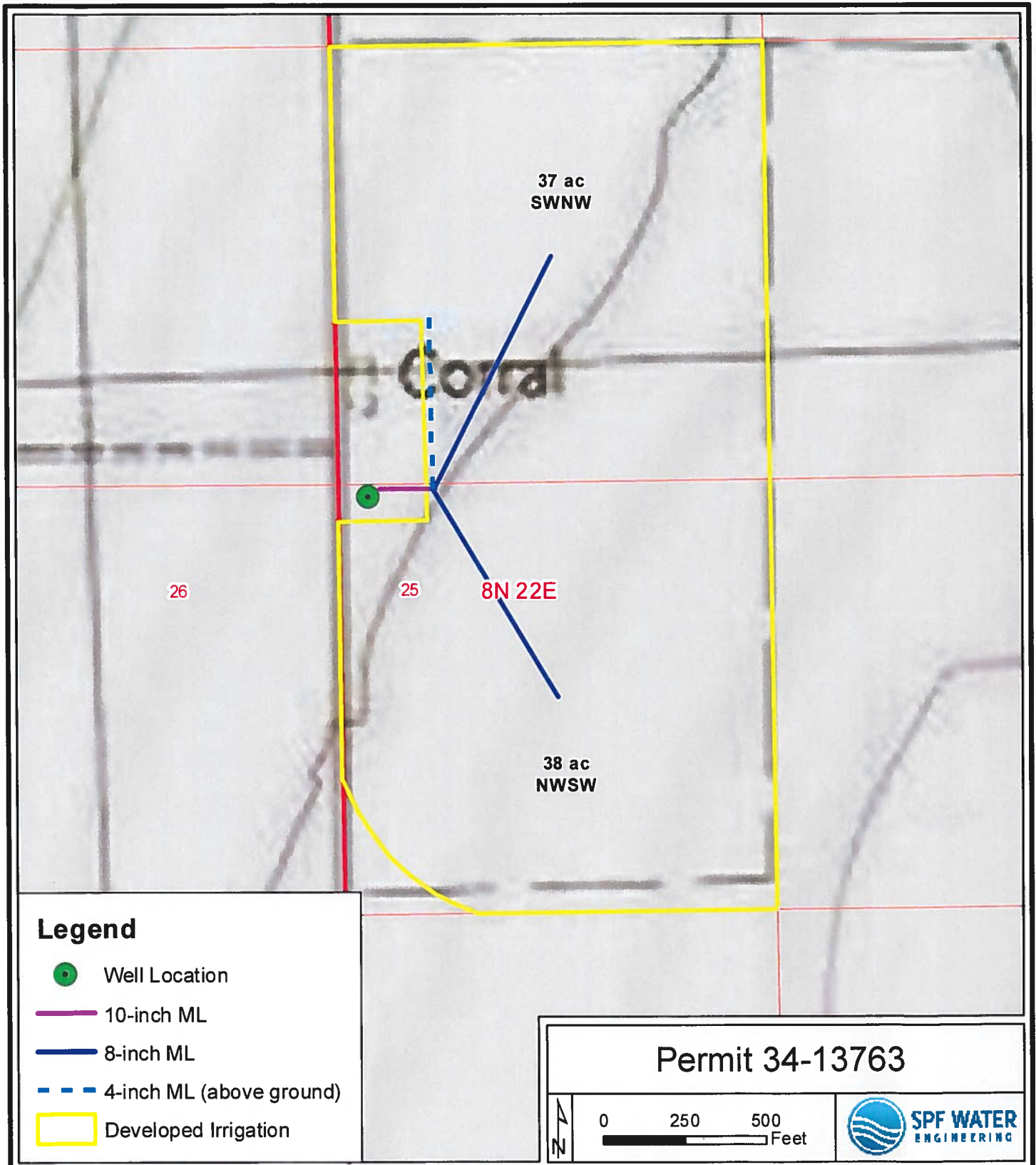
Date/Time	Volume (ft ³ /s)	(+)Total (gal)	Velocity (ft/s)	Error #
7/3/2015 16:09	1.88	639194.7	10.31	0
7/3/2015 16:10	1.88	640046.4	10.30	0
7/3/2015 16:11	1.88	640882.8	10.31	0
7/3/2015 16:12	1.88	641721.4	10.31	0
7/3/2015 16:13	1.88	642514.5	10.29	0
7/3/2015 16:14	1.87	643399.1	10.29	0
7/3/2015 16:15	1.87	644228.3	10.25	0
7/3/2015 16:16	1.86	645069.5	10.24	0
7/3/2015 16:17	1.86	645901.7	10.22	0
7/3/2015 16:18	1.86	646730.3	10.22	0
7/3/2015 16:19	1.86	647571.4	10.19	0

Time: 10 minutes
Total Volume 8376.7 gallons
Average Flow Rate 837.7 gpm
Average Flow Rate 1.87 cfs

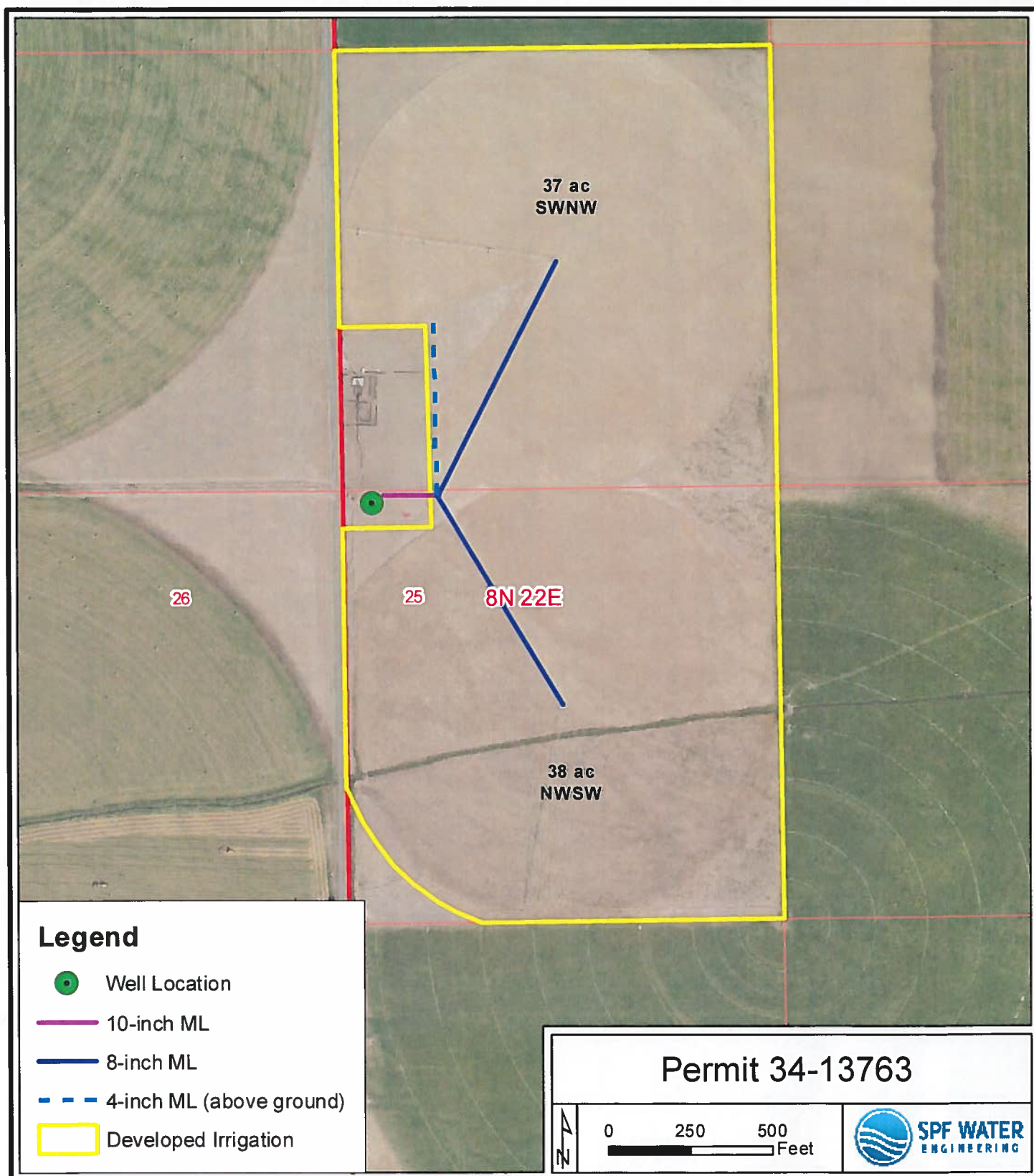
ATTACHMENT D

TOPO MAP, 2013 AERIAL PHOTO, 2010 GOOGLE EARTH PHOTO

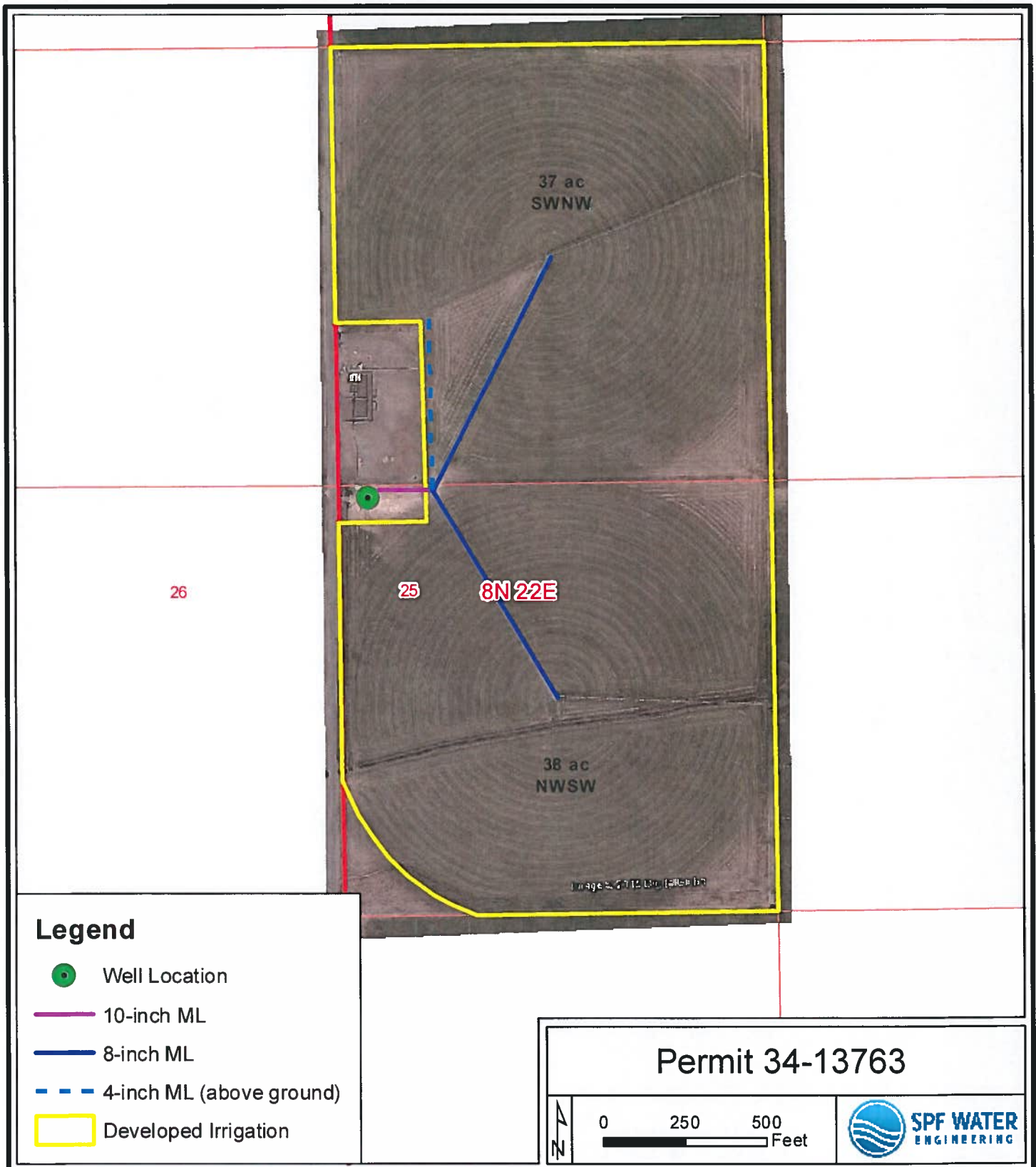
Topo Map



2013 Photo Map



September, 2010 Google Photo



ATTACHMENT E

PHOTOS



Photo 3: Photo of the installed Seametrics 6-inch flow meter on the well discharge pipeline. The Flowmeter read an instantaneous flow rate of 846 gpm, while the 10-minute averaged portable flow meter measurement computed to 837.7 gpm, a difference of less than 1%.

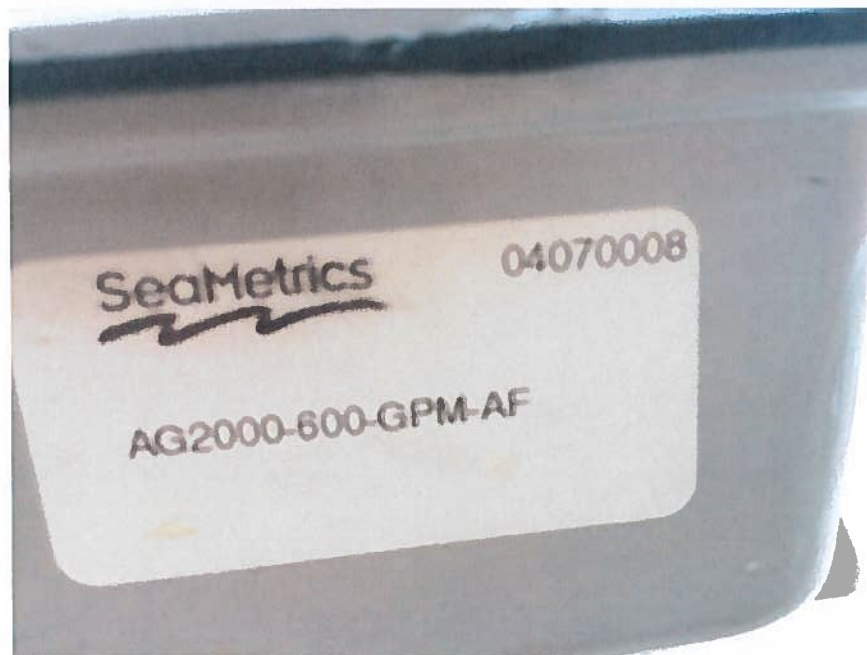


Photo 4: Photo of the installed Seametrics 6-inch flow meter tag showing the model # AG2000-600-GPM-AF corresponding to a 6-inch meter that reads instantaneous flow rate in gallons per minute and totalized volume in acre-feet.



Photo 5: IDWR Drilling Permit ID Tag.

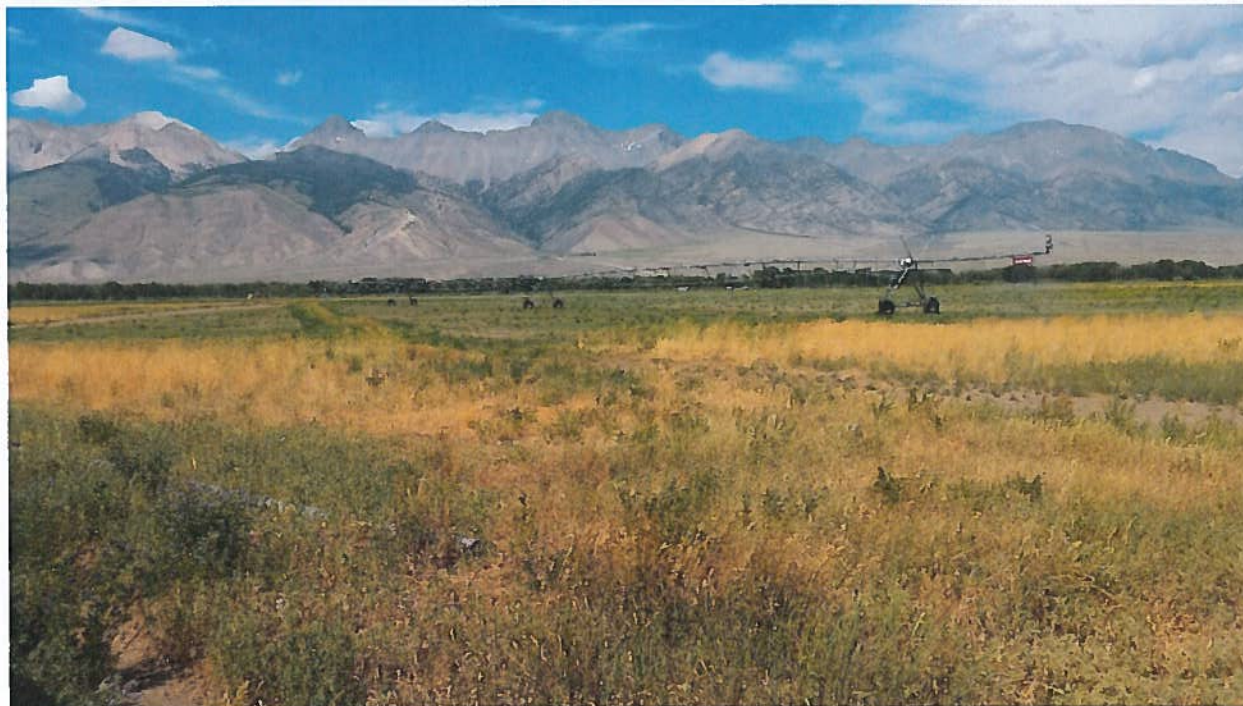


Photo 6: Photo of North Pivot in operation



Photo 7: Photo of South Pivot in operation



Photo 8: Typical above ground aluminum main and handline for irrigation of corners and areas pivots cannot reach.