

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

D. FLOW MEASUREMENTS1. **Measurement**

<u>Equipment</u>	<u>Type</u>	<u>Make/Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
No physical measurement @ exam	N/A	N/A	N/A	N/A	N/A

Supplemental well. System not operating @ exam. See Flow Calculations Section below for Theoretical HP Equation and Owner Pump Test flow estimations.

2. Measurements: None taken @ exam. Well discharge piping not suitable (insufficient pipe length) for polysonic measurement.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: Theoretical HP Equation:

$$HP = 50$$

$$PSI = 10 \text{ (open discharge est. to canal and gated pipe)}$$

Z = 210 ft (Avg drawdown nearby wells ~60 ft. Z = Static WL + Drawdown. Well Log this well Static WL 150 ft + avg Drawdown 60 ft = 210 ft => same pumping level well log of supplemental well adjacent property WR #63-11739 too).

$$Q = (8.8 \times 0.7 \times HP) / [Z + (2.31 \times PSI)] = (8.8 \times 0.7 \times 50) / [210 + (2.31 \times 10)] = \mathbf{1.32 \text{ cfs}}$$
 est. capacity of pumping system

Measured Method: Well Capacity per Owner witnessed Pump Test:

$$\text{Discharge} = 75 \text{ inches} = 75 \times 0.02 \text{ cfs} = \mathbf{1.50 \text{ cfs}}$$

$$\text{Theoretical HP Equation est. capacity of pumping system} = \mathbf{1.32 \text{ cfs}}$$

$$\text{Well Capacity per Owner witnessed Pump Test} = \mathbf{1.50 \text{ cfs}}$$

$$\text{Permitted Rate} = \mathbf{2.28 \text{ cfs}}$$

$$\text{Beneficial Use Limit} = 109 \text{ ac} \times 0.02 \text{ cfs/ac} = \mathbf{2.18 \text{ cfs}}$$

$$\text{Proof of Beneficial Use fee paid} = \$150.00 = \text{up to } \mathbf{3.00 \text{ cfs}}$$

Recommend Theoretical HP Equation Est. Limit = 1.32 cfs

Theoretical HP Equation est. 1.32 cfs < 75% (61%) of beneficial use limit. Without system measurement, cannot justify recommending rate greater than Theoretical HP Equation est.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 109 \text{ ac} \times 4.5 \text{ afa/ac} = 490.5 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.32 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 680.7 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 490.5 \text{ afa} < 680.7 \text{ afa} = \mathbf{\text{Recommend } 490.5 \text{ afa}}$$

2. Volume Calculations for Other Uses: N/A. No other uses permitted.

G. NARRATIVE/REMARKS/COMMENTS**SYSTEM DESCRIPTION:**

System consists of a 12" dia 230 ft deep well with a 6" steel discharge line to a 10" PVC line to gated pipe and canal for gravity irrigation. Blattner participates in a canal exchange (discharge well water to Willard Canal) when using the supplemental well for all of the POU except fields in the SWSE, which can be irrigated with gated pipe directly from the well. Blattner estimated well/system capable of producing 75 inches (1.50 cfs).

G. NARRATIVE/REMARKS/COMMENTS CONTINUED**IRRIGATION PRACTICES:**

This well is used to supplement surface water irrigation within the POU. Same distribution system for both ground and surface water. Blattner irrigates the POU via gravity irrigation from a series of ditches and gated pipe sets. Crops grown include hay, wheat, beans, and feed corn. Supplemental well used when canal water not available or in low supply. Blattner estimated last time used well 2010.

OVERLAP:

Surface water from Boise Kuna Irrigation District serves as primary source of water for irrigation of POU. There are no other overlapping rights associated with the POU or POD.

COMPLIANCE WITH PERMIT CONDITIONS:

Permit conditioned owner shall install a measuring device and report diversions of water annually. No measurement device currently installed on well. Due to the change in administration of water rights in Bs 63, measuring devices and reporting are not currently necessary for supplemental irrigation wells in this area. Blattner requested these conditions be waived/modified during licensing. Recommend modifying these conditions to condition 01M stating a device shall be installed and reporting done if/when the Department requests it in the future. Use of ground water under this right is supplemental to surface water in accordance with conditions of the right. No new well drilled nor an existing well enlarged or deepened after this permit issued. To the best of my knowledge, owner has complied with all other permit conditions.

Have conditions of permit approval been met? ____Yes ____X No – Modifications of measurement device and reporting as discussed above approvable per Supervisor. All other conditions met.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	1.32 CFS	490.5 AF
<u>Totals:</u>		1.32 CFS	490.5 AF

2. Recommended Amendments

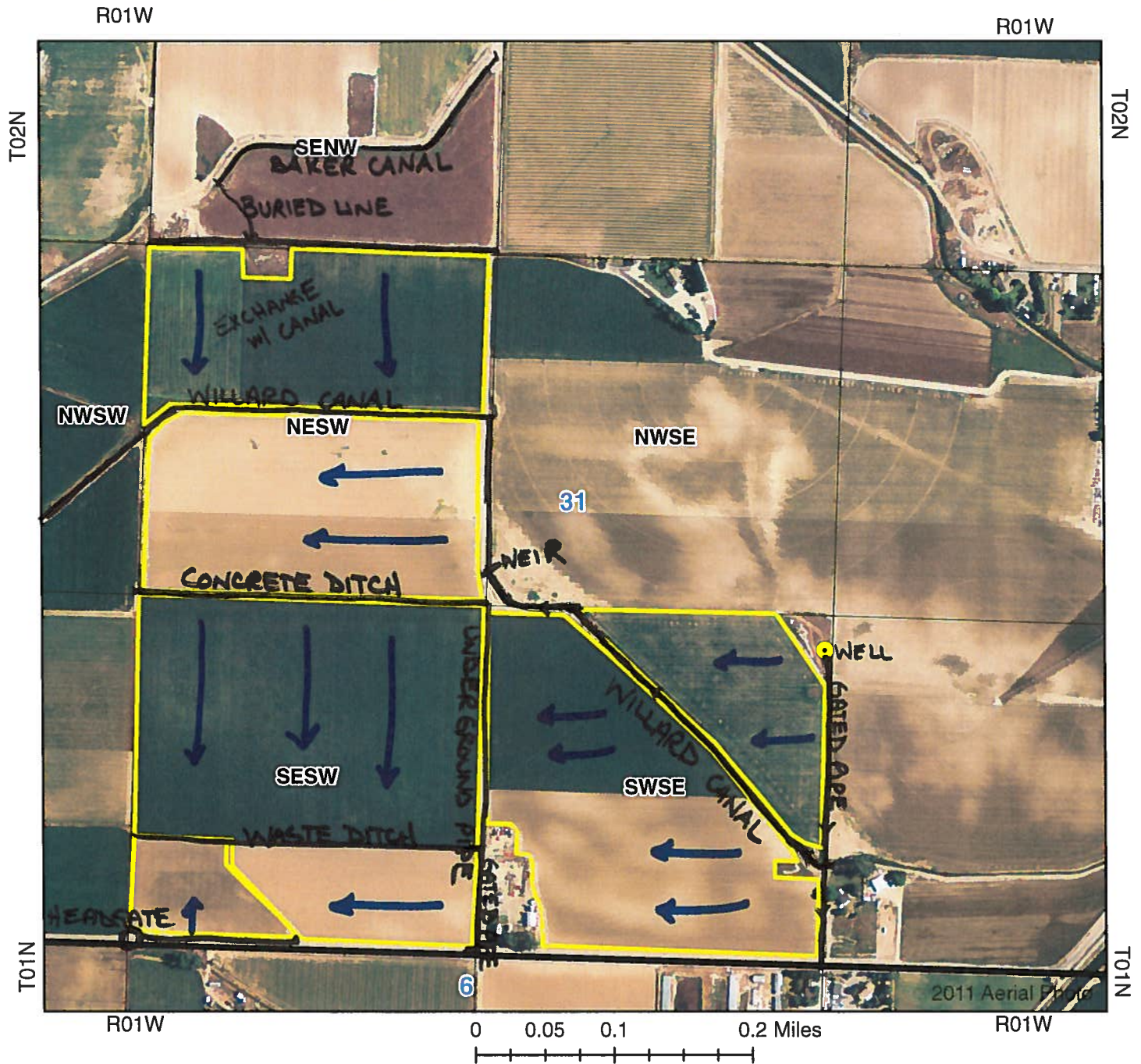
____Change P.D. as reflected above ____Add P.D. as reflected above ____X None
 ____Change P.U. as reflected above ____Add P.U. as reflected above ____Other

I. AUTHENTICATION

Field Examiner's Name Angeli M. Quinn Date 7/3/2012
 Reviewer _____ Date _____

State of Idaho
Department of Water Resources

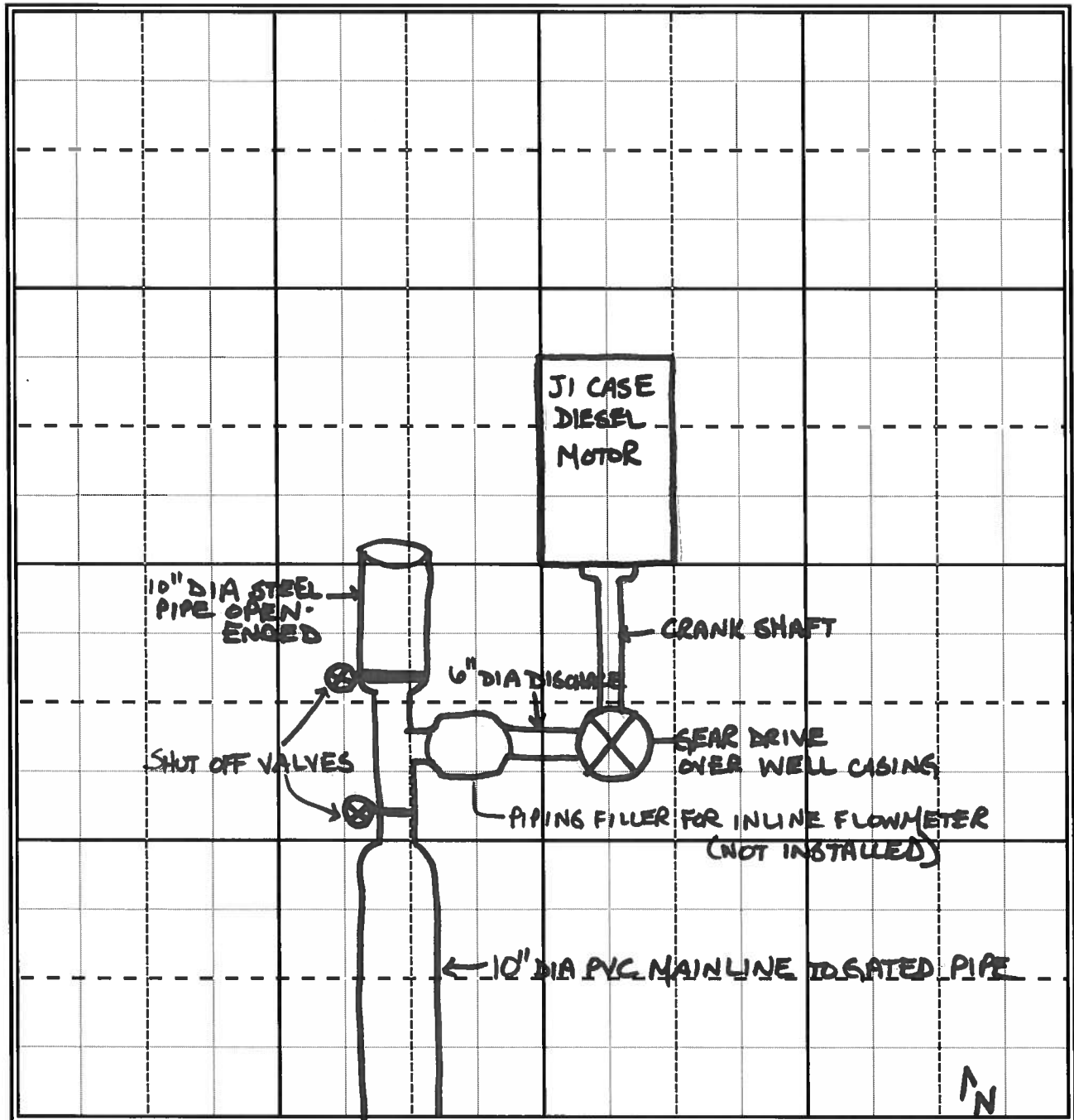
63-11940 Beneficial Use Field Report Map



- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters



63-11940 Beneficial Use Field Report Diversion System Diagram



Not to Scale

4/2011

IDAHO DEPARTMENT OF WATER RESOURCES
FIELD EXAMINERS
WELL INSPECTION FORM

1. IDENTIFICATION # Well ID 303620 (Tag #, etc.)

OTHER APPLICABLE # WR 63-11940 (Water right #, etc.)

2. OWNER William Blattner - William and Norma Blattner Family Trust Phone _____

Address 5453 BENNET RD City KUNA

State ID Zip 83634 Email _____

3. WELL LOCATION (GPS required in Degrees Decimal Minutes – use PLS if GPS not available)

Lat N 43.46255° Long. W 116.49868°

Twp 2N Rge 1W Sec 31 ¼ _____ ¼ _____

4. WELL CONSTRUCTION ☒ Well log attached ☐ Well log not found

Any obvious construction problems that may be a source for contamination or waste? ☐ Yes ☒ No

If yes, describe below &/or see attached (list any that apply): ☐ Photos ☐ Diagram ☐ Other

5. HYDROLOGIC INFORMATION

Static water if measured _____ ft. Water temperature if measured _____ °F

Flowing artesian ☐ Yes ☐ No Pressure if measured _____ psi

NOTES No MEASUREMENTS TAKEN.

INSPECTED BY Angela M. Quinn DATE 5/16/2012

MAR 2 1993

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR
BALLPOINT PEN

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.

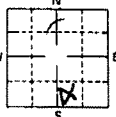
resources
FEB 24 1993

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RECEIVED
MAR 2 1993STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER OR
BALLPOINT PEN

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 <u>Ross Blatner</u> Address <u>855 Locust Grove Lane 83634</u> Drilling Permit No. <u>63-92-C-0938</u> Water Right Permit No. <u>63-11940</u>		7. WATER LEVEL Static water level <u>150</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>NA</u> °F. Quality <u>NA</u> 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 _____ <table border="1"><thead><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr></thead><tbody><tr><td><u>NA</u></td><td><u>Lost Circulation</u></td><td></td></tr></tbody></table>		Discharge G.P.M.	Pumping Level	Hours Pumped	<u>NA</u>	<u>Lost Circulation</u>																																																																																			
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3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Monitor ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)		9. LITHOLOGIC LOG <u>84148</u> <table border="1"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>16</td><td>0</td><td>2</td><td>Soil</td><td></td><td></td></tr><tr><td>16</td><td>2</td><td>9</td><td>Broken lava</td><td></td><td></td></tr><tr><td>16</td><td>9</td><td>18</td><td>Solid Lava</td><td></td><td></td></tr><tr><td>12</td><td>18</td><td>32</td><td>Solid Lava</td><td></td><td></td></tr><tr><td>12</td><td>32</td><td>35</td><td>Blk Cinder</td><td></td><td></td></tr><tr><td>12</td><td>35</td><td>36</td><td>Solid Lava</td><td></td><td></td></tr><tr><td>12</td><td>36</td><td>73</td><td>Broken Lava</td><td></td><td></td></tr><tr><td>12</td><td>73</td><td>76</td><td>Red Cinder</td><td></td><td></td></tr><tr><td>12</td><td>76</td><td>85</td><td>Broken Lava</td><td></td><td></td></tr><tr><td>12</td><td>85</td><td>126</td><td>Solid Lava</td><td></td><td></td></tr><tr><td>12</td><td>126</td><td>135</td><td>Broken Lava</td><td></td><td></td></tr><tr><td>12</td><td>135</td><td>185</td><td>Solid Lava</td><td></td><td></td></tr><tr><td>12</td><td>185</td><td>230</td><td>Broken Lava</td><td></td><td></td></tr></tbody></table>		Bore Diam.	Depth		Material	Water		From	To	Yes	No	16	0	2	Soil			16	2	9	Broken lava			16	9	18	Solid Lava			12	18	32	Solid Lava			12	32	35	Blk Cinder			12	35	36	Solid Lava			12	36	73	Broken Lava			12	73	76	Red Cinder			12	76	85	Broken Lava			12	85	126	Solid Lava			12	126	135	Broken Lava			12	135	185	Solid Lava			12	185	230	Broken Lava		
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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 _____ _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was 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 _____ feet Well screen Installed? ☐ Yes ☒ No Manufacturer _____ Type _____ Top Packer or Headpipe _____ Bottom of Tailpipe _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata Describe access port <u>Port on Well Seal</u>																																																																																											
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Canyon</u> Address of Well Site _____ (give at least name of road) <u>SW</u> 1/4 <u>SE</u> 1/4 Sec. <u>31</u> T. <u>2</u> N ☒ or S ☐ R. <u>1</u> E ☐ or W ☒		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 <u>Domestic Pump & Drill</u> Firm No. <u>4183</u> Address <u>12630 Orchard Lane</u> Signed by Drilling Supervisor <u>[Signature]</u> and <u>[Signature]</u> (Operator) <u>[Signature]</u> (If different than the Drilling Supervisor)																																																																																									

63-11940 Beneficial Use Field Report Photos



63-11940 Exam 5/16/2012: POD facing east.



63-11940 Exam 5/16/2012: Portion of POU facing west.