

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11722

Exam Date: 5/22/2012

1. Current Owner: FRANCES PERKINS
14501 LOCUST LN
NAMPA ID 83686
(208)467-6195
2. Accompanied by: Paul & Roger Haylett – Haylett Farms
Phone No: (208)890-3291 (Paul's cell) OR (208)890-3219 (Roger's cell)
Address: 14772 Locust Ln Nampa, ID 83686
Relationship to Permit Holder: Farm/lease property from owner - system operators.

3. SOURCE TRIBUTARY
GROUND WATER N/A

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Wilder Irrigation District – surface water.
2. Other water rights with the same point of diversion: None.

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

GROUND WATER NE1/4NW1/4 Sec. 10, Twp 02N, Rge 03W, B.M.
CANYON County
Method of Determination: GPS Location N43.528543° W116.683059° Garmin model GPSmap 76 Datum NAD 83

2. PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<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>	
02N	03W	10		24				27											51

Total Acres: 51

Method of Determination: Bing (2011) Aerial Photography w/ field verification.

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

4. Well or Diversion

ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Irrigation Well-					
No Metal Tag	Newman Electric	60	20266504	Unknown	8" Discharge Pipe

*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, Sprinkler/Irrigation Discharge, and Well Capacity/Well Log Pump Test flow estimations.

2. Measurements: None taken @ exam.

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: Theoretical HP Equation:

HP = 60

PSI = 45 (operating pressure for pivots -> majority of irrigation via pivots)

Z = 161.3 ft (Well Log indicates Pumping Level of 39.3 ft w/ Static Level of 122 ft -> likely driller meant Drawdown = 39.3 ft -> Z = Static WL + Drawdown = 122 ft + 39.3 ft = 161.3 ft)

$Q = (8.8 \times 0.7 \times \text{HP}) / [Z + (2.31 \times \text{PSI})] = (8.8 \times 0.7 \times 60) / [161.3 + (2.31 \times 10)] = 1.39 \text{ cfs}$ est. capacity of pumping system

Measured Method: Sprinkler/Irrigation Discharge Estimation:

2 pivots w/ minimal gravity irrigation all at same time.

$Q = 2 \text{ pivots} @ 350 \text{ gpm each} = 700 \text{ gpm} = 1.56 \text{ cfs}$ est. discharge from pivots

Measured Method: Well Capacity/Well Log Pump Test:

Well Log Pump Test : Discharge = 910 gpm = **2.03 cfs** w/ 39.3 ft drawdown after 4.75 hour test.

Theoretical HP Equation est. capacity of pumping system = **1.39 cfs**

Sprinkler System Estimation = **1.56 cfs**

Well Capacity/Well Log Pump Test = **2.03 cfs**

Permitted Rate = **1.34 cfs**

Beneficial Use Limit = 51 ac x 0.02 cfs/ac = **1.02 cfs**

Proof of Beneficial Use fee paid = \$125.00 = up to **2.00 cfs**

Recommend Beneficial Use Limit (system capable of producing at least 0.02cfs/ac) = **1.02 cfs**

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 51 \text{ ac} \times 4.5 \text{ afa/ac} = 229.5 \text{ afa}$

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.02 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 526.0 \text{ afa}$

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 229.5 \text{ afa} < 526.0 \text{ afa} = \text{Recommend } 229.5 \text{ afa}$

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

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

System consists of a 16" dia 480 ft deep well with an 8" steel discharge line to "the can" (corrugated pipe in ground irrigation system for surface water and ground water piped to) with 6" dia mainline to two pivots for sprinkler irrigation. 4" dia line off the 8" discharge line pipes water to ditch for gravity irrigation. ID Power meter # 36-450-992 – irrigation well and power for pivot in the NWNE.

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

This well is used to supplement surface water irrigation within the POU. The majority of the POU under pivots, but a portion gravity irrigated from a ditch runs alongside the Mora Canal. Crops grown include corn, alfalfa, and beans. Supplemental well used when canal water not available or in low supply, used mostly in drought years.

OVERLAP:

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

Verified in field right 63-10649 supplemental irrigation from a different well (PD recorded in NENE Section 10 T2N R3W) for different acres within the NWNE of Section 10 T2N R3W. Different well(s) used for domestic rights 63-15070 and 63-15071 within same 40 ac-tract as this right's POD.

COMPLIANCE WITH PERMIT CONDITIONS:

Use of ground water under this right is supplemental to surface water in accordance with conditions of the right. No new land was irrigated after this permit was issued. Well completed 5/31/92, after permit issued (5/16/92), but drilling permit approved 4/30/92 before permit issued. No other well drilled and well was not deepened or enlarged after permit issued in accordance with permit conditions. Permitted water bearing zone 350 to 450 ft. Per well log, water bearing zone 50 to 480 ft (screens installed between 150 ft to 425 ft, but if water present in layers from 50 ft to 480 could enter well). Diversion outside Bs 63 Ground Water Restricted Area. Recommend removing water bearing zone condition. To the best of my knowledge, owner has complied with all other permit conditions.

Have conditions of permit approval been met? ☒ Yes* ☐ No
 *Conditions met provided WB Zone removed as discussed above.

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	1.02 CFS	229.5 AF
<u>Totals:</u>		1.02 CFS	229.5 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

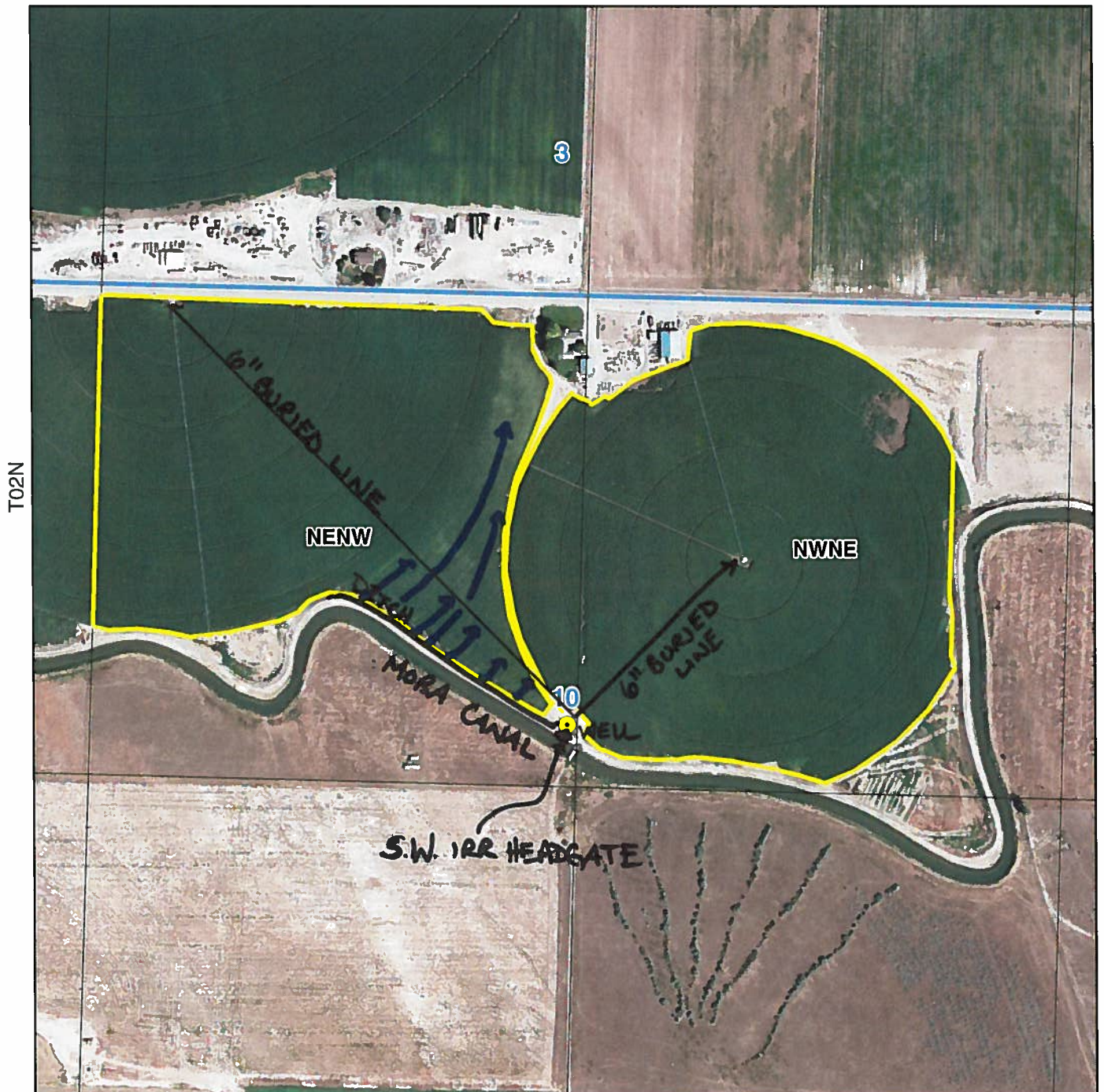
I. AUTHENTICATION

Field Examiner's Name Angela M. Quinn Date 7/5/2012
 Reviewer _____ Date _____

State of Idaho
Department of Water Resources

63-11722 Beneficial Use Field Report Map

R03W



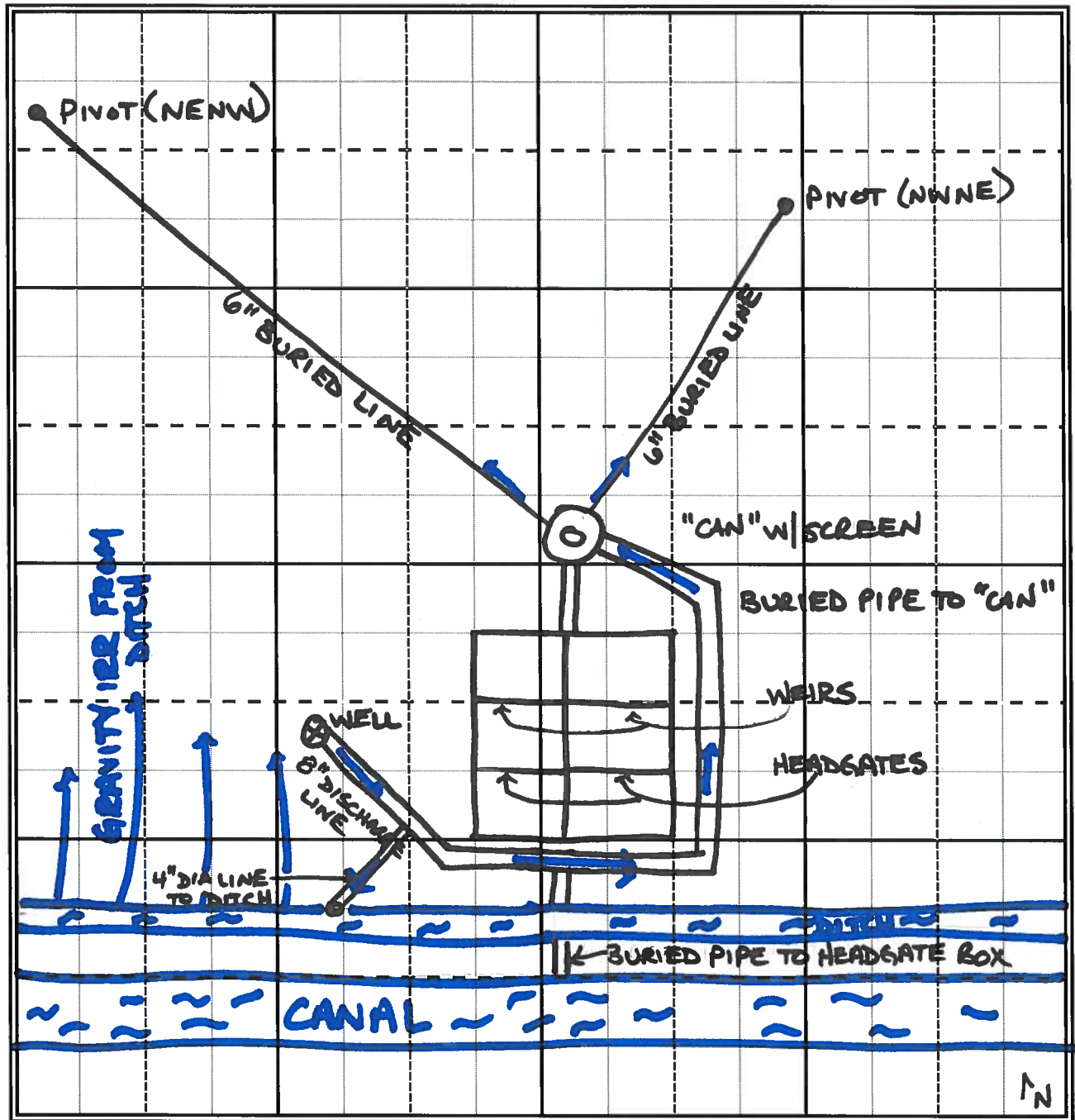
0 0.05 0.1 0.2 Miles

Bing (2011) Aerial Photo

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



63-11722 Beneficial Use Field Report Diversion System Diagram



Not to Scale

4/2011

IDAHO DEPARTMENT OF WATER RESOURCES
FIELD EXAMINERS
WELL INSPECTION FORM

1. IDENTIFICATION # No METAL TAG. WELL ID # 303405 (Tag #, etc.)

OTHER APPLICABLE # 63-11722 (Water right #, etc.)

2. OWNER FRANCES PERKINS Phone (208) 467-6195

Address 14501 LOCUST LN City NAMPA

State ID Zip 83486 Email _____

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

Lat. N 43.528543° Long. W 116.683059°

Twp 2 N Rge 3 W Sec 10 ¼ NE ¼ NW

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 @ EXAM.

INSPECTED BY

Angel M. Quinn

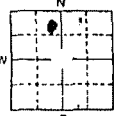
DATE 5/22/2012

ATTN: DOUG DANIELSON

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCESUSE TYPEWRITER
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>Frances & Galen Perkins</u> Address <u>14501 Locust Lane,ampa ID</u> Drilling Permit No. <u>63-92-C-694-000</u> Water Right Permit No. <u>63-11722</u>	7. WATER LEVEL Static water level <u>122</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>60</u> °F. Quality <u>Good</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 ☐ Bailor ☐ 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>910</u></td><td><u>39.3</u></td><td><u>4 3/4</u></td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	<u>910</u>	<u>39.3</u>	<u>4 3/4</u>																																																																																						
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3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Monitor ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th rowspan="2">Water Yes ☐ No ☐</th></tr><tr><th>From</th><th>To</th></tr></thead><tbody><tr><td><u>28"</u></td><td><u>0</u></td><td><u>10</u></td><td><u>Clay</u></td><td> </td></tr><tr><td> </td><td><u>10</u></td><td><u>25</u></td><td><u>Sand w/ traces of clay</u></td><td> </td></tr><tr><td> </td><td><u>25</u></td><td><u>30</u></td><td><u>Clay</u></td><td> </td></tr><tr><td> </td><td><u>30</u></td><td><u>90</u></td><td><u>Clay, small rocks</u></td><td> </td></tr><tr><td> </td><td><u>90</u></td><td><u>105</u></td><td><u>Coarse sand</u></td><td> </td></tr><tr><td> </td><td><u>105</u></td><td><u>110</u></td><td><u>Sandy clay</u></td><td> </td></tr><tr><td> </td><td><u>110</u></td><td><u>130</u></td><td><u>Coarse sand, clay layers</u></td><td> </td></tr><tr><td> </td><td><u>130</u></td><td><u>145</u></td><td><u>Clay</u></td><td> </td></tr><tr><td> </td><td><u>145</u></td><td><u>155</u></td><td><u>Coarse sand, sandstone</u></td><td> </td></tr><tr><td> </td><td><u>155</u></td><td><u>175</u></td><td><u>Coarse sands</u></td><td> </td></tr><tr><td> </td><td><u>175</u></td><td><u>255</u></td><td><u>Clay, mix sands</u></td><td> </td></tr><tr><td> </td><td><u>255</u></td><td><u>270</u></td><td><u>Coarse sands</u></td><td> </td></tr><tr><td> </td><td><u>270</u></td><td><u>310</u></td><td><u>Clay, mix sands</u></td><td> </td></tr><tr><td> </td><td><u>310</u></td><td><u>330</u></td><td><u>Coarse sands</u></td><td> </td></tr><tr><td> </td><td><u>330</u></td><td><u>395</u></td><td><u>Clay, mix sands</u></td><td> </td></tr><tr><td> </td><td><u>395</u></td><td><u>475</u></td><td><u>Coarse sand, small clay layers</u></td><td> </td></tr><tr><td> </td><td><u>475</u></td><td><u>480</u></td><td><u>Clay</u></td><td> </td></tr></tbody></table>	Bore Diam.	Depth		Material	Water Yes ☐ No ☐	From	To	<u>28"</u>	<u>0</u>	<u>10</u>	<u>Clay</u>			<u>10</u>	<u>25</u>	<u>Sand w/ traces of clay</u>			<u>25</u>	<u>30</u>	<u>Clay</u>			<u>30</u>	<u>90</u>	<u>Clay, small rocks</u>			<u>90</u>	<u>105</u>	<u>Coarse sand</u>			<u>105</u>	<u>110</u>	<u>Sandy clay</u>			<u>110</u>	<u>130</u>	<u>Coarse sand, clay layers</u>			<u>130</u>	<u>145</u>	<u>Clay</u>			<u>145</u>	<u>155</u>	<u>Coarse sand, sandstone</u>			<u>155</u>	<u>175</u>	<u>Coarse sands</u>			<u>175</u>	<u>255</u>	<u>Clay, mix sands</u>			<u>255</u>	<u>270</u>	<u>Coarse sands</u>			<u>270</u>	<u>310</u>	<u>Clay, mix sands</u>			<u>310</u>	<u>330</u>	<u>Coarse sands</u>			<u>330</u>	<u>395</u>	<u>Clay, mix sands</u>			<u>395</u>	<u>475</u>	<u>Coarse sand, small clay layers</u>			<u>475</u>	<u>480</u>	<u>Clay</u>	
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4. METHOD DRILLED ☐ Rotary ☐ Air ☐ Auger ☒ Reverse rotary ☐ Cable ☐ Mud ☐ Other _____ (backhoe, hydraulic, etc.)	10. Work started <u>5-27-92</u> finished <u>5-31-92</u>																																																																																												
5. WELL CONSTRUCTION - See Attached Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ Thickness _____ inches Diameter _____ 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 <u>See Attachment</u> 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 <u>Well back</u> Placed from <u>50</u> feet to <u>480</u> feet Surface seal depth <u>50'</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>2" x 2' Souden Pipe</u> <u>2" x 53' Caswell Pipe</u>	11. DRILLER'S CERTIFICATION I/We certify that all minimum well construction standards were compiled with at the time the rig was removed. Sargent Drilling, Inc. Firm Name _____ Firm No. <u>507</u> <u>4955 N. Virginia St.</u> Date <u>6-17-92</u> Address <u>Reno, NV 89506</u> Signed by Drilling Supervisor <u>[Signature]</u> and (Operator) <u>[Signature]</u> (If different than the Drilling Supervisor) <u>702/677-0150</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 <u>14501 Locust Lane</u> (give at least name of road) <u>NE 1/4 NW 1/4 Sec. 10, R. 3, E 1/4 or W 1/4</u>																																																																																													

WELL DRILLER'S REPORT - ATTACHMENT

Date 6-17-92

Frances & Galen Perkins

Drilling Permit No. 63-92-C-094

Water Right Permit No. 63-11722

WELL CONSTRUCTION

Casing Schedule

Thickness	Diameter	From	To
<u>.250</u> inches	<u>16</u> inches	+ <u>2</u> feet	<u>150</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>170</u> feet	<u>250</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>270</u> feet	<u>310</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>330</u> feet	<u>395</u> feet
<u>.250</u> inches	<u>16</u> inches	<u>425</u> feet	<u>480</u> feet
_____ inches	_____ inches	_____ feet	_____ feet
_____ inches	_____ inches	_____ feet	_____ feet

Well Screen

Manufacturer Roscoe Moss Type Wire Wrapped

Top Packer or Headpipe 1/4", 16" dia Plate

Bottom of Tailpipe 1/4", 16" dia Plate

Diameter 16 Slot size 040 from 150 feet to 170 feet
 Diameter 16 Slot size 040 from 250 feet to 270 feet
 Diameter 16 Slot size 040 from 310 feet to 330 feet
 Diameter 16 Slot size 040 from 395 feet to 425 feet
 Diameter _____ Slot size _____ from _____ feet to _____ feet
 Diameter _____ Slot size _____ from _____ feet to _____ feet

RECEIVED
FEB 01 1996

Department of Water Resources

Sargent Drilling, Inc.
9955 N. Virginia Street
Reno, Nevada 89506
702/677-0150

RECEIVED

JAN 24 1996

Department of Water Resources

RECEIVED

JAN 26 1996

WATER RESOURCES
WESTERN REGION

MICROFILMED

JAN 27 1996

63-11722 Beneficial Use Field Report Photos



63-11722 Exam 5/22/2012: POD facing east/northeast. Surface water irrigation headgate box and "can" in background. 8" dia discharge line piped around backside of headgate box into "can" to 6" buried lines to pivots.



63-11722 Exam 5/22/2012: POU facing northeast with pivot in NWNE Section 10 T2N R3W in photo middle-ground.