

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-31632

Exam Date: 8/24/2012

1. Current Owner: ALLIED SEED LLC
9311 HWY 45
NAMP ID 83686
(208)466-6700
2. Accompanied by: Juan Deluna
Phone No: Same
Address: Same
Relationship to Permit Holder: Warehouse Manager

3. SOURCE

GROUND WATER

TRIBUTARY

N/A

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None (unrecorded domestic use from different well)
2. Other water rights with the same point of diversion: None

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

GROUND WATER

NE1/4SE1/4

Sec. 16, Twp 02N, Rge 02W, B.M.

CANYON County

Method of Determination: GPS Location N 43° 30.46488' W 116° 34.39956' Garmin model GPSmap 76 Datum NAD 83

2. PLACE OF USE:

FIRE PROTECTION

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	02W	16													X				

Method of Determination: Esri (2012) Aerial Photography w/ field verification.

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. Well or DiversionID No.*Motor MakeHpMotor Serial No.Pump MakePump Serial No. or Discharge Size

D0029365

Crown submersible

30

unknown

Crown 8H-100

unknown - 8" discharge

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

D. FLOW MEASUREMENTS1. **Measurement Equipment**

<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

Dedicated fire protection well. System not operating @ exam. See Flow Calculations Section below for Theoretical HP Equation and Discharge Pipe Diameter flow estimations.

2. Measurements: None taken at exam, dedicated fire protection well – did not require owner to turn on well pump during exam.

E. FLOW CALCULATIONS

 X Additional Computation Sheets Attached

Measured Method: Theoretical HP Equation:

HP = 30

PSI = 60 (pump & closed pipeline est.)

Z = 43 ft (pump set at 63 ft, est. ~ 20 ft above pump for motor > 10 hp)

$Q = (8.8 \times 0.7 \times \text{HP}) / [Z + (2.31 \times \text{PSI})] = (8.8 \times 0.7 \times 30) / [43 + (2.31 \times 60)] = 1.02 \text{ cfs}$ est. capacity of pumping system

Measured Method: Pipe Diameter Flow Estimation:

Discharge Pipe Dia = 8 in => Q = **1.74 cfs** (see attached "Expected Flows For Pipe Diameters")

Theoretical HP Equation est. capacity of pumping system = **1.02 cfs**

Pipe Diameter Flow Estimation = **1.74 cfs**

Permitted Rate Fire Protection Use = **4.50 cfs**

Beneficial Use Limit = **No standard/policy rate for Fire Protection use. No domestic use from POD.**

Proof of Beneficial Use fee paid = \$200.00 = up to **5.00 cfs**

Recommend Theoretical HP Equation Estimation = 1.02 cfs

Theoretical HP Equation est. 1.02 cfs recommended, because likely closer estimate of actual system capacity than pipe diameter flow estimation that assumes optimum design conditions.

F. VOLUME CALCULATIONS

- Volume Calculations for Irrigation: **N/A** (no irrigation use permitted).
- Volume Calculations for Other Uses: **N/A** (no volume required for fire protection use).

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

System consists of a 12 in. diameter well with 30 hp submersible motor discharged to 8 in. pipe to a 6 in. line leads to a fire hydrant adjacent to well. Well has dedicated power line/source with Idaho Power meter number 36 451 292. Well motor and pump information provided by Davis Well & Pump. No diversion works to building(s). Canyon Co. tax lot used to create ArcMap place of use shape assuming fire hoses connected to hydrant could fight fire anywhere on property.

OVERLAP:

Well is a dedicated fire protection well, not plumbed to any other fixtures for domestic uses (as permitted). Recommend only fire protection use for licensing. A second well on property serves domestic uses associated with the business. There are no other associated overlapping rights.

COMPLIANCE WITH PERMIT CONDITIONS:

Permitted water bearing zone 40 ft to 100 ft. Well cased to 40 ft with surface seal to 18 ft. No well screens installed, well open hole from 40 ft to bottom of well at 100 ft. Likely most of water in well entering from 40 ft to 100 ft, but possible water from water bearing zone(s) below 18 ft surface seal could enter well. Well is outside Bsn 63 Ground Water Restricted Area, therefore the water bearing zone condition can be removed at licensing. Permit also conditioned domestic use is for office and restroom facility. Well not plumbed to building(s), no domestic use recommended. Therefore, this

G. NARRATIVE/REMARKS/COMMENTS CONTINUED

condition can be removed at licensing. 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 condition 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>
FIRE PROTECTION	01/01 to 12/31	1.02 CFS	N/A
<u>Totals:</u>		1.02 CFS	

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. Gium Date 8/8/2013

Reviewer _____ Date _____

63-31632 Beneficial Use Field Report System Diagram & Map

02W



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

0 0.01 0.02 0.04 Miles



EXPECTED FLOWS FOR PIPE DIAMETERS

This is for rough estimate for **pump & closed pipeline** system.

Use to double check other measurements/estimates.

Assumes optimum design.

$$Q = VA \quad \text{where: } V = 5 \text{ ft/sec} \quad A = \pi r^2 \quad (\text{radius in ft.})$$

DIAMETER (INCHES)	RATE (CFS)
01	0.03
02	0.11
03	0.25
04	0.44
06	0.98
08	1.74
10	2.73
12	3.93
14	5.34
16	6.98
18	8.83
20	10.90
22	13.19
24	15.70
36	35.34
48	62.83

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only

Inspected by _____

Twp _____ Rge _____ Sec _____

_____ 1/4 _____ 1/4 _____ 1/4

Lat: : : Long: : :

1. WELL TAG NO. D 0029365

DRILLING PERMIT NO. _____

Other IDWR No. _____

2. OWNER:

Name ALLIED SEED LLC

Address 9311 HWY 45

City NAMPA State ID Zip 83686

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.



Twp. 2 North ☒ or South ☐
 Rge. 2 East ☐ or West ☒
 Sec. 16
 Gov't Lot _____
 Lat. _____
 Long. _____

10 acres 1/4 NE 1/4 SE 1/4
 County CANYON 40 acres 160 acres

Address of Well Site **SAME**

City _____

City _____

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

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other **FIRE PROTECTION**

5. TYPE OF WORK: check all that apply

☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES:

Seal/Filter Pack			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
BENTONITE	0	18	1400#	POUR

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s)

Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12	+2	40	285	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS:

☐ Perforations Method _____

☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

12 ft. below ground Artesian pressure (b)

Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
2000	0	90	2 HR

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments:

Depth First Water Encounter

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

[illegible]

Completed Depth 100 (Measurable)
Date: Started 7/1/2003 Completed 7/3/2003

13. DRILLER'S CERTIFICATION:

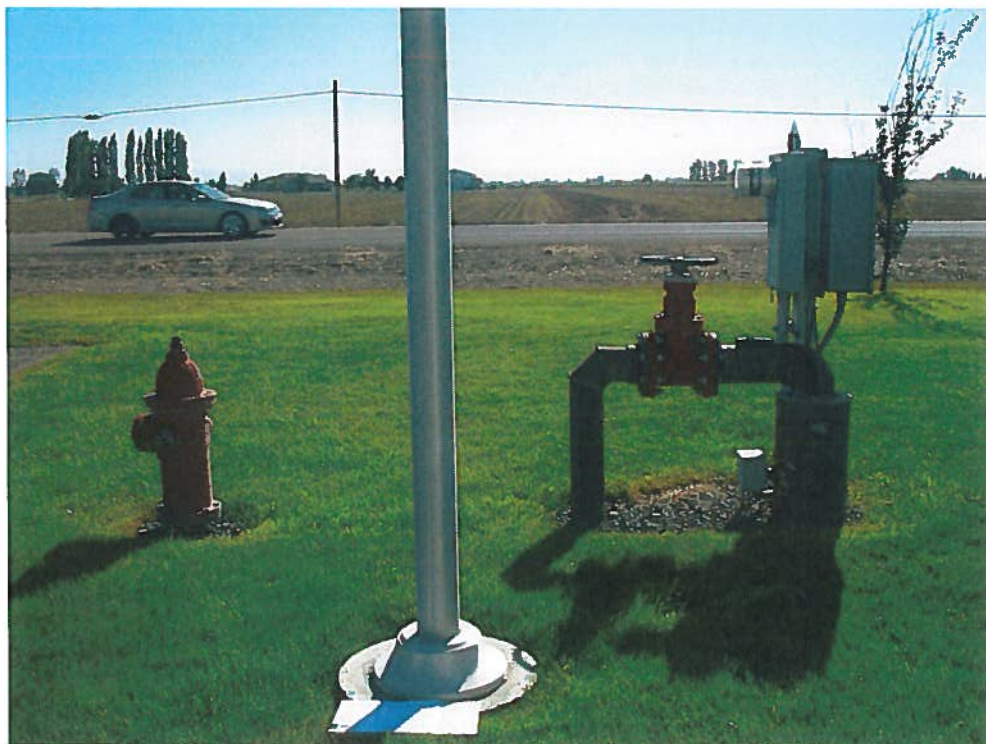
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name **DAVIS WELL & PUMP** Firm No. **101**

Firm Official Chuck Davis Date 7/10/2003

and
Driller or Operator Chris Davis Date 7/10/2003
(Sign once if Firm Official & Operator)

63-31632 Beneficial Use Field Report Photos



63-31632 Exam 8/24/2012: POD well with 8 inch discharge to 6 inch line piped underground to fire hydrant connection facing east with Hwy 45 in background.



63-31632 Exam 8/24/2012: Portion of POU (Allied Seed facility) with well and fire hydrant in foreground facing west/northwest.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

August 17, 2012

Allied Seed LLC
9311 Hwy 45
Nampa, ID 83686

RE: Scheduling Field Exam for Water Right Permit No. 63-31632

Dear Permit Holder:

We are planning to **conduct water right examinations** in the vicinity of the above-referenced permit **during the weeks of August 20 and August 27, 2012**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal conditions during the examination. The permit authorizes diversion of ground water for domestic and fire protection use.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by August 24, 2012**. If there is a problem with scheduling or conducting the examination at this time, please call and other arrangements can be made. I appreciate your attention in this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Angela M. Grimm', with a long, sweeping horizontal line extending to the right.

Angela M. Grimm, P.G.
Water Resource Agent, Sr.