

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 10/12/2015
 FROM: Groundwater Section Michael J. Thoma
 SUBJECT: Application G- 17955 Reviewer's Name Michael J. Thoma
 Supersedes review of 11/18/2014 Date of Review(s)

PUBLIC INTEREST PRESUMPTION; GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review groundwater applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: Stallion Land Company LLC County: Jackson

A1. Applicant(s) seek(s) 0.06 (25 gpm) cfs from 4 well(s) in the Rogue Basin,
Bear Creek subbasin Quad Map: Sam's Valley

A2. Proposed use landscape irrigation/commercial use Seasonality: Irrigation season /year- round, respectively

A3. Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid):

Well	Logid	Applicant's Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36
1	JACK 7480	2	Sand and Gravel	0.06	T36S/R2W-28 SWNW	2110'S, 315'E fr NW cor S 28
2	JACK 62240	A	Sand and Gravel	0.06	T36S/R2W-28 SWNW	1475'S, 550'E fr NW cor S 28
3	JACK 62241	B	Sand and Gravel	0.06	T36S/R2W-28 NWNW	1150'S, 200'E fr NW cor S 28
4	JACK 62245	C	Mixed Clay/Gravel; Claystone	0.06	T36S/R2W-28 NWNW	1270'S, 10'E fr NW cor S 28
5						

* Alluvium, CRB, Bedrock

Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	1220	30	19	6/4/86	62	0-23	+1-39			30		Air
2	1220	60	25	5/13/15	80	0-18	+2-58			22	28.8	Pump
3	1220	46	25	6/5/15	68	0-20	+2-58			15		Air
4	1220	48	22	6/24/15	80	0-18	+2-58		48-58	8		Air

Use data from application for proposed wells.

A4. **Comments:** The original application included Well 1 (JACK 7480) as an existing well and Well 4 (JACK 62245) as a proposed well. Two other wells were proposed on the original application and were much deeper than the wells proposed here and completed in bedrock. Thus the proposed aquifer has changed from consolidated bedrock on the original review to alluvium.

A5. **Provisions of the Rogue** Basin rules relative to the development, classification and/or management of groundwater hydraulically connected to surface water are, or are not, activated by this application. (Not all basin rules contain such provisions.)
 Comments: _____

A6. **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
 Name of administrative area: _____
 Comments: _____

B. GROUNDWATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

B1. **Based upon available data**, I have determined that groundwater* for the proposed use:

- a. is over appropriated, is not over appropriated, or **cannot be determined to be** over appropriated during any period of the proposed use. * This finding is limited to the groundwater portion of the over-appropriation determination as prescribed in OAR 690-310-130;
- b. **will not** or **will** likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the groundwater portion of the injury determination as prescribed in OAR 690-310-130;
- c. **will not** or **will** likely to be available within the capacity of the groundwater resource; or
- d. **will, if properly conditioned**, avoid injury to existing groundwater rights or to the groundwater resource:
 - i. The permit should contain condition #(s) 7C (7-year), 7J (Scenic waterway);
 - ii. The permit should be conditioned as indicated in item 2 below.
 - iii. The permit should contain special condition(s) as indicated in item 3 below;

- B2. a. **Condition** to allow groundwater production from no deeper than _____ ft. below land surface;
- b. **Condition** to allow groundwater production from no shallower than _____ ft. below land surface;
- c. **Condition** to allow groundwater production only from the _____ groundwater reservoir between approximately _____ ft. and _____ ft. below land surface;
- d. **Well reconstruction** is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Groundwater Section.

Describe injury –as related to water availability– that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc): _____

B3. **Groundwater availability remarks:** B1a. As shown in the attached hydrograph, water levels in the area are generally stable. JACK 52479, a State Observation Well, shows dewatering influences from operation of the adjacent aggregate mine, but this trend is not reflected in other nearby wells (i.e., JACK 7146).

B1b. Nearby groundwater rights are greater than ¼ mile from the proposed POAs and will not likely be subject to significant interference due to the small proposed rate and general low-yield of the aquifer.

B1c. While any single well cited in this review may not produce 25 gpm, the four wells should approach the requested rate cumulatively.

B1d. The proposed wells are above the Rogue River Scenic Waterway so the scenic waterway condition should be used.

C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. **690-09-040 (1):** Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	sand/gravel alluvial terrace deposits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	sand/gravel alluvial terrace deposits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	sand/gravel alluvial terrace deposits	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	sand/gravel alluvial terrace deposits and fractured bedrock	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer confinement evaluation: Well logs for the proposed wells all show static water levels higher than water bearing zones but do not suggest a laterally-extensive confining layer. Therefore the aquifer is likely semiconfined to unconfined.

C2. **690-09-040 (2) (3):** Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Hydraulically Connected?			Potential for Subst. Interfer. Assumed?	
						YES	NO	ASSUMED	YES	NO
1	1	Bear Creek	~1200	1160	2100	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	1	Bear Creek	~1200	1160	1410	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	1	Bear Creek	~1200	1160	1470	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	1	Bear Creek	~1200	1160	1660	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Basis for aquifer hydraulic connection evaluation: The existing wells have seals to about 20 feet below land surface. Nearby well logs report mixed clay and coarse sediment to approx. 70 ft below land surface, with sand and gravel lenses of variable thickness and extent. The sediments are alluvial in origin, limited in extent, and variable in permeability. Water levels in wells likely reflect a peizometric surface that is above or coincident with Bear Creek locally and indicate groundwater is flowing towards and discharging to Bear Creek.

Water Availability Basin the well(s) are located within: Watershed ID #: 70993 BEAR CR > ROGUE R - AT MOUTH

C3a. **690-09-040 (4):** Evaluation of stream impacts for each well that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that surface water source, and not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% natural flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < ¼ mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
1	1	<input type="checkbox"/>	<input type="checkbox"/>	IS70993A	20	<input type="checkbox"/>	17.10	<input type="checkbox"/>	<<25%	<input type="checkbox"/>
2	1	<input type="checkbox"/>	<input type="checkbox"/>	IS70993A	20	<input type="checkbox"/>	17.10	<input type="checkbox"/>	<<25%	<input type="checkbox"/>
3	1	<input type="checkbox"/>	<input type="checkbox"/>	IS70993A	20	<input type="checkbox"/>	17.10	<input type="checkbox"/>	<<25%	<input type="checkbox"/>
4	1	<input type="checkbox"/>	<input type="checkbox"/>	IS70993A	20	<input type="checkbox"/>	17.10	<input type="checkbox"/>	<<25%	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water source. **Complete only if Q is distributed among wells.** Otherwise same evaluation and limitations apply as in C3a above.

SW #	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?
	<input type="checkbox"/>			<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Each well was evaluated for the full proposed rate in C3a above.

Comments: A range of aquifer parameters were used with an analytical model (Hunt, 2003) to get an estimate of impacts of pumping to stream depletion of Bear Creek assuming a semi-confined aquifer. The results show that impacts would be much less than 25% at 30 days (see attached results).

C4a. **690-09-040 (5):** Estimated impacts on **hydraulically connected surface water sources greater than one mile** as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required.

Non-Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
Distributed Wells													
Well	SW#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		%	%	%	%	%	%	%	%	%	%	%	%
Well Q as CFS													
Interference CFS													
(A) = Total Interf.													
(B) = 80 % Nat. Q													
(C) = 1 % Nat. Q													
(D) = (A) > (C)													
(E) = (A / B) x 100		%	%	%	%	%	%	%	%	%	%	%	%

(A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed. as CFS; (C) = 1% of calculated natural flow at 80% exceed. as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage.

Basis for impact evaluation:

All wells are < 1 mile from the nearest surface water source.

C4b. **690-09-040 (5) (b)** The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section.

- C5. **If properly conditioned**, the surface water source(s) can be adequately protected from interference, and/or groundwater use under this permit can be regulated if it is found to substantially interfere with surface water:
- i. The permit should contain condition #(s) _____;
 - ii. The permit should contain special condition(s) as indicated in "Remarks" below;

C6. SW / GW Remarks and Conditions

References Used:

Hunt, B. 2003. Unsteady Stream Depletion when pumping from a semi-confined aquifer. Journal of Hydrologic Engineering. p. 12-19.

OWRD Well Log and Water level databases accessed 10/12/2015

Wiley, T. J., McClaughry, J. D., D'Allura, J. A. 2011. Geologic Database and Generalized Geologic Map of Bear Creek Valley, Jackson County, Oregon. Oregon Department of Geology and Mineral Industries Open File Report O-11-11.

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: _____ Logid: _____

D2. **THE WELL does not appear to meet current well construction standards based upon:**

- a. review of the well log;
- b. field inspection by _____ ;
- c. report of CWRE _____ ;
- d. other: (specify) _____

D3. **THE WELL construction deficiency or other comment is described as follows:** _____

D4. **Route to the Well Construction and Compliance Section for a review of existing well construction.**

Water Availability Tables

Water Availability Analysis Detailed Reports

BEAR CR > ROGUE R - AT MOUTH ROGUE BASIN

Water Availability as of 11/14/2014

Watershed ID #: 70993 ([Map](#))

Exceedance Level:80%

Date: 11/14/2014

Time: 3:14 PM

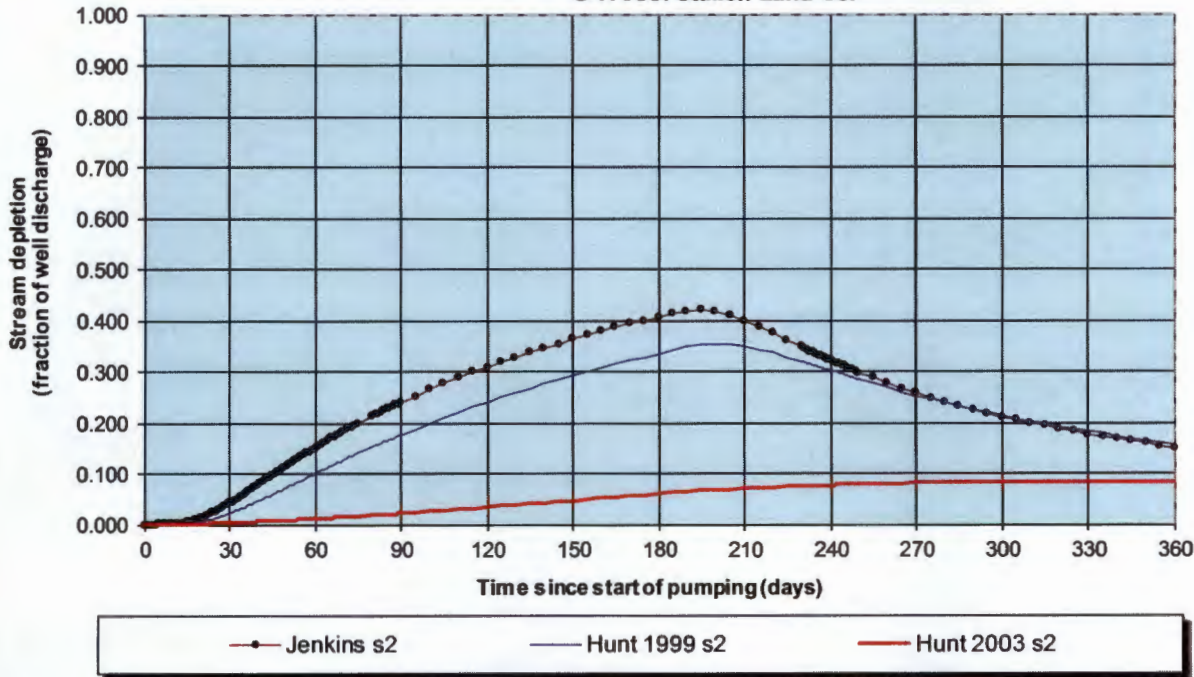
Water Availability Calculation

Monthly Streamflow in Cubic Feet per Second
Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	107.00	192.00	-85.40	0.00	170.00	-255.00
FEB	129.00	235.00	-106.00	0.00	170.00	-276.00
MAR	129.00	214.00	-85.20	0.00	170.00	-255.00
APR	105.00	31.00	74.00	0.00	170.00	-96.00
MAY	84.20	47.20	37.00	0.00	170.00	-133.00
JUN	61.60	73.40	-11.80	0.00	100.00	-112.00
JUL	28.10	94.20	-66.10	0.00	40.00	-106.00
AUG	19.30	79.80	-60.50	0.00	24.00	-84.50
SEP	17.10	56.50	-39.40	0.00	20.00	-59.40
OCT	18.30	18.10	0.17	0.00	24.00	-23.80
NOV	30.90	57.90	-27.00	0.00	62.00	-89.00
DEC	65.30	138.00	-72.30	0.00	153.00	-225.00
ANN	89,800.00	74,400.00	24,400.00	0.00	76,600.00	0.00

Transient Stream Depletion (Jenkins, 1970; Hunt, 1999, 2003)

G-17955: Stallon Land Co.



Output for Stream Depletion, Scenerio 2 (s2):						Time pump on (pumping duration) = 180 days						
Days	30	60	90	120	150	180	210	240	270	300	330	360
J SD	4.2%	15.0%	24.0%	30.9%	36.3%	40.6%	40.0%	32.2%	25.8%	21.1%	17.7%	15.1%
H SD 1999	2.2%	10.0%	17.7%	24.0%	29.2%	33.5%	34.9%	30.2%	25.3%	21.3%	18.2%	15.8%
H SD 2003	0.35%	1.12%	2.14%	3.38%	4.70%	6.03%	7.05%	7.70%	8.12%	8.29%	8.38%	8.45%
Qw, cfs	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
H SD 99, cfs	0.001	0.006	0.010	0.013	0.016	0.019	0.019	0.017	0.014	0.012	0.010	0.009
H SD 03, cfs	0.000	0.001	0.001	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.005	0.005

Parameters:		Scenario 1	Scenario 2	Scenario 3	Units
Net steady pumping rate of well	Qw	25.00	25.00	25.00	gpm
Time pump on (pumping duration)	tpon	180	180	180	days
Perpendicular from well to stream	a	1410	1410	1410	ft
Well depth	d	80	80	80	ft
Aquifer hydraulic conductivity	K	0.5	5	50	ft/day
Aquifer saturated thickness	b	80	80	80	ft
Aquifer transmissivity	T	40	400	4000	ft*ft/day
Aquifer storativity or specific yield	S	0.05	0.05	0.05	
Aquitard vertical hydraulic conductivity	Kva	0.1	0.1	0.1	ft/day
Aquitard saturated thickness	ba	20	20	20	ft
Aquitard thickness below stream	babs	3	3	3	ft
Aquitard porosity	n	0.2	0.2	0.2	
Stream width	ws	100	100	100	ft
Streambed conductance (lambda)	sbc	3.33	3.33	3.33	ft/day
Stream depletion factor	sdf	2485.13	248.51	24.85	days
Streambed factor	sbf	117.50	11.75	1.18	
input #1 for Hunt's Q_4 function	t'	0.00	0.00	0.04	
input #2 for Hunt's Q_4 function	K'	248.51	24.85	2.49	
input #3 for Hunt's Q_4 function	epsilon'	0.25	0.25	0.25	
input #4 for Hunt's Q_4 function	lamda'	117.50	11.75	1.18	



RECEIVED

JACK 7480

3/15/2W-28

STATE OF OREGON WATER WELL REPORT (as required by ORS 537.785)

JUN 10 1986

WATER RESOURCES DEPT

(1) OWNER:

Name DOUBLE DEE LUMBER Address POB 3517 City CENTRAL POINT State OR Zip 97502

(2) TYPE OF WORK:

New Well Deepen Recondition Abandon

(3) DRILL METHOD:

Rotary Air Rotary Mud Cable Other

(4) PROPOSED USE:

Domestic Community Industrial Irrigation Thermal Injection Other

BORE HOLE CONSTRUCTION:

Depth of Completed Well 50 ft. Special Standards date of approval

Table with columns: HOLE Diameter, SEAL Material, Amount sacks or pounds. Row 1: 6, CEMENT, 6 SACK

How was seal placed? Method A B C D E Other

Backfill placed from ft. to ft. Material Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

Table with columns: Diameter, From, To, Gauge, Steel, Plastic, Welded, Threaded. Row 1: 6, 1, 39, .250, Steel, Welded

Final location of shoe(s) 39

PERFORATIONS/SCREENS:

Table with columns: From, To, Slot size, Number, Diameter, Tele/pipe size, Casing, Liner. Includes checkboxes for Perforations and Screens.

(8) WELL TESTS: Minimum testing time is 1 hour

Table with columns: Pump, Bailer, Air, Flowing Artesian, Yield gal/min, Pumping level, Drill stem at, Time. Row 1: 30, 30, 1 hr

Temperature of water Depth Artesian Flow Found Was a water analysis done? Did any strata contain water not suitable for intended use? Salty Muddy Odor Color Other

(9) LOCATION OF WELL by legal description:

County JACKSON Latitude Longitude Township 36 N or S, Range 2W E or W, WM. Section 28 Tax Lot 2000 Lot Block Subdivision Street Address of Well (or nearest address) 7111 BLACKWELL RD., CENTRAL POINT, OR.

(10) STATIC WATER LEVEL:

19 ft. below land surface. Date 6-4-86 Artesian pressure lb. per square inch. Date

(11) WELL LOG:

Table with columns: Material, From, To, WB?, SWL. Rows: SOIL, BROWN (0-2), CLAY, BROWN (2-17), CONGLOMERATE, SAND (17-24), GRAVEL, SMALL (24-62), 30-19'

RECEIVED SEP 10 2015 OWRD

Date started 6-4-86 Completed 6-4-86

(unbonded) Water Well Constructor Certification:

I constructed this well in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed Joaquin Medina Date 6-4-86

(bonded) Water Well Constructor Certification:

I accept responsibility for construction of this well and its compliance with all Oregon water well standards. This report is true to the best of my knowledge and belief.

Signed Ronald J. Matkins Date 6-4-86

Company MARTINSON WELL DRILLING, CONG No.

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

JACK 62240

7/8/2015

WELL I.D. LABEL# L

117719

START CARD #

1026394

ORIGINAL LOG #

(1) LAND OWNER

Owner Well I.D. _____
First Name _____ Last Name _____
Company STALLION LAND COMPANY LLC
Address PQ BOX 3667
City CENTRAL POINT State OR Zip 97502

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (complete 2a & 10) Abandonment(complete 5a)

(2a) PRE-ALTERATION
Dia + From To Gauge Stl Plstc Wld Thrd
Casing:
Material From To Amt sacks/lbs
Seal:

(3) DRILL METHOD

Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other _____

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/Commercial Livestock Dewatering
 Thermal Injection Other _____

(5) BORE HOLE CONSTRUCTION Special Standard (Attach copy)

Depth of Completed Well 80.00 ft.

BORE HOLE			SEAL			sacks/lbs
Dia	From	To	Material	From	To	Amt
10	0	18	Bentonite Chips	0	18	30 S
6	18	80			Calculated	8
					Calculated	

How was seal placed: Method A B C D E
 Other DRY Poured
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____
Explosives used: Yes Type _____ Amount _____

(5a) ABANDONMENT USING UNHYDRATED BENTONITE

Proposed Amount _____ Actual Amount _____

(6) CASING/LINER

Casing	Liner	Dia	+ From	To	Gauge	Stl	Plstc	Wld	Thrd
<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	<input checked="" type="checkbox"/>	2	58	.250	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Shoe Inside Outside Other Location of shoe(s) 58
Temp casing Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS

Perforations Method _____
Screens Type _____ Material _____

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scm/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour

Pump Bailer Air Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
22	28.8	80	4

Temperature 55 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below) TDS amount 312 ppm
From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)

County JACKSON Twp 36.00 S N/S Range 2.00 W E/W WM
Sec 28 1/4 of the 1/4 Tax Lot 2100
Tax Map Number _____ Lot _____
Lat _____ " or 42.41438000 DMS or DD
Long _____ " or -122.95203000 DMS or DD
 Street address of well Nearest address
0 BLACKWELL RD. CENTRAL POINT, OR 97502

(10) STATIC WATER LEVEL

Existing Well / Pre-Alteration	Date	SWL(psi)	+ SWL(ft)
Completed Well	5/13/2015		25

Flowing Artesian? Dry Hole?

WATER BEARING ZONES Depth water was first found 60.00

SWL Date	From	To	Est Flow	SWL.(psi)	+ SWL(ft)
5/13/2015	60	80	2l		25

(11) WELL LOG

Ground Elevation _____

Material	From	To
TIGHT BROWN CLAY SMALL GRAVEL	0	22
SMALL GRAVEL BROWN CLAY COURSE SAND	22	54
TAN CLAY SMALL GRVL FINE TO COURSE SAND	54	80

Date Started 6/3/2015 Completed 6/3/2015

(unbonded) Water Well Constructor Certification

I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 1945 Date 7/8/2015

Signed JUSTIN SPLIETHOF (E-filed)

(bonded) Water Well Constructor Certification

I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 1835 Date 7/8/2015

Signed KEVIN D GILL (E-filed)

Contact Info (optional) _____

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

JACK 62241
7/8/2015

WELL I.D. LABEL# L118360
START CARD # 1026669
ORIGINAL LOG #

(1) LAND OWNER Owner Well I.D.
First Name _____ Last Name _____
Company STALLION LAND COMPANY LLC
Address PO BOX 3667
City CENTRAL POINT State OR Zip 97502

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (complete 2a & 10) Abandonment (complete 5a)

(2a) PRE-ALTERATION
Dia + From To Gauge Stl Plstc Wld Thrd
Casing: _____
Material From To Amt sacks/lbs
Seal: _____

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/ Commercial Livestock Dewatering
 Thermal Injection Other

(5) BORE HOLE CONSTRUCTION Special Standard (Attach copy)
Depth of Completed Well 68.00 ft.
BORE HOLE
Dia From To Material SEAL Amt sacks/lbs

Dia	From	To	Material	SEAL	Amt	sacks/lbs
10	0	20	Bentonite Chips	0	20	14 S
6	20	68		Calculated	9	
				Calculated		

How was seal placed: Method A B C D E
 Other DRY POURED
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____
Explosives used: Yes Type _____ Amount _____

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount _____ Actual Amount _____

(6) CASING/LINER
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd

Casing	Liner	Dia	From	To	Gauge	Stl	Plstc	Wld	Thrd
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6	<input checked="" type="checkbox"/>	2	58	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Shoe Inside Outside Other Location of shoe(s) 58
Temp casing Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS
Perforations Method _____
Screens Type _____ Material _____

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scm/slot width	Slot length	# of slots	Tele/ pipe size

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min Drawdown Drill stem/Pump depth Duration (hr)

15		68	1
----	--	----	---

Temperature 54 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below) TDS amount 580 ppm
From To Description Amount Units

(9) LOCATION OF WELL (legal description)
County JACKSON Twp 36.00 S N/S Range 2.00 W E/W WM
Sec 28 NW 1/4 of the NW 1/4 Tax Lot 2100
Tax Map Number _____ Lot _____
Lat _____ " or 42.41535000 DMS or DD
Long _____ " or -122.95333000 DMS or DD
 Street address of well Nearest address
0 BLACKWELL RD. CENTRAL POINT, OR 97502

(10) STATIC WATER LEVEL
Date SWL(psi) + SWL(ft)

Existing Well / Pre-Alteration	Date	SWL(psi)	+ SWL(ft)
Completed Well	6/5/2015		25

Flowing Artesian? Dry Hole?
WATER BEARING ZONES Depth water was first found 46.00
SWL Date From To Est Flow SWL(psi) + SWL(ft)

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)
6/5/2015	46	60	15		25

(11) WELL LOG Ground Elevation _____

Material	From	To
SANDY CLAY GRAVEL	0	3
GRAVEL CLAY COURSE SAND	3	46
GRAVEL COURSE SAND	46	68

RECEIVED
SEP 10 2015
OWRD

Date Started 6/5/2015 Completed 6/5/2015
(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number 1686 Date 6/24/2015
Signed TADD K MOORE (E-filed)

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
License Number 1835 Date 7/8/2015
Signed KEVIN D GILL (E-filed)
Contact Info (optional) CLOUSER DRILLING INC

617955

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765 & OAR 690-205-0210)

JACK 62245
7/14/2015

WELL I.D. LABEL# L 118365
START CARD # 1026929
ORIGINAL LOG #

(1) LAND OWNER Owner Well I.D. _____
First Name _____ Last Name _____
Company STALLION LAND COMPANY LLC
Address PO BOX 3667
City CENTRAL POINT State OR Zip 97502

(2) TYPE OF WORK New Well Deepening Conversion
 Alteration (complete 2a & 10) Abandonment (complete 5a)

(2a) PRE-ALTERATION
Dia + From To Gauge Stl Plstc Wld Thrd
Casing:
Material From To Amt sacks/lbs
Seal: _____

(3) DRILL METHOD
 Rotary Air Rotary Mud Cable Auger Cable Mud
 Reverse Rotary Other _____

(4) PROPOSED USE Domestic Irrigation Community
 Industrial/Commercial Livestock Dewatering
 Thermal Injection Other _____

(5) BORE HOLE CONSTRUCTION Special Standard (Attach copy)
Depth of Completed Well 80.00 ft.

BORE HOLE

Dia	From	To	Material	From	To	Amt	sacks/lbs
10	0	18	Bentomite Chips	0	18	10	S
6	18	80			Calculated	8	
					Calculated		

How was seal placed: Method A B C D E:
 Other DRY Poured
Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____
Explosives used: Yes Type _____ Amount _____

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount _____ Actual Amount _____

(6) CASING/LINER
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd
 6 2 58 .250
Shoe Inside Outside Other Location of shoe(s) 58
Temp casing Yes Dia _____ From _____ To _____

(7) PERFORATIONS/SCREENS
Perforations Method AIR / HOLTE
Screens Type _____ Material _____

Perf/ Screen	Casing/ Liner	Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
Perf	Casing	6	48	58	.188	1	240	

(8) WELL TESTS: Minimum testing time is 1 hour
 Pump Bailer Air Flowing Artesian
Yield gal/min _____ Drawdown _____ Drill stem/pump depth _____ Duration (hr) _____
Temperature 57 °F Lab analysis Yes By _____
Water quality concerns? Yes (describe below) TDS amount 480 ppm
From _____ To _____ Description _____ Amount _____ Units _____

(9) LOCATION OF WELL (legal description)
County JACKSON Twp 36.00 S N/S Range 2.00 W E/W WM
Sec 28 NE 1/4 of the NW 1/4 Tax Lot 2100
Tax Map Number _____ Lot _____
Lat _____ " or _____ DMS or DD
Long _____ " or _____ DMS or DD
 Street address of well Nearest address
0 BLACKWELL RD CENTRAL POINT, OR 97502

(10) STATIC WATER LEVEL
Date 6/24/2015 SWL(psi) _____ + SWL(ft) 22
Existing Well / Pre-Alteration _____
Completed Well _____
Flowing Artesian? Dry Hole?

WATER BEARING ZONES Depth water was first found 48.00

SWL Date	From	To	Est Flow	SWL(psi)	+ SWL(ft)
6/24/2015	48	58	8		22

(11) WELL LOG Ground Elevation _____

Material	From	To
DARK BROWN CLAY & COBBLES	0	3
BROWN CLAY COURSE SAND	3	13
BROWN CLAY WITH MED & LG GRAVEL	13	22
DK BRWN CLAY W/MIXED GRAVL & CR	22	55
TAN CLAY & MIXED GRAVEL	55	59
ORANGE/TANNISH CLAY	59	72
GREY CLAYSTONE MED HARD	72	77
BROWN CLAYSTONE SOFT	77	79
GREY CLAYSTONE MED HARD	79	80

Date Started 6/24/2015 Completed 6/24/2015
(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number _____ Date _____
Signed _____

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
License Number 1835 Date 7/14/2015
Signed KEVIN D GILL (E-filed)
Contact Info (optional) CLOUSER DRILLING INC