

STATE OF OREGON WATER SUPPLY WELL REPORT

LAKE 52865

WELL I.D. LABEL# L

117044

(as required by ORS 537.765 & OAR 690-205-0210)

START CARD #

1041357

12/6/2018

ORIGINAL LOG #

LAKE

52529

(1) LAND OWNER

Owner Well I.D. SVE #2

First Name Last Name Company SURPRISE VALLEY ELECTRIC Address P. O. BOX 691 City ALTURAS State CA Zip 96101

(2) TYPE OF WORK

New Well Deepening Conversion Alteration Abandonment

(2a) PRE-ALTERATION

Casing: Dia From To Gauge Stl Plstc Wld Thrld Seal: Material From To Amt sacks/lbs

(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 1210.00 ft.

Table with columns: Dia, From, To, Material, SEAL, Amt, lbs. Rows for Cement at 0-40ft and 40-495ft.

How was seal placed: Method A B C D E

Backfill placed from 0 ft. to 495 ft. Material CEMENT

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

Table with columns: Casing, Liner, Dia, From, To, Gauge, Stl, Plstc, Wld, Thrld. Rows for 20, 13.38, 9.63, 7 inch diameters.

Shoe Inside Outside Other Location of shoe(s)

Temp casing Yes Dia From To

(7) PERFORATIONS/SCREENS

Perforations Method slotted

Screens Type Material

Table with columns: Perf, Casing/Screen, Dia, From, To, Scrn/slot width, Slot length, # of slots, Tele/pipe size.

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

Pump Bailer Air Flowing Artesian

Table with columns: Yield gal/min, Drawdown, Drill stem/Pump depth, Duration (hr). Row: 2,000, 50, 400, 1.

Temperature 225 °F Lab analysis Yes By

Water quality concerns? Yes (describe below) TDS amount 1,200 mg/L

Table with columns: From, To, Description, Amount, Units.

(9) LOCATION OF WELL (legal description)

County LAKE Twp 33.00 S N/S Range 18.00 E E/W WM Sec 23 SW 1/4 of the NE 1/4 Tax Lot 1300

2665' N & 1725' W from SE corner of Section 23 Paisley, OR

(10) STATIC WATER LEVEL

Table with columns: Existing Well / Pre-Alteration, Date, SWL(psi), SWL(ft). Row: Completed Well, 2/9/2012, 145.

Flowing Artesian? Dry Hole?

WATER BEARING ZONES

Depth water was first found 445.00

Table with columns: SWL Date, From, To, Est Flow, SWL(psi), SWL(ft). Row: 2/9/2012, 445, 1,260.

(11) WELL LOG

Ground Elevation 4473.00

Table with columns: Material, From, To. Row: see attached, 0, 1,260. Includes text: No Special Standards associated with this well.

Date Started 4/26/2011 Completed 2/9/2012

(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.

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.

License Number 2012 Date 12/6/2018

Signed JESUS MARIEZCURRENA (E-filed)

Contact Info (optional) LP Insurance

WATER SUPPLY WELL REPORT - Map with location identified must be attached and shall include an approximate scale and north arrow

LAKE 52865

12/6/2018

Map of Hole

SUMMARY REPORT - OIL OR GAS WELL
STATE OF OREGON • DEPT OF GEOLOGY & MINERAL INDUSTRIES • 229 BROADALBIN ST SW • ALBANY OR 97321

(In compliance with rules and regulations pursuant to ORS 520.)

(1) Permittee Information

Name	Surprise Valley Electrification Corp.
Mailing Address	516 US HWY 395 E
City/State/Zip	Alturas, CA 96101
Telephone	530.233.3511
Fax	530.233.2190
Email	lynnsvec@frontier.com
Prepared by	Lynn Culp

(2) Well Information

Well No.	SVE #2
DOGAMI ID No.	
Drilling Commenced	April 26, 2011
Drilling Completed	February 9, 2012
Date P & A	May 2, 2011
Total Depth	1260 ft
Redrill Depth	
Logs Run	

General Manager*Signature**Title**Date***(3) Casing Record**

Size of Hole	Size of Casing	Weight (pounds per foot)	Grade/Type	Depth	Type and Amount of Cement	
24"	20"	65	A53B	40ft	Type 2	
17.5"	13 3/8"	54	J55	495ft	Type G	240 sks
12.25"	9 5/8"	36	J55	1046ft		
	7"	23	K55 LT&C	1210ft		bbls.

(4) Plugs & Junk

Plugs / Junk	Geological Marker	Depth

(5) Perforations or Liner

Size of Casing	From	To	Shots/ft.	Method of Perforating		
				Jet	Bullet	Slotted Line
9 5/8"	445'	1046'				2.5" slots 6" centers
7"	940	1210				.5" holes/40 holes per ft

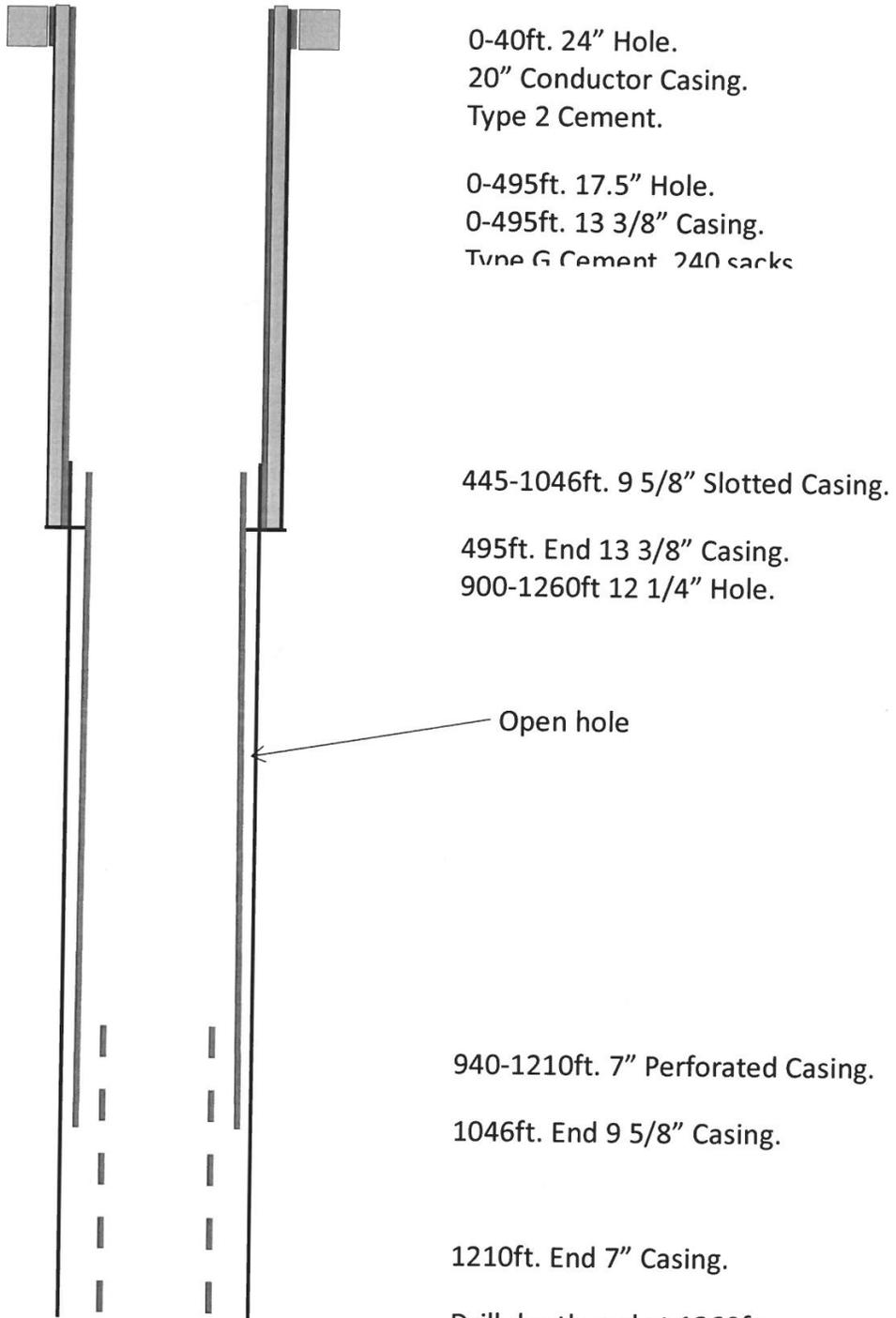
(6) Initial Production

Date	Clean Oil (bbl/day)	Gravity	Percent Water	FTP	FCP	SITP	SICP

12/6/2018

Map of Hole

Surprise Valley Electric Well #2
Completion Diagram



12/6/2018

Map of Hole

LITHOGRAPHIC DESCRIPTION OF OIL OR GAS WELL

(Not required if a mud log is submitted)

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Mailing Address	516 US Hwy 395 E.
City/State/Zip	Alturas, CA 96101
Telephone	530.233.3511
Fax	530.233.2190
Email	lynnsvec@frontier.com
Prepared by	Lynn Culp, Kyle Makovsky, Roy Mink, Silvio Pezzopane

(2) Well Information

Well No.	SVE #2
DOGAMI ID No.	36-037-90027 Lake 1628

General Manager

5/29/2012

Signature

Title

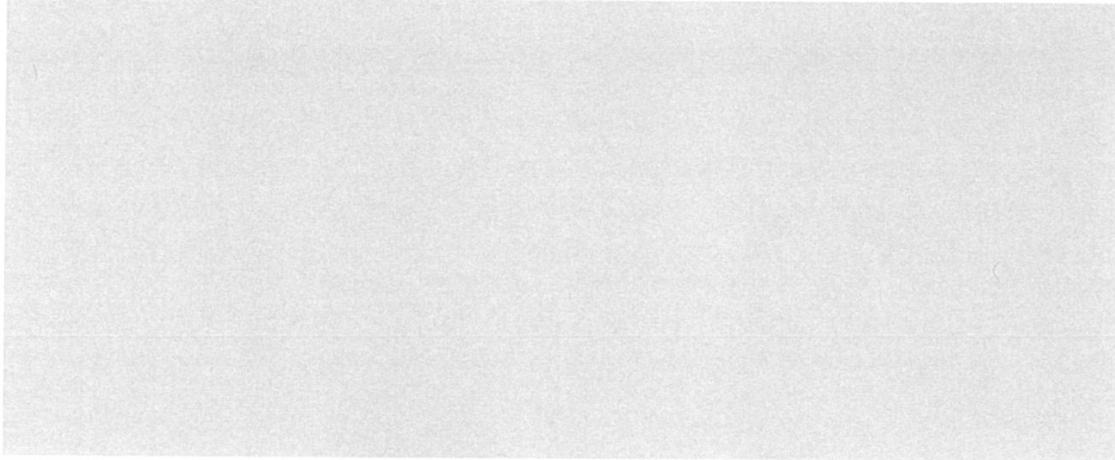
Date

(3) Well Cuttings

Depth		Description
From	To	
0	40	Brown clay soil and gravelly sand
40	60	Light brown ash fragments, reddish rhyolite, black basalt, minor calcite/quartz
60	80	Light brown/grey ash, red rhyolite, black basalt, cinders, rounded grains, black and red cuttings magnetic
80	105	Light grey/brown ash, red rhyolite, black basalt, rounded grains, chert and obsidian magnetic
105	125	Light grey/brown ash, red rhyolite, black basalt, rounded grains, purple, orange alteration, green stone
125	155	Grey/brown ash, red rhyolite, black basalt, rounded grains, black and grey chips magnetic, light tan pumice fragments
155	185	Grey/brown ash, red rhyolite, black basalt, magnetic, white/grey pumice green stone, minor alteration stains
185	210	Grey/brown rhyolite, red rhyolite with alteration, black basalt, white/grey pumice
210	245	Grey/brown rhyolite, red rhyolite, black basalt, light brown pumice
245	300	Grey/brown rhyolite, red and brown rhyolite, black basalt, pumice, rounded grains
300	340	Brown/grey rhyolite, rounded w/ some alteration, light grey tuff, black basalt/rhyolite; light grey tuff, feldspar chips
340	360	Grey/light brown rhyolite, dark grey/black rhyolite, light red/yellow altered rhyolite, some chips rounded
360	410	Grey/brown rhyolite, dark grey/black basalt, light red/yellow altered rhyolite, grey/white pumice, rounded pebbles
410	420	Black basalt, light brown rhyolite, some alteration
425	430	no data - no returns
435	460	Black basalt, light brown/grey rhyolite, red altered rhyolite
460	465	Fine sand of light brown/grey rhyolite, black basalt/rhyolite; light brown/red altered rhyolite
465	475	Light brown/grey rhyolite, black basalt/rhyolite, yellow/red altered rhyolite
475	490	Large amount fine sand, smaller cuttings are same as above with white alteration/pumice
490	510	Altered tuff, light grey to reddish brown to dark brown, waxy texture, amorphous silica present
510	530	no data - no returns
530	565	Dark to light gray basalt, andesite, white and green alteration minerals
565	620	Porphyritic basalt and andesite, pink/dark green/white alteration, opaline quartz, amorphous silica, calcite rhombs
620	695	Dark gray, green, purple, and red basalt, amorphous silica, euhedral quartz, and calcite in vesicles
695	710	Porphyritic andesite, opaline quartz
710	790	Gray green and red basalt, altered, fibrous banded white mineral, calcite rhombs, crystalline and opaline quartz
790	800	Olivine rich basalt, little alteration
800	815	Porphyritic andesite and basalt rock, highly altered, clear crystalline quartz, banded alteration
815	845	Amygdaloidal basalt, amygdules are green, white banded, botryoidal texture, calcite grains
845	890	Gray basalt, little to no alteration
890	905	Vesicular/amygdaloidal basalt, high amount of crystalline quartz filling vesicles
905	920	Basalt with pyrite mineralization
920	930	Gray basaltic andesite
930	960	Gray/red/purple basalt, calcite rhombs, some amygdaloidal calcite
960	1010	Dark gray and green basalt, calcite rhombs
1010	1070	Highly altered vesicular/amygdaloidal basalt, pyrite mineralization, dark green/white/pink alteration minerals
1070	1260	no data - no returns
	1260	- Total Depth

12/6/2018

Map of Hole



SECTION 3: WELL DEVELOPMENT, CONTINUED

Total maximum rate requested: 300 GPM (each well will be evaluated at the maximum rate unless you indicate well-specific rates and annual volumes in the table below).

The table below must be completed for each source to be evaluated or the application will be returned. If this is an existing well, the information may be found on the applicable well log. (If a well log is available, please submit it in addition to completing the table.) If this is a proposed well, or well-modification, consider consulting with a licensed well driller, geologist, or certified water right examiner to obtain the necessary information.

SEE ATTACHMENT E FOR COPY OF THE WELL LOGS

OWNER'S WELL NAME OR NO.	PROPOSED	EXISTING	WELL ID (WELL TAG) NO. OR WELL LOG ID**	FLOWING ARTESIAN	CASING DIAMETER	CASING INTERVALS (IN FEET)	PERFORATED OR SCREENED INTERVALS (IN FEET)	SEAL INTERVALS (IN FEET)	MOST RECENT STATIC WATER LEVEL & DATE (IN FEET)	SOURCE AQUIFER***	PROPOSED USE		
											TOTAL WELL DEPTH	WELL-SPECIFIC RATE (GPM)	ANNUAL VOLUME (ACRE-FEET)
SVE1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L117043	<input type="checkbox"/>	20" 13 3/8"	0-40ft 0-9000ft	900-1360ft	0-900ft	159ft June 2014*	Basalt Lithic mft. See Lithological Description in Well Log	1360ft		
SVE2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	L117044	<input type="checkbox"/>	20" 13 3/8"	0-40ft 0-495ft	495-1260ft	0-495ft	145ft June 2014*	Basalt See Lithological Description in Well Log	1260ft		
	<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"/>									

* STATIC DEPTH ESTIMATE TRUE STATIC WITH NO PUMPING FROM WELLS SEVERAL MONTHS PRIOR

** Licensed drillers are required to attach a Department-supplied Well Tag, with a unique Well ID or Well Tag Number to all new or newly altered wells. Landowners can request a Well ID for existing wells that do not have one. The Well ID is intended to serve as a unique identification number for each well.

*** A well log ID (e.g. MARI1234) is assigned by the Department to each log in the agency's well log database. A separate well log is required for each subsequent alteration of the well.

**** Source aquifer examples: Troutdale Formation, gravel and sand, alluvium, basalt, bedrock, etc.

Revised 8/1/2017

Ground Water/S

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