

**NEVADA COUNTY COMMUNITY DEVELOPMENT AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH**

Inspection request (530) 265-1599

**Wastewater System Construction Permit Application**

Assessor's Parcel Number 27-020-01 Building Permit Number 060-03165  
Job Address 16710 River Ranch Rd, Grass Valley 95949

Owner <u>Ed &amp; Shirley Vanderzyl</u>	Mailing Address <u>3331 La Mesa Dr, #2</u>	Phone Number <u>(650) 654-2668</u>
Applicant <u>Same</u>	Mailing Address <u>Same</u>	Phone Number <u>Same</u>
Contractor/Installer	License Number	Phone Number
Size of Property (acres) <u>40</u>	Subdivision	Lot Number
Number of Bedrooms <u>2</u>	Existing Buildings on Property <u>0</u>	

System Type (check all that apply): ☒ Standard ☐ Pressurized Distribution ☐ Deep Trench ☐ Cap-Fill ☐ Pump  
☐ Pre-Treatment ☐ Curtain Drain ☐ Variance ☐ Other

BY MY SIGNATURE, I AFFIRM THAT I UNDERSTAND THE SYSTEM MUST CONFORM TO THE CURRENT NEVADA COUNTY LAND USE AND DEVELOPMENT CODE, CHAPTER VI (SEWAGE DISPOSAL ORDINANCE AND REGULATIONS), AND THAT I AM RESPONSIBLE FOR COMPLIANCE WITH THE CODE, THIS PERMIT AND PERMIT CONDITIONS. I HEREBY CERTIFY THAT THE PROPERTY OWNER HAS AUTHORIZED THIS APPLICATION FOR A CONSTRUCTION PERMIT.

Applicant's Signature Shirley Vanderzyl Date 8.24.06

**FOR DEPARTMENT USE ONLY**

**SEWAGE DISPOSAL**

☒ New ☐ Expansion/Modification ☐ Repair ☐ Septic Tank Only ☐ Other

TECHNICIAN REVIEW: [Signature] 8-24-06  
(Signed) (Date)

Septic Tank Volume: <u>1,500</u> Gallons	Leach Line Specifications: <input type="checkbox"/> See Approved Special Design
Pump Tank Volume: <u>NA</u> Gallons	Length: <u>194</u> ft. Width: <u>36</u> in.
	Trench Depth from natural grade: <u>24</u> in.
	Soil Cover: <u>12</u> in. Rock under Pipe: <u>6</u> in.

Comments or Permit Conditions:

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**WATER SUPPLY**

IF ON A PRIVATE WELL:

☐ Well Yield Test Required Prior to Building Permit Issuance ☐ "Raw Water Certification" Required Prior to Occupancy ☐ \_\_\_\_\_ Gallons Potable Water Storage Required Prior to Occupancy

REMARKS

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**NOTE:**

- ☐ SEE ATTACHED SPECIAL CONDITIONS
- ☐ ELECTRICAL PERMIT REQUIRED—SEE BUILDING DEPARTMENT FOR PERMIT AND REQUIRED INSPECTIONS
- ☐ MONITORING & MAINTENANCE 'RIGHT OF ENTRY' DOCUMENT MUST BE RECORDED, AND A CONFORMED COPY PROVIDED TO THIS DEPARTMENT FOR PERMIT FINAL APPROVAL
- ☐ ANNUAL CERTIFICATE OF OPERATION REQUIRED PRIOR TO PERMIT FINAL
- ☐ CONSULTANT'S CERTIFICATION REQUIRED FOR PERMIT FINAL APPROVAL

**THIS APPLICATION BECOMES A PERMIT WHEN SIGNED BY THE ENVIRONMENTAL HEALTH DEPT.  
A COPY OF THIS PERMIT MUST BE ON THE JOB SITE DURING SYSTEM CONSTRUCTION**

Issued by [Signature] Issue Date 11/13/06  
Final Approval by [Signature] Final Approval Date 11/27/06

THIS PERMIT EXPIRES 2 YEARS AFTER ISSUE DATE. PERMIT MAY BE RENEWED ONE TIME FOR 2 ADDITIONAL YEARS IF RENEWAL APPLICATION IS MADE PRIOR TO DATE PERMIT EXPIRES.

Job No: 060-03164

White—Environmental Health Dept

Yellow—Job Copy

Pink—Consultant

(Name of Consultant)

NP1

**NEVADA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH  
SEWAGE DISPOSAL SYSTEM CONSTRUCTION INSPECTION REPORT**

Owner/Applicant: VANDERZYL APN: 27-000-01 Date: 11/14/06 Job #: 060-03164  
Site Address: 16710 RIVER ROCK RD  
Installer: MOORE PLUMBING System installed for: 1 (2) 3 4 5 bedrooms Commercial ☐  
System Type: STANDARD ☒ New ☐ Repair ☐ Modification  
Inspection number 1 Comments \_\_\_\_\_  
Water Supply: ☐ Public water ☐ Private well ☐ Other \_\_\_\_\_

☒ SEPTIC TANK: 1,500 gallons ☒ Concrete ☐ Polyethylene Manufacturer: WEDDILL  
☐ PUMP TANK: \_\_\_\_\_ gallons ☐ Concrete ☐ Polyethylene Manufacturer: \_\_\_\_\_  
☒ Manhole risers installed ☐ Effluent filter ☒ Re-bar/observation ports in trenches ☐ Pump/alarm function  
☒ DISPOSAL FIELD: ☐ Pipe & drainrock: \_\_\_\_\_ lineal feet installed. Total depth: \_\_\_\_\_ in. Width: \_\_\_\_\_ in.  
☒ Other material(s): EZ DRAIN : 390 lineal feet installed. Total depth: \_\_\_\_\_ in. Width: \_\_\_\_\_ in.  
☐ PRESSURE DOSED "SQUIRT TEST": \_\_\_\_\_ Pre-treatment component: \_\_\_\_\_  
☐ CURTAIN DRAIN: Depth: \_\_\_\_\_ Open trench inspection completed by: ☐ Consultant ☐ County  
☐ Sewer pipe "Warning..."-tape installed ☐ Building Department to inspect System electrical components

☒ **OK TO BACKFILL.** Proper soils stabilization and erosion control measures must be in place at all times.  
☐ **OK TO BACKFILL PENDING THE FOLLOWING:** ☐ Complete the items listed in the numbered **NOTES** below.  
☐ Design Consultant must inspect and approve installation before backfill.  
☐ **DO NOT BACKFILL:** Correct listed items; re-inspection is required. Call inspection line; 265-1599  
☐ System is not completed or ready for inspection. ☐ Re-inspection of pump/alarm function is required.

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☒ **FOR PERMIT FINAL APPROVAL, PLEASE PROVIDE THE FOLLOWING:** (✓-mark means received)  
☒ Accurate "as-built" drawing 11/16/06 ☐ Septic pumper's inspection report/receipt \_\_\_\_\_  
(date) (date)  
☐ Consultant's written Certification of installation \_\_\_\_\_  
(date)  
☐ Monitoring & Maintenance & Right of Entry Recorded Agreement \_\_\_\_\_ ☐ Service Contract \_\_\_\_\_  
(date) (date)  
☐ Annual Operating Permit (Certificate of Operation) Application & Fee \_\_\_\_\_  
(date)  
☐ Other: \_\_\_\_\_  
(date)

**WELL NOTES:** ☐ An original pump test, or well driller's report dated within the last year is required for building permit release.  
☐ A "Raw Water Certification", conducted by this department, is required prior to occupancy. This requires an application and fee remittance to this department and scheduling of the wellhead inspection. Allow several weeks for sampling and results.

E H Specialist: David Foster Ph# 265-1753 Received By: LEFT ON

NEVADA COUNTY COMMUNITY DEVELOPMENT AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH

Job No: 41-16916

**ON-SITE SOIL EVALUATION**

Applicant's Name Jan Wilson Telephone 432-1190  
Mailing Address P.O. Box 411 City Plum Valley State CA Zip 95946  
Assessor's Parcel Number 27 -- 020 -- 01 Lot Number \_\_\_\_\_  
Property Location 16710 River Ranch City Grass Valley  
Property Owner's Name Lane Levi Address \_\_\_\_\_  
Proposed Land Use SFD  
Size of Property (acres) 40 If Residence, Proposed Number of Bedrooms \_\_\_\_\_  
Proposed Water Supply: ☐ Public, ☒ Well, ☐ Spring, ☐ Other: \_\_\_\_\_

**ONSITE SOIL EVALUATION FINDINGS**

Date Soil Evaluation Conducted 7-15-03 Consultant Dave Lincoln  
See consultant's report dated 7-30-03

The site and soil conditions for an onsite sewage disposal system:

☒ Meet County Regulations for:

	<u>Initial</u>	<u>Repair</u>
Standard System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pressure Dosed	<input type="checkbox"/>	<input type="checkbox"/>
Pre-Treatment	<input type="checkbox"/>	<input type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Curtain Drain required (depth) _____		

The average percolation rate is 43 minutes per inch (mpi).  
Minimum length of leach trench required per bedroom (standard system only): 94  
Maximum depth of leach trench 24

☐ DO NOT meet County Regulations due to:

- |   |  |
|---|--|
| <input type="checkbox"/> Insufficient effective soil depth (_____)  | <input type="checkbox"/> Excessive slope (_____)         |
| <input type="checkbox"/> Insufficient area (_____)                  | <input type="checkbox"/> Cannot meet horizontal setbacks |
| <input type="checkbox"/> Insufficient depth to seasonal groundwater | <input type="checkbox"/> Wet Weather Testing required    |
| <input type="checkbox"/> Rock                                       | <input type="checkbox"/> Other _____                     |

☐ Possible alternatives to mitigate the site or soil conditions:

- |   |   |
|---|---|
| <input type="checkbox"/> Connect to public sewer                | <input type="checkbox"/> Obtain easement onto adjacent parcel |
| <input type="checkbox"/> Apply for variance for _____           |   |
| <input type="checkbox"/> Additional testing elsewhere on parcel | <input type="checkbox"/> Other _____                          |

**PRIOR TO BUILDING PERMIT ISSUANCE, THE FOLLOWING IS REQUIRED:**

- ☒ Apply for wastewater disposal system construction permit and pay appropriate fee(s)  
☒ Submit 2 original copies of consultant's wastewater system design  
☒ Submit 5 copies of a site plan conforming to County site plan requirements including 2 site plans with consultant's original stamp/signature  
☒ Contract with a licensed well driller to apply for a well permit from this department, drill a well and submit a well yield report  
☐ Provide an original well yield report dated within the past year  
☐ Submit a potable water "will serve" letter from \_\_\_\_\_  
☐ Other \_\_\_\_\_

Other comments or conditions: \_\_\_\_\_

**ANY CHANGES IMPACTING THE TESTED SEWAGE DISPOSAL AREA  
MAY INVALIDATE THE FINDINGS OF THIS EVALUATION**

Valeri Anna

EH Specialist's Signature

12-5-03

Date

**— THIS IS NOT A PERMIT —**

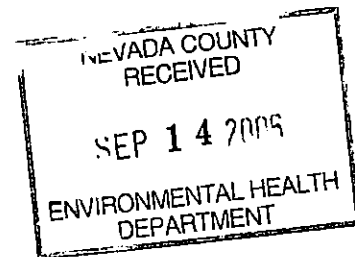
LINCOLN & LONG CIVIL ENGINEERING  
568 East Main Street, Suite D Grass Valley, CA 95945  
Phone (530) 273-0503 Fax (530) 274-3415

January 18, 2006

To Whom It May Concern: DAVID PIERCE

APN: 27-020-01

Located at: 16710 River Ranch Road



**These test results meet the requirements for a STANDARD SEPTIC SYSTEM.**

The average percolation rate was 46 minutes/inch, which dictates the following leach line requirements for your parcel:

- 1 bedroom home 97 linear feet
- 2 bedroom home 194 linear feet
- 3 bedroom home 291 linear feet

A 1500 gallon septic tank is recommend and the leach lines should be 3 feet wide by 24 inches deep with 6 inches of drain rock under the pipe and a minimum of 12 inches clean fill over the straw.

*Note: We highly recommend installing trenches during the dry season (normally between June 1st and October 15<sup>th</sup>) to minimize backhoe glazing of the trench sidewalls.*

*Due to the County Ordinance of January 5, 2004, a "Comprehensive Site Plan" will need to be completed prior to turning the Perc & Mantle results into Nevada County Environmental Health. Please contact this office for information and prices for completing the "Comprehensive Site Plan".*

*In the event that client provides their own comprehensive site plan, an additional fee of \$350.00 is charged for the staff time required to approve plans prepared outside of this office (typical costs include correlating data between conflicting site maps, phone calls to draftsperson, revisions to the site plan, revised designs, etc.).*

*Prices Subject to Change*

Thanks,  
Lincoln & Long  
Civil Engineering

**FILE COPY**

# LINCOLN & LONG

## Civil Engineering and Environmental Services

568 E Main Street Suite D Grass Valley CA 95945

(530) 273-0503 Fax (530) 274-3415

### PERCOLATION TEST

Location of property: 16710 River Ranch Road

Owner/Agent Van Deroyl APN: 27-020-01

Weather: Fair Number of Holes Tested: 3

Test Date: 1/16/06

Depth of holes tested:

#1 30" #2 30" #3 30"

#### DATA OBTAINED FROM PERCOLATION TEST

TIME	HOLE #1 Depth to Water	HOLE #2 Depth to Water	HOLE #3 Depth to Water
10:10	4 5/8	2 5/16	3
10:40	5 1/2 (R) 4 1/2	3 7/8 (R) 2 1/4	4 7/16 (R) 3
11:10	5 3/16 (R) 4 1/2	3 1/2 (R) 2	4 3/16 (R) 3
11:40	5 1/16 (R) 4 3/8	3 3/16 (R) 2 1/16	4 (R) 2 7/8
12:10	4 7/8 (R) 4 1/2	3 1/8 (R) 2	3 3/4 (R) 2 3/4
12:40	5 (R) 4 5/8	3 (R) 2 1/8	3 3/8
1:10	5 1/8	3 1/8 (R) 2	4 (R) 3
1:40	STAB	3	3 5/8

Stabilized rate (min/in.) for hole:

#1 60 #2 30 #3 48

Average percolation rate 46 min./in.

Tests made by John DeLuca

Under the direction of Dave Lincoln CE 27126

NOTES: The location of these soil tests in no way constitutes a property survey and absolutely no guarantee is made. No inference as to the location of property lines/corners should be made from these tests. We guarantee these tests are accurately done, but due to the many complexities of septic engineering, we in no way guarantee these tests will be adequate to obtain a septic permit from Nevada County Environmental Health Department.

## NEVADA COUNTY SOIL TEST-PIT LOG

Test Date:

JAN 9, 06

Page

1 of 1

Parent Rock Type: V G MS A Other Consultant:

DAVE LINCOLN ES VALERIE

SOIL PIT# 3 1<sup>ST</sup> HORIZON Depth: 0 to 31  
Slope: 25% Aspect: \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0% cobble 0% stone 0%  
Color: 2.5 YR 4/8  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

2<sup>ND</sup> HORIZON Depth: 31 to 42  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0% cobble 0% stone 0%  
Color: 2.5 YR 5/8  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

3<sup>RD</sup> HORIZON Depth: 42 to 76  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0% cobble 0% stone 0%  
Color: 5 YR 5/8  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

4<sup>TH</sup> HORIZON Depth: \_\_\_\_\_ to \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_% cobble \_\_\_\_\_% stone \_\_\_\_\_%  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

Effective Soil Depth: \_\_\_\_\_ Groundwater

Consultant Signature

Nevada County Staff Signature

N/ghForm Soil Log1 Revised 11-14-03

SOIL PIT# 4 1<sup>ST</sup> HORIZON Depth: 0 to 36  
Slope: 26% Aspect: \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_% cobble \_\_\_\_\_% stone \_\_\_\_\_%  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 3, Horizon # 1

2<sup>ND</sup> HORIZON Depth: 36 to 47  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_% cobble \_\_\_\_\_% stone \_\_\_\_\_%  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 3, Horizon # 2

3<sup>RD</sup> HORIZON Depth: 47 to 81  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_% cobble \_\_\_\_\_% stone \_\_\_\_\_%  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 3, Horizon # 3

4<sup>TH</sup> HORIZON Depth: \_\_\_\_\_ to \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_% cobble \_\_\_\_\_% stone \_\_\_\_\_%  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

Effective Soil Depth: \_\_\_\_\_ Groundwater

APN

27-020-01

JOB #

05-5163

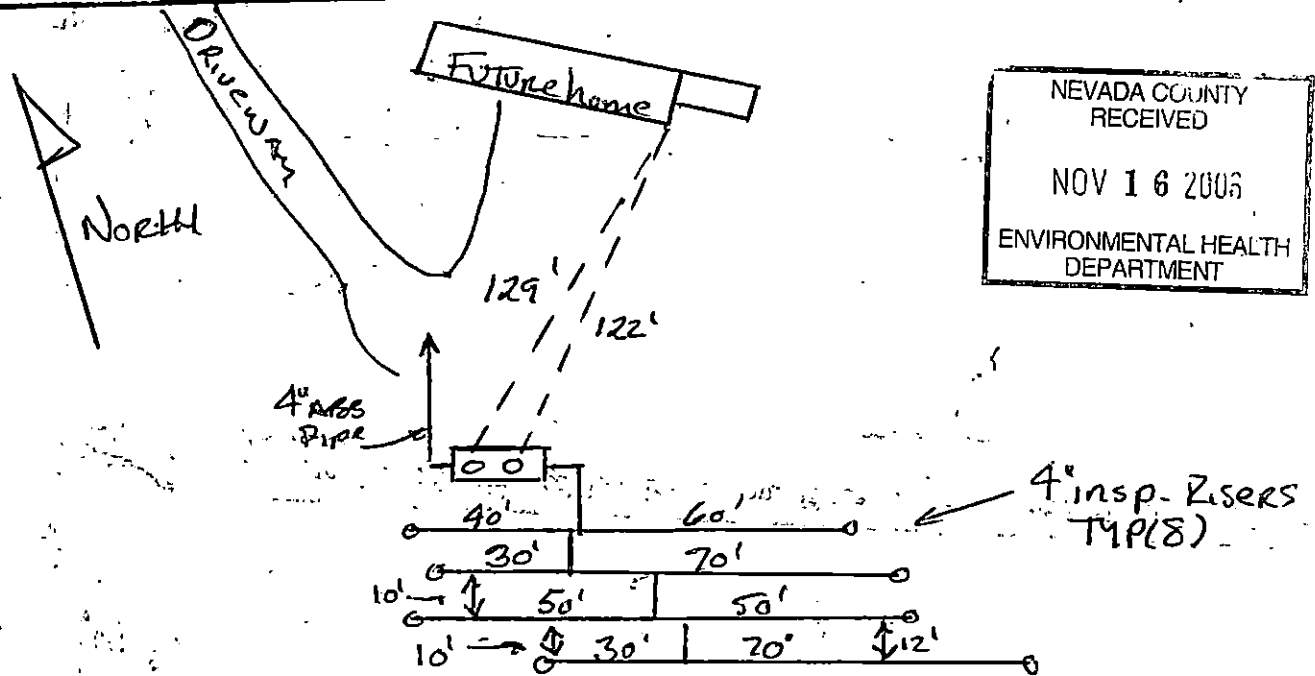
Notes:

# NEVADA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

## Sewage Disposal System "As-Built" Drawing

Site Address: 16710 River Ranch Road APN: 27--020--01  
 Installer's Name: Moore Plumbing Inc Phone#: 530-346-2239  
 Installer's California Contractor's License No.: 365317 or ☒ "Owner-Builder"  
 Installer's Business Address: Po Box 427 Chicago Park Ca 95712

As accurately as possible, show locations of the septic tank, leach field, cross-over pipes, clean-outs, pump tank, curtain drain, and any other components of the system you installed. Reference the septic tank and the ends of all leach lines from two building foundation corners (preferred), or two other permanent objects. Give distance measurements: house to tank, tank to first leach line, all leach line ends to crossovers, leach line lengths, and lengths of crossovers between trenches. Show repair area, and any additional measurements requested by the permit. Draw North Arrow. Use an attachment if needed.



MERRILL 1500 GAL Concr Septic Tank w/EFF. FILTER  
 400' 82 Flow Leach Field

The as-built drawing must be on site at the time of final inspection. If the as-built is not available, it will require a reinspection and additional fee.

Installer Signature: M. Moore Date: 11-11-06  
 FormAsBuilt Rev. 10 August 01



001 001

002 002

003 003

THESE DOCUMENTS SONT LA PROPRIETE DE LA BIBLIOTHEQUE DE LA MAIRIE DE MONTREAL

LES DOCUMENTS SONT A RETOURNER A LA BIBLIOTHEQUE DE LA MAIRIE DE MONTREAL

LES DOCUMENTS SONT A RETOURNER A LA BIBLIOTHEQUE DE LA MAIRIE DE MONTREAL



**COUNTY OF NEVADA  
COMMUNITY DEVELOPMENT AGENCY  
ENVIRONMENTAL HEALTH DEPARTMENT**  
950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1222 FAX (530) 265-9853 www.mynevadacounty.com  
10075 LEVON AVENUE, SUITE 105, TRUCKEE, CA 96161  
(530) 582-7884 FAX (530) 582-0712

**Application for On-Site Soils Evaluation (OSSE)**

Name (print) Ed or Shirley Vanderzyl Daytime Phone (650) 654-2668  
Site Address 16710 River Ranch Rd., Grass Valley  
Nearest Cross Street Doq Bar Assessor's Parcel # 27-020-01  
Consultant \_\_\_\_\_ Phone \_\_\_\_\_  
Type of Project: ☒ Residential \_\_\_\_\_ Subdivision (# of lots: \_\_\_\_\_) \_\_\_\_\_ Commercial/Industrial  
This is for a (check all that apply) ☒ New Test \_\_\_\_\_ Re-test \_\_\_\_\_ New Area on Parcel \_\_\_\_\_ Repair

Please initial that each item below has been addressed:

- SV I certify that the subject property to be tested has no history or visible signs of mining activity. I recognize that if signs or history of mining is later found, the inspection will not be made (or will be called off if the inspection has begun), until clearance is obtained from the Department's Hazardous Materials Division.
- SV Fee paid and "Fee Agreement" form completed.
- SV Provide an accurate site location map. Please draw it for someone who's never been there. Make sure the property is clearly marked with a street number or applicant's name.
- SV A scaled site map showing wells, streams, ponds, proposed house site, easements, etc., makes the process go more quickly and smoothly for you.
- SV Any additional information that may be of value in making a complete assessment of the site, such as previous soils test results, permits, known geologic or mining hazards, etc.

I represent that I am the owner of the subject property, or a legal representative of the property owner, and that I am requesting the described service be provided by the Nevada County Department of Environmental Health. I recognize that the fee paid is for a specific service on a specified date and time. Failure to be ready, or to cancel before the inspector arrives, will incur additional fees.

Signed Shirley Vanderzyl Date 12.9.05

Please print name Shirley Vanderzyl

Department assigned Job Number: 05005763

**RECEIVED**

DEC 09 2005

# OSSE Pre-Issue Site Inspection Report

Job No. 41-05-5163 APN 27-020-01 Date 1-9-06

Physical Location 16710 River Ranch Rd

Consultant D. Lincoln Excavator \_\_\_\_\_ Inspected by N. Awa

Others Present owners

Type of Inspection: ☒ OSSE ☐ Pre-Issue ☒ Single Family ☐ Commercial ☐ Subdivision ☐ Other

Water Supply: Existing? ☒ N ☒ Well ☐ Public ☐ Other \_\_\_\_\_ No. of Acres 40

1. Recent Weather History: Wet Weather Test Season? ☒ Y ☐ N \_\_\_\_\_

rainfall > 40" TTD - overcast today, last few days

2. Vegetation Cover (trees, brush, ground-cover, riparian vegetation, maturity of growth, amount of cover.

Black oak } mature, moderate cover  
Ponderosa pine }

3. Site Topography: Percent Slope \_\_\_\_\_ % Convex Concave Sun Exposure \_\_\_\_\_

Contours: Smooth Irregular \_\_\_\_\_

M-3, M-4 = see attached OSSE agreement

4. Specific Topographical Concerns: Rock Outcroppings Pond Wells Cut Bank Fill Perennial Stream  
Seasonal Drainage Roadside Drainage Structures Powerline Easements \_\_\_\_\_

5. Other Comments: \_\_\_\_\_

# OSSE Pre-Issue Site Inspection Report

Job No. ~~41-~~ 05-5163 APN: 27-020-01 Lot #: \_\_\_\_\_ Date: 1-9-05

**Perc Tests** Number: 3 Depth(s): 30"

**Open Trench Required** ☐ Yes ☒ No **Additional Wet Weather Testing Required:** ☐ Yes ☒ No

**Curtain Drain Required** ☐ Yes ☒ No Depth \_\_\_\_\_

**Comments/Steep Slopes/Other Issues:** \_\_\_\_\_

**Defined Area Agreed To:** \_\_\_\_\_

M-1, M-2 = 50' radius @ each mantle

**MAXIMUM Trench Depth in Defined Area and Proposed Disposal System Type(s)**  
(Pending Satisfactory Perc Test): \_\_\_\_\_

max trench depth = 28"

standard/deep trench system

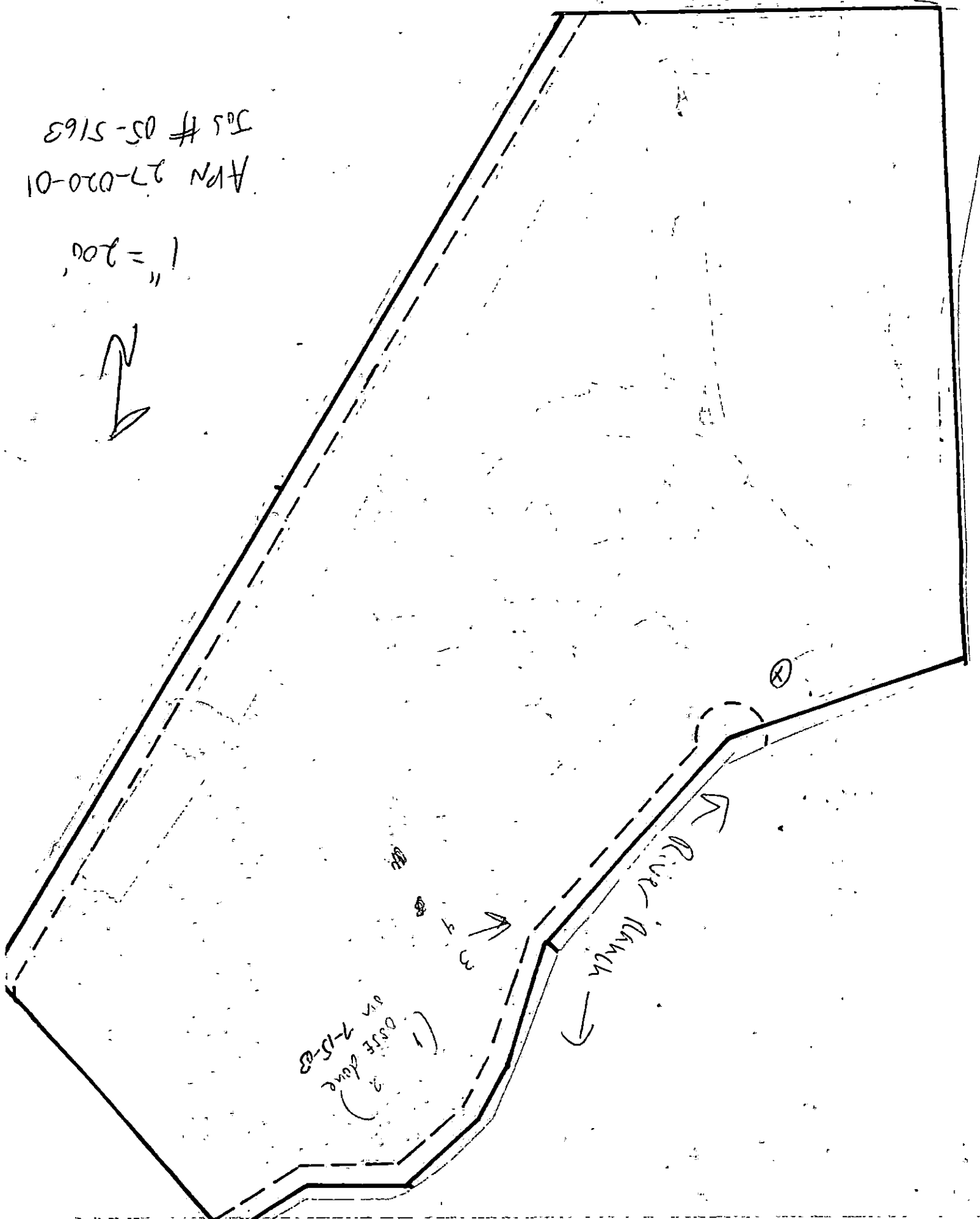
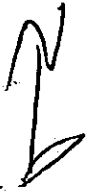
Valeri Lima

(Signature of EH Specialist)

[Signature]  
(Signature of Soils Consultant)

APN 27-020-01  
JOS # 05-5163

1" = 200'



## NEVADA COUNTY SOIL TEST-PIT LOG

Test Date: JAN 9, 06 Page 1 of 1Parent Rock Type: V G MS A Other Consultant: DAVE LINCOLN ES VALERIE

SOIL PIT# 37<sup>1ST</sup> HORIZON Depth: 170 to 360  
Slope: 25 % Aspect: \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0 % cobble 0 % stone 0 %  
Color: 2.5 YR 4/1B  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

2<sup>ND</sup> HORIZON Depth: 270 to 472  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0 % cobble 0 % stone 0 %  
Color: 2.5 YR 5/1B  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

3<sup>RD</sup> HORIZON Depth: 472 to 760  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 0 % cobble 0 % stone 0 %  
Color: 5 YR 5/1B  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

4<sup>TH</sup> HORIZON Depth: \_\_\_\_\_ to \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_ % cobble \_\_\_\_\_ % stone \_\_\_\_\_ %  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

Effective Soil Depth: to 1st Groundwater

Consultant Signature \_\_\_\_\_

Nevada County Staff Signature \_\_\_\_\_

H&amp;H Form Soil Log1 Revised 11-14-03

SOIL PIT# 4<sup>1ST</sup> HORIZON Depth: 0 to 36  
Slope: 26 % Aspect: \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_ % cobble \_\_\_\_\_ % stone \_\_\_\_\_ %  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # 1, Horizon # 1

2<sup>ND</sup> HORIZON Depth: 36 to 47  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_ % cobble \_\_\_\_\_ % stone \_\_\_\_\_ %  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # 1, Horizon # 2

3<sup>RD</sup> HORIZON Depth: 47 to 81  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_ % cobble \_\_\_\_\_ % stone \_\_\_\_\_ %  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # 1, Horizon # 3

4<sup>TH</sup> HORIZON Depth: 4 to \_\_\_\_\_  
Texture: s ls sl sc scl l c cl sic sicl sil si DRX IWRX MWRX DG  
Rock Fragments: gravel \_\_\_\_\_ % cobble \_\_\_\_\_ % stone \_\_\_\_\_ %  
Color: \_\_\_\_\_  
Redoxymorphic Features: none few common many  
RC color \_\_\_\_\_ RD color \_\_\_\_\_ RM color \_\_\_\_\_  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES: \_\_\_\_\_

Same as SOIL PIT # \_\_\_\_\_, Horizon # \_\_\_\_\_

Effective Soil Depth: \_\_\_\_\_ Groundwater

APN 27-020-01JOB # 05-5163

Notes: \_\_\_\_\_

## Soil Test-Pit Log: Key to Terms and Abbreviations

**Slope** as measured in percent.

**Parent Rock Type:** V = Volcanic; G = Granite; MS = Metasedimentary; A = Alluvium

**Effective Soil Depth** is defined as: "the depth of soil material from ground surface that effectively provides filtration of effluent. Effective soil excludes soil layers that meet the criteria for 'Soil With Rapid Permeability' and 'Conditions Associated With Saturation' and 'Limiting Layers'." **Soil With Rapid Permeability** is defined as: "soil with: (A) percolation rates less than six (6) minutes per inch, or (B) soil texture classes of sand or loamy sand, or (C) soils containing more than 50% rock fragments greater than 2 mm in diameter, or (D) soils with stones, cobbles, gravel and rock fragments with too little soil material to fill interstices larger than one (1) mm in diameter." **Conditions Associated With Saturation** are defined as: "(A) reddish brown or brown oxidized soil horizons with dull gray zones of redox-depletions (chromas of 2 or less), and red or yellowish red zones of redox concentrations; or (B) reduced, or iron depleted, horizons of gray, blue, or olive colors (chromas of 2 or less) with dull red, yellowish red, or brown zones of redox concentrations; or (C) organic soils and dark-colored soils very high in organic matter. **Limiting Layer** is defined as: "a layer that impedes the movement of water, air or the growth of plant roots. For example: hardpan, claypan, fragipan, bedrock, and expansive clay."

**Depth** of soil horizon from top to bottom of horizon as measured from grade.

### Texture:

s = sand	ls = loamy sand	sl = sandy loam
sc = sandy clay	scl = sandy clay loam	l = loam
c = clay	cl = clay loam	sic = silty clay
sicl = silty clay loam	sil = silt loam	si = silt
DRX = bedrock		MWRX = moderately weathered rock
IWRX = intensely weathered rock		DG = decomposed granite

**Rock Fragments:** gravel (avg. diameter: 0.078 inches [2 mm] to 3 inches)  
cobbles (avg. diameter: 3 inches to 10 inches)  
stones and boulders (avg. diameter: >10 inches)

**Color** of a moist soil matrix, broken ped face, using Munsell Soil Color Chart or other standard soil color books.

**Redoxymorphic Features:** few <2%      common 2-20%      many >20%

RC = Redox concentrations; note color of moist soil using Munsell chart or other standard soil color books.

RD = Redox depletions; note color of moist soil using Munsell chart or other standard soil color books.

RM = Reduced matrices; note color of moist soil using Munsell chart or other standard soil color books.

<b>Structure:</b>	<u>granular/platy</u>	<u>blocky/prismatic</u>
fine	<1/8 inch (<2 mm)	<3/8 inch (10 mm)
medium	1/8-3/16 in (2-5 mm)	3/8-3/4 in (10-20 mm)
coarse	>3/16 inch (>5 mm)	>3/4 inch (>20 mm)

**Soil Pores:** fine <1/8 inch (2 mm)  
medium 1/8-3/16 inch (2-5 mm)  
coarse >3/16 inch (>5 mm)  
inters = interstitial  
tubular = tubular

**Consistence:** l = loose  
vfr = very friable  
fr = friable  
f = firm  
vf = very firm  
ef = extremely firm

**Plasticity:** np = non-plastic  
sp = slightly plastic  
mp = moderately plastic  
vp = very plastic

**Stickiness:** ns = non-sticky  
ss = slightly sticky  
ms = moderately sticky  
vs = very sticky

**Roots:** vf = very fine <1/16 inch (1 mm)  
f = fine 1/16-1/8 inch (1-2 mm)  
m = medium 1/8-3/16 inch (2-5 mm)  
c = coarse >3/16 inch (>5 mm)

### Boundary:

**Distinctness:** a = abrupt < 1 inch  
c = clear 1 to 2 inches  
g = gradual 2 to 6 inches  
d = diffuse > 6 inches

**Topography:** s = smooth  
w = wavy  
i = irregular  
b = broken



**COUNTY OF NEVADA  
COMMUNITY DEVELOPMENT AGENCY  
ENVIRONMENTAL HEALTH DEPARTMENT**

950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1222 FAX (530) 265-7056 [www.mynevada.co](http://www.mynevada.co)  
10075 LEVON AVENUE, SUITE 105, TRUCKEE, CA 96161  
(530) 582-7884 FAX (530) 582-0712

**RECEIVED**  
JUN 16 2003

**Application for On-Site Soils Evaluation (OSSE)**

NEVADA COUNTY  
COMMUNITY DEVELOPMENT AGENCY

Name (print) Lane Levi Daytime Phone \_\_\_\_\_  
Site Address 16710 River Ranch Road  
Nearest Cross Street Archer Road Assessor's Parcel # 27-020-01  
Consultant Lincoln and Long Phone 273-0503  
Type of Project: ☒ Residential \_\_\_\_\_ Subdivision (# of lots: \_\_\_\_\_) \_\_\_\_\_ Commercial/Industrial  
This is for a (check all that apply) ☒ New Test \_\_\_\_\_ Re-test \_\_\_\_\_ New Area on Parcel \_\_\_\_\_ Repair

Please initial that each item below has been addressed:

- ☒ HB I certify that the subject property to be tested has no history or visible signs of mining activity. I recognize that if signs or history of mining is later found, the inspection will not be made (or will be called off if the inspection has begun), until clearance is obtained from the Department's Hazardous Materials Division.
- ☒ HB Fee paid and "Fee Agreement" form completed.
- ☒ HB Provide an accurate site location map. Please draw it for someone who's never been there. Make sure the property is clearly marked with a street number or applicant's name.
- ☒ HB A legible copy of the Assessor's plot map. NOTE: In addition, a scaled site map showing wells, streams, ponds, proposed house site, easements, etc., makes the process go more quickly and smoothly for you.

Any additional information that may be of value in making a complete assessment of the site, such as previous soils test results, permits, known geologic or mining hazards, etc.

I represent that I am the owner of the subject property, or a legal representative of the property owner, and that I am requesting the described service be provided by the Nevada County Department of Environmental Health. I recognize that the fee paid is for a specific service on a specified date and time. Failure to be ready, or to cancel before the inspector arrives, will incur additional fees.

Signed ☒ Hal Brown Date ☒ 6-13-03

Please print name ☒ Hal Brown

Department assigned Job Number: 41-16916



## OSSE Pre-Issue Site Inspection Report

Job No. 41- 16916 APN 27-020-01 Date 7-15-03 Page 1 of 3

Physical Location 16710 River Ranch Rd.

Consultant D. Lincoln Excavator Bob Inspected by V. Aurs

Others Present owner

Type of Inspection: ☒ OSSE ☐ Pre-Issue ☒ Single Family ☐ Commercial ☐ Subdivision ☐ Other

Water Supply: Existing? Y ☒ (N) ☐ Well ☐ Public ☐ Other \_\_\_\_\_ No. of Acres 40

1. Recent Weather History: Wet Weather Test Season? Y ☒ (N) \_\_\_\_\_

Hot, sunny past few days

2. Vegetation Cover (trees, brush, ground-cover, riparian vegetation, maturity of growth, amount of cover.

Black oak } mature, moderate cover  
ponderosa pine }

3. Site Topography: Percent Slope 15 % ☒ Convex ☐ Concave Sun Exposure Filtered

Contours: ☒ Smooth ☐ Irregular \_\_\_\_\_

4. Specific Topographical Concerns: Rock Outcroppings Pond Wells Cut Bank Fill Perennial Stream  
Seasonal Drainage Roadside Drainage Structures Powerline Easements \_\_\_\_\_

5. Other Comments: \_\_\_\_\_

# OSSE Pre-Issue Site Inspection Report

Job No. 41- 16916 APN: 27-020-01 Lot #: \_\_\_\_\_ Date: 7-15-03

**Perc Tests** Number: 3 Depth(s): 30"

**Open Trench Required** ☐ Yes ☒ No **Additional Wet Weather Testing Required:** ☐ Yes ☒ No

**Curtain Drain Required** ☐ Yes ☒ No Depth \_\_\_\_\_

**Comments/Steep Slopes/Other Issues:** \_\_\_\_\_

Steep slope east of M-2 ~ 50'

**Defined Area Agreed To:** \_\_\_\_\_

M-1, M-2  $\Rightarrow$  50' radius on ~~the~~  $\leq 30^\circ$  slope

**MAXIMUM Trench Depth in Defined Area and Proposed Disposal System Type(s)**  
(Pending Satisfactory Perc Test): \_\_\_\_\_

max trench depth = ~~30~~ 24"

Standard system

Valerie Ama

(Signature of EH Specialist)

[Signature]

(Signature of Soils Consultant)

# OSSE Pre-Issue Site Inspection Report

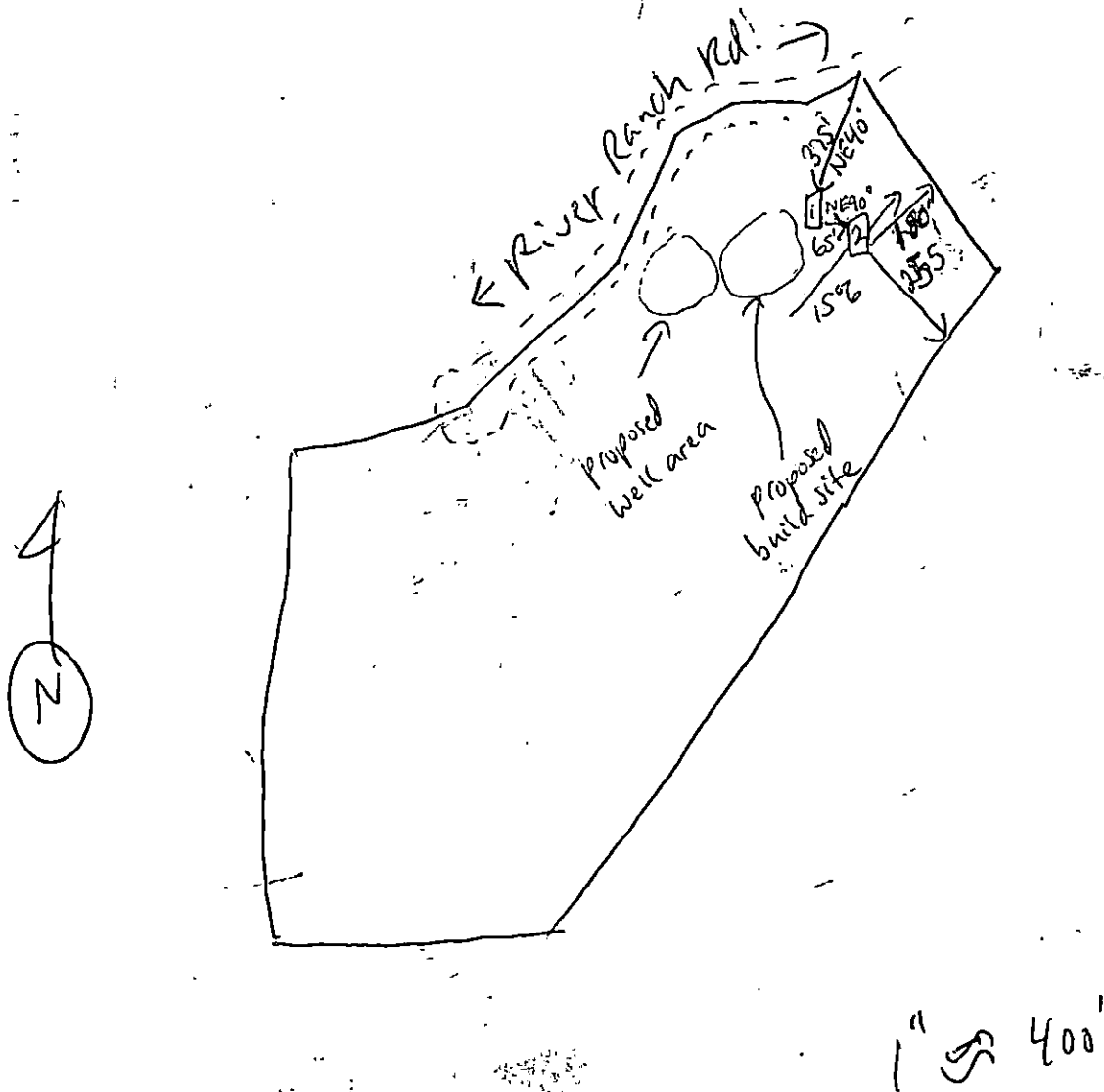
Job No. 41- 16916

APN 27-020-01

Date 7-15-03

Page 3 of 3

## SITE SKETCH MAP



## NEVADA COUNTY SOIL TEST-PIT LOG

Parent-Rock Type: V G MS A Other Consultant:

Test Date:

15 July 03

Page 1 of 1

D. Linco ES Valerio

SOIL PIT# 1 1<sup>ST</sup> HORIZON Depth: 0 to 14  
Slope: 15 % Aspect: E  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 4 % cobble 0 % stone 0 %  
Color: 2.5 YR 3/4  
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # , Horizon #

2<sup>ND</sup> HORIZON Depth: 14 to 25  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 2.5 YR 4/4 % cobble 0 % stone 0 %  
Color: 2.5 YR 4/4  
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # , Horizon #

3<sup>RD</sup> HORIZON Depth: 25 to 64  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 5 YR 4/4 % cobble 0 % stone 0 %  
Color: 5 YR 4/4  
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # , Horizon #

4<sup>TH</sup> HORIZON Depth: 64 to 73  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel 5 YR 5/6 % cobble 0 % stone 0 %  
Color: 5 YR 5/6  
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # , Horizon #  
Effective Soil Depth: 73" Groundwater

Consultant Signature

Nevada County Staff Signature

H/gh/Fom Soil Log1 Revised 6-25-01

SOIL PIT# 2 2<sup>ST</sup> HORIZON Depth: 0 to 18  
Slope: 16 % Aspect:   
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel % cobble % stone %  
Color:   
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 1, Horizon # 1

2<sup>ND</sup> HORIZON Depth: 18 to 34  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel % cobble % stone %  
Color:   
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 1, Horizon # 2

3<sup>RD</sup> HORIZON Depth: 34 to 65  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel % cobble % stone %  
Color:   
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 1, Horizon # 3

4<sup>TH</sup> HORIZON Depth: 65 to 72  
Texture: s ls sl sc scl l c cl sic sil sil si DRX IWRX MWRX DG  
Rock Fragments: gravel % cobble % stone %  
Color:   
Redoxymorphic Features: none few common many  
RC color RD color RM color  
Structure: gran platy block prism f m c single grain massive  
Soil Pores: none few common many f m c inters tubular  
Moist Consistence: l vfr fr f vf ef  
Plasticity: np sp mp vp Stickiness: ns ss ms vs  
Roots: none few common many vf f m c  
Boundary: Distinctness: a c g d Topography: s w i b  
Moisture: dry moist wet saturated  
NOTES:

Same as SOIL PIT # 1, Horizon # 4  
Effective Soil Depth: 72" Groundwater

APN

27-020-01

JOB #

41-16916

Notes:

Standard System @ M-1, M-2 pend.  
peers @ 36"

July 30, 2003

To Whom It May Concern:

Attached are the results of the percolation tests that we recently completed on

APN: 27-020-01

Located at: 16710 River Ranch Road

This test result log should be retained to be submitted to the Environmental Health Department for a septic permit.

**These test results meet the requirements for a STANDARD SEPTIC SYSTEM.**

The average percolation rate was 43 minutes/inch, which dictates the following leach line requirements for your parcel:

1 bedroom home 94 linear feet

2 bedroom home 187 linear feet

3 bedroom home 281 linear feet

4 bedroom home 375 linear feet

\*Add this amount  
of leach line to  
your plot plan

A 1500 gallon septic tank is recommend and the leach lines should be 3 feet wide by 24 inches deep with 6 inches of drain rock under the pipe and a minimum of 12 inches clean fill over the straw.

The County requires a scaled site plan to obtain a septic permit. The ordinance allows for you to do this site plan for a Standard System. We will provide this service if you desire for a fee of \$250.

*Note: We highly recommend installing trenches during the dry season (normally between June 1st and October 15<sup>th</sup>) to minimize backhoe glazing of the trench sidewalls.*

*Prices Subject to Change*

Thanks,  
Lincoln & Long Civil Engineering

## Percolation Test

Location of property : 16710 River Ranch Road

Owner/Agent: Levi Wilson APN: 27-020-01

Weather : Hot No. of Holes tested : 3

Test Date: 7/25/03

Depth of holes tested

#1 30" #2 30" #3 30"

### DATA OBTAINED FROM PERCOLATION TEST

TIME	HOLE #1 Depth to Water	HOLE #2 Depth to Water	HOLE #3 Depth to Water
------	------------------------------	------------------------------	------------------------------

7:50	2 <sup>3</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>8</sub>	2 <sup>9</sup> / <sub>16</sub>
8:20	4 (R) 2 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>2</sub> (R) 1 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub> (R) 2 <sup>1</sup> / <sub>2</sub>
8:50	3 <sup>1</sup> / <sub>2</sub> (R) 2	2 <sup>1</sup> / <sub>4</sub> (R) 1 <sup>1</sup> / <sub>2</sub>	3 <sup>5</sup> / <sub>8</sub> (R) 2 <sup>3</sup> / <sub>8</sub>
9:20	3 <sup>1</sup> / <sub>16</sub> (R) 2	2 <sup>1</sup> / <sub>8</sub> (R) 1 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub> (R) 2 <sup>1</sup> / <sub>2</sub>
9:50	2 <sup>7</sup> / <sub>8</sub> (R) 2 <sup>1</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>16</sub> (R) 1 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub> (R) 2 <sup>7</sup> / <sub>16</sub>
10:20	3 (R) 2	2 <sup>1</sup> / <sub>16</sub> (R) 1 <sup>7</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub> (R) 2 <sup>1</sup> / <sub>2</sub>
10:50	2 <sup>7</sup> / <sub>8</sub>	2	3 <sup>1</sup> / <sub>4</sub>

Stabilized rate (min/in.) for hole:

#1 35 #2 54 #3 40

Average percolation rate 43 min./in.

Tests made by John DeLuca

Under the direction of Dave LINCOLN CE 27126

NOTES: The location of these soil tests in no way constitutes a property survey and absolutely no guarantee is made. No inference as to the location of property lines/ corners should be made from these tests.

We guarantee these tests are accurately done, but due to the many complexities of septic engineering, we in no way guarantee these tests will be adequate to obtain a septic permit from Nevada County Environmental Health Department.

NEVADA COUNTY DEPARTMENT OF  
ENVIRONMENTAL HEALTH

950 Maidu Avenue  
Nevada City, CA 95959  
(530) 265-1222  
Fax (530) 265-7056

10075 Levon Avenue Suite 105  
Truckee, CA 96161  
(530) 582-7884  
Fax (530) 582-0712

NEVADA COUNTY  
COMMUNITY DEVELOPMENT AGENCY

JOB NUMBER: 04004497

APN: 27 - 020 - 01

PERMIT NUMBER NO 9302

Both Assessor's Parcel Number and Permit  
Number must show on Well Driller's Report.

RECEIVED

OCT 26 2004

**APPLICATION/PERMIT TO CONSTRUCT, REPAIR OR DESTROY A WELL**

Property Owner: Ed Vanderzyl Owner's Mailing Address: 3331 La Mesa Dr., #2, San Carlos, CA 94070  
Job Site Address: 16710 River Ranch Road City: Grass Valley Zip: 95949  
Nearest Cross Street: ARCHER ROAD Parcel Acreage: 40.0

PROPOSED WORK: ☒ New Well ☐ Deepening ☐ Destruction (Include Diagram of Proposal)

☐ Repair or Modification: (Proposed Work)

(Include Diagram of Proposal)

TYPE OF WELL: ☒ Class I ☐ Class II ☐ Monitoring PROPOSED USE: Domestic

Angular Seal Depth Proposed: \_\_\_\_\_

CASING TYPE: ☒ Plastic ☐ Steel Diameter 6" Wall Thickness or Gauge F-480, CL 125

SEALING MATERIAL: ☒ Bentonite ☐ Concrete ☐ Other (Please Specify) \_\_\_\_\_

Sealing Application: ☐ Pumped/Tremie ☐ Dropped

PROPOSED SEAL DATE AND TIME: Date \_\_\_\_\_ Time Will Call

WELL CONTRACTOR: Peters' Drilling and Pump Service C-57 License No. 456136

Business Address: P.O. Box 1546, Grass Valley, CA 95945 Phone: (530) 273-8136

I hereby certify that the work described in this application will be done in accordance with the provisions of the Nevada County Land Use and Development Code, Chapter X, pertaining to well construction, repair, modification, deepening, and destruction. Within 90 days of completion of work, I will furnish the Nevada County Department of Environmental Health a complete and accurate copy of the water well "Driller's Report"; DWR Form No. 188.

WELL CONTRACTOR ☒ Greg Steffen DATE 10/22/04

PERMIT EXPIRES ONE YEAR FROM DATE OF ISSUE

DEPARTMENT USE ONLY—Do Not Write Below This Line

PERMIT REQUIREMENTS: Maintain All County Setback Requirements Including 25 Feet Minimum From Well  
To Waste Plumbing Within A Structure.

Permit Issued By Greg Powell Date 1-13-05

SEAL: Date 1-06-05 Depth 22' Inspector Dave Presta  
COMPLETED WELL: Date Completed 1/12/05 Total Depth 760 Yield\* 3.5 gpm  
Construction Final Approval By Sally Carmichael Date 2/9/05

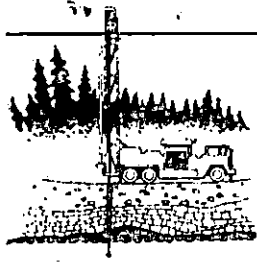
\*NOTE: This rate is provided by the well driller and is stated solely for the purpose of obtaining clearance for a building permit. For this purpose, this well yield is valid for one (1) year from date of well completion. Well yield can change over time.

White—Office

Yellow—Contractor

Pink—Owner

F/kgH Forms Rev 04-29-04



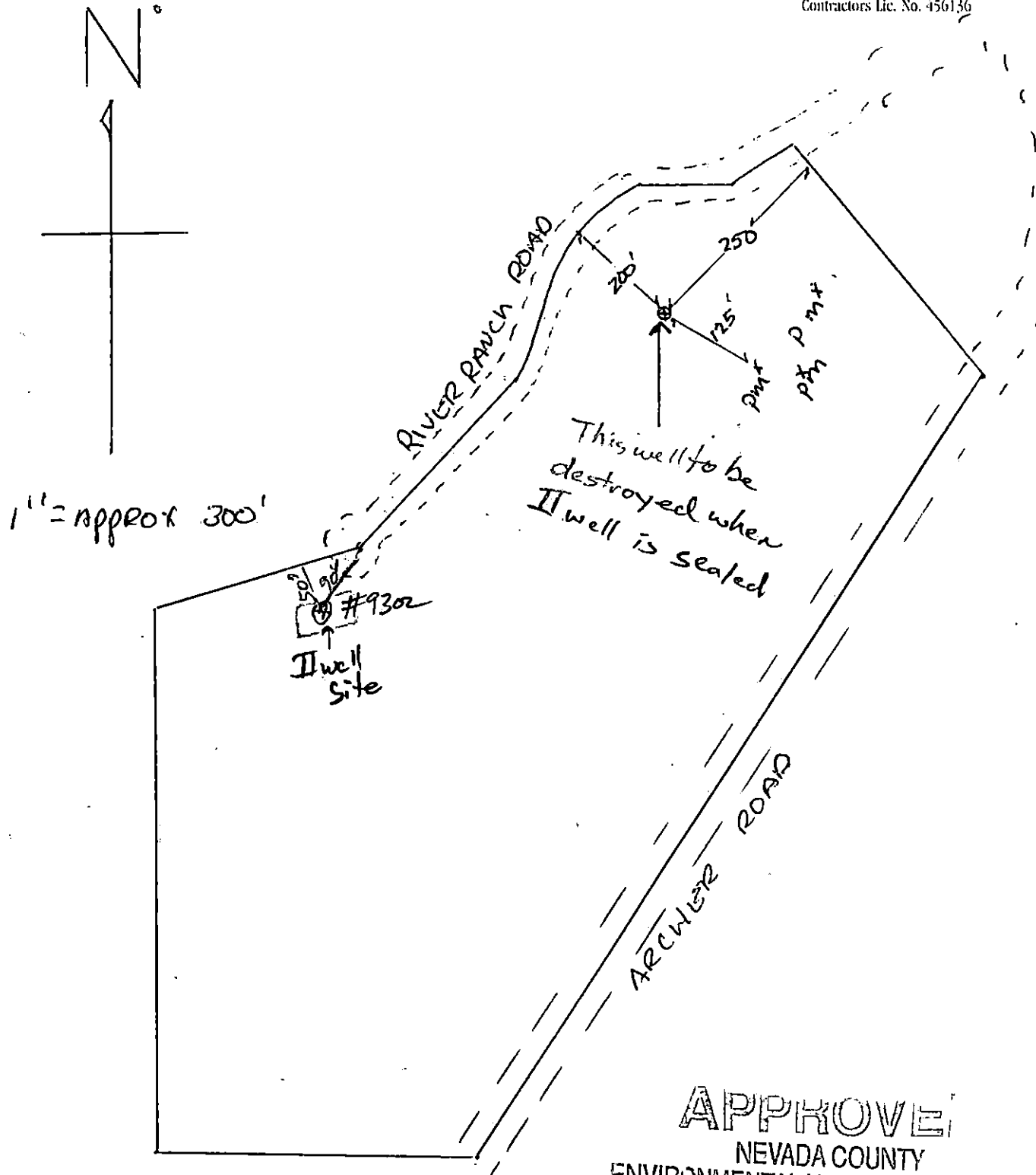
# PETERS'

DRILLING &  
PUMP SERVICE

ED VANDERZYL  
16710 RIVER RANCH RD  
Grass Valley, CA 95945  
AC 40'  
APN 27-020-01

P.O. Box 1546  
Grass Valley, CA 95945  
Valley (530) 273-8136  
FAX (530) 273-1213

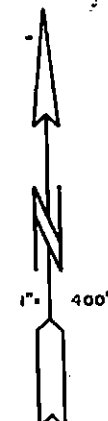
Colfax (530) 346-6210  
Auburn (530) 888-7311  
Lincoln (916) 645-9692  
Yuba County (530) 751-9009  
Contractors Lic. No. 456136



APPROVE  
NEVADA COUNTY  
ENVIRONMENTAL HEALTH DEPARTMENT  
DATE: 1-13-05 BY: Kay Powell  
FOR: Class well #9302/040-04497

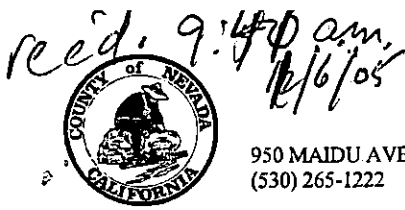


27-02  
(FMLY. II-46)



Assessor's Map Bk. 27 - Pg. 02  
County of Nevada, Calif.

1982 3-1-86  
3-1-83 3-1-82  
3-1-84 1-1-97



COUNTY OF NEVADA COMMUNITY DEVELOPMENT AGENCY  
ENVIRONMENTAL HEALTH DEPARTMENT

www.newmynevadacounty.com

950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1222 FAX (530) 265-9853

10075 LEVON AVENUE, SUITE 105, TRUCKEE, CA 96161  
(530) 582-7884 FAX (530) 582-0712

WELL CONSTRUCTION INSPECTION FORM

Date: 1/6/05 Time In: 11:50 Time Out: 12:45  
(and destruction) Well Seal Request Date/Time: 1/6/05; 12:45  
APN: 27 020 - 01 Permit #: 9302 Job #: 040-04952  
(9340: destruction)  
Location: 16710 River Ranch Rd. Nearest Cross Street: Archer Rd.  
Property Owner: (Panels) Peters Drilling (for Ed Vandenseal.)  
Well Contractor: (Panels) Peters Drilling  
Depth of Well: \_\_\_\_\_ Estimated Yield: \_\_\_\_\_ (gpm)  
Depth of Casing: 40' Casing Material: ☒ PVC ☐ Steel  
Annular Seal Depth: 25' Annular Seal Thickness: 2" No. of Bags: 15/2 GPS: ☐ Yes ☒ No  
Annular Material: ☐ Cement ☒ Bentonite ☐ Grout How Applied: ☒ Dropped ☐ Tremie  
Packer Type: ☒ Plastic ☐ Boot First Water: \_\_\_\_\_ Static Level: \_\_\_\_\_

- ☐ Well drilled in approved location: ☒ Yes ☐ No Annular seal witnessed: ☒ Yes ☐ No  
☐ Well location has not received final approval pending Department review of permit application.  
☐ Wells that produce less than 3gpm require a pumped yield test and 1000 gallons of water storage.  
☐ Erosion control in place: ☒ Yes ☐ No

Comments: PACKER SET BEFORE INSPECTOR ARRIVED, WELL DEPTH  
80' SO FAR TODAY. 15 BAGS BENTONITE, 2 BAGS CONCRETE ON  
SURFACE.

OBSERVED DESTRUCTION OF NEW DEE WELL, FILLED APPROX 700'  
WITH CUTTINGS INSIDE WELL CASING, THEN 7 BAGS BENTONITE  
TO SURFACE, WELL CASING BROKEN OFF JUST BELOW SURFACE.

Received By: [Signature] ☒ Driller ☐ Helper ☐ Owner/Representative  
Inspector: [Signature]



COUNTY OF NEVADA COMMUNITY DEVELOPMENT AGENCY  
ENVIRONMENTAL HEALTH DEPARTMENT

www.new.mynevadacounty.com

950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1222 FAX (530) 265-9853

10075 LEVON AVENUE, SUITE 105, TRUCKEE, CA 96161  
(530) 582-7884 FAX (530) 582-0712

WELL CONSTRUCTION INSPECTION FORM

Date: 11-08-04 Time In: 1:30 Time Out: \_\_\_\_\_

Well Seal Request Date/Time: 11-05-04

APN: 27 - 020 - 01 Permit #: 9302 Job #: 040-0

Location: 16710 River Ranch RD Nearest Cross Street: Archer RD

Property Owner: Ed Vanderzy

Well Contractor: Peters

Depth of Well: \_\_\_\_\_ Estimated Yield: \_\_\_\_\_ (gpm)

Depth of Casing: \_\_\_\_\_ Casing Material: ☐ PVC ☐ Steel

Annular Seal Depth: \_\_\_\_\_ Annular Seal Thickness: \_\_\_\_\_ No. of Bags: \_\_\_\_\_ GPS: ☐ Yes ☐ No

Annular Material: ☐ Cement ☐ Bentonite ☐ Grout How Applied: ☐ Dropped ☐ Tremie

Packer Type: ☐ Plastic ☐ Boot First Water: \_\_\_\_\_ Static Level: \_\_\_\_\_

☐ Well drilled in approved location: ☐ Yes ☐ No Annular seal witnessed: ☐ Yes ☒ No

☒ Well location has not received final approval pending Department review of permit application.

☐ Wells that produce less than 3gpm require a pumped yield test and 1000 gallons of water storage.

☐ Erosion control in place: ☐ Yes ☐ No

Comments: \_\_\_\_\_

Received By: \_\_\_\_\_ ☒ Driller ☐ Helper ☐ Owner/Representative

Inspector: Neg Powell

**COPY**

STATE OF CALIFORNIA  
**WELL COMPLETION REPORT**  
Refer to Instruction Pamphlet

Page 1 of 3

Owner's Well No. 05-2

No. **E020651**

Work Began 1/6/2005, Ended 1/12/2005

Local Permit Agency Nevada Co Environmental Health

Permit No. 9302

Permit Date 11/9/2004

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

**GEOLOGIC LOG**

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE (SPECIFY)

DEPTH FROM SURFACE DRILLING METHOD AIR FLUID

FL. to FL. DESCRIPTION Describe material, grain, size, color, etc.

0 18 Red Dirt & Clay  
18 52 Greenstone  
52 55 Fracture  
55 380 Greenstone  
380 650 Greenstone w/Soft Spots  
650 660 Fractured Rock  
660 760 Greenstone

ENTERED  
6040044970

RECEIVED  
JAN 18 2005

ENVIRONMENTAL HEALTH

TOTAL DEPTH OF BORING 760 (Feet)  
TOTAL DEPTH OF COMPLETED WELL 760 (Feet)

**WELL OWNER**

Name Ed Vanderzyl

Mailing Address 3331 La Mesa Dr., #2

San Carlos

CITY

CA

94070

STATE

ZIP

**WELL LOCATION**

Address 16710 River Ranch Road

City Grass Valley CA 95949

County Nevada

APN Book 27 Page 020 Parcel 01

Township 14 N Range 9 E Section 6

Latitude

DEG. MIN. SEC.

DEG. MIN. SEC.

**LOCATION SKETCH**

NORTH

WEST EAST  
RIVER RANCH ROAD  
Well site

**ACTIVITY**

☒ NEW WELL

**MODIFICATION/REPAIR**

Deepen

Other (Specify)

DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

**PLANNED USES**

☒ WATER SUPPLY

☒ Domestic ☐ Public

☐ Irrigation ☐ Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

**WATER LEVEL & YIELD OF COMPLETED WELL**

DEPTH TO FIRST WATER 650 (FL) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 40 (FL) & DATE MEASURED 1/12/2005

ESTIMATED YIELD 3.5 (GPM) & TEST TYPE Air

TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN (FL)

May not be representative of a well's long-term yield.

DEPTH FROM SURFACE FL. to FL.	BORE HOLE DIA. (Inches)	CASING (S)					
		TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)
		BLANK	SCREEN	CONDUIT	FILL PIPE		
0 22	10 5/8						
22 40	8 5/8						
0 40		✓				F-480	6"
0 380		✓				F-480	4"
380 400			✓			F-480	4"
400 560		✓				F-480	4"
							1/8" x 3"

DEPTH FROM SURFACE FL. to FL.	ANNULAR MATERIAL TYPE			
	CE- MENT	BEN- TONE	FILL	FILTER PACK (TYPE/SIZE)
0 21	(✓)	(✓)	(✓)	
21 25	✓			

**ATTACHMENTS**

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

**CERTIFICATION STATEMENT**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **PETERS DRILLING & PUMP SERVICE INC.**  
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P.O. Box 1540  
ADDRESS

Grass Valley  
CITY

CA  
STATE

95945  
ZIP

Signed *[Signature]*  
WELL DRILLER/AUTHORIZED REPRESENTATIVE

01/13/05  
DATE SIGNED

456136  
C-57 LICENSE NUMBER

ORIGINAL  
File with DWR

Page 2 of 3

Owner's Well No. 05-2

Work Began 1/6/2005, Ended 1/12/2005

Local Permit Agency Nevada Co Environmental Health

Permit No. 9302 Permit Date 11/9/2004

STATE OF CALIFORNIA  
**WELL COMPLETION REPORT**

Refer to Instruction Pamphlet

No. **E020651**

DWR USE ONLY -- DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

**GEOLOGIC LOG**

ORIENTATION (✓) <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/> ANGLE (SPECIFY)	
DEPTH FROM SURFACE	
FL. to FL.	DESCRIPTION
Describe material, grain, size, color, etc.	
0	18 Red Dirt & Clay
18	52 Greenstone
52	55 Fracture
55	380 Greenstone
380	650 Greenstone w/Soft Spots
650	660 Fractured Rock
660	760 Greenstone

**RECEIVED**  
JAN 18 2005  
ENVIRONMENTAL HEALTH

**WELL OWNER**

Name Ed Vanderzyl  
Mailing Address 3331 La Mesa Dr., #2  
San Carlos CA 94070  
CITY STATE ZIP

**WELL LOCATION**

Address 16710 River Ranch Road  
City Grass Valley CA 95949  
County Nevada  
APN Book 27 Page 020 Parcel 01  
Township 14 N Range 9 E Section 6  
Latitude

DEG. MIN. SEC.	DEG. MIN. SEC.
LOCATION SKETCH	
NORTH	
WEST	
EAST	
SOUTH	
ACTIVITY (✓)	
<input checked="" type="checkbox"/> NEW WELL	
MODIFICATION/REPAIR	
Deepen	
Other (Specify)	
DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")	
PLANNED USES (✓)	
WATER SUPPLY	
<input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Public	
<input type="checkbox"/> Irrigation <input type="checkbox"/> Industrial	
MONITORING	
TEST WELL	
CATHODIC PROTECTION	
HEAT EXCHANGE	
DIRECT PUSH	
INJECTION	
VAPOR EXTRACTION	
SPARGING	
REMEDIATION	
OTHER (SPECIFY)	

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

**WATER LEVEL & YIELD OF COMPLETED WELL**

DEPTH TO FIRST WATER 650 (FL.) BELOW SURFACE 1  
DEPTH OF STATIC WATER LEVEL 40 (FL.) & DATE MEASURED 1/12/2005  
ESTIMATED YIELD 3.5 (GPM) & TEST TYPE Air  
TEST LENGTH 4 (Hrs.) TOTAL DRAWDOWN (FL.)  
*May not be representative of a well's long-term yield.*

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE	ANNULAR MATERIAL		
		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	TYPE		CE- MENT, TONITE FILL	FILTER PACK (TYPE/SIZE)	
FL. to FL.		BLANK	SCREEN	CON- DUCTOR	FILL PIPE			FL. to FL.			
560	580		✓			F-480	4"	CI 160	1/8" x 3"		
580	600	✓				F-480	4"	CI 160			
600	620		✓			F-480	4"	CI 160	1/8" x 3"		
620	640	✓				F-480	4"	CI 160			
640	660		✓			F-480	4"	CI 160	1/8" x 3"		
660	680	✓				F-480	4"	CI 160			

DEPTH FROM SURFACE	FL. to FL.	ANNULAR MATERIAL
0	21	✓
21	25	✓

**ATTACHMENTS (✓)**

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

**CERTIFICATION STATEMENT**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME PETERS DRILLING & PUMP SERVICE INC.  
(PERSON, FIRM) OR CORPORATION (TYPED OR PRINTED)

P.O. Box 1546  
ADDRESS

Signed

WELL DRILLER AUTHORIZED REPRESENTATIVE

Grass Valley  
CITY

01/13/05  
DATE SIGNED

CA 95945  
STATE ZIP

456136  
C-57 LICENSE NUMBER

ORIGINAL  
File with DWR

Page 3 of 3

Owner's Well No. 05-2

Date Work Began 1/6/2005, Ended 1/12/2005

Local Permit Agency Nevada Co. Environmental Health

Permit No. 9302

Permit Date 11/9/2004

STATE OF CALIFORNIA  
**WELL COMPLETION REPORT**

Refer to Instruction Pamphlet

No. **E020651**

DWR USE ONLY -- DO NOT FILL IN

STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

**GEOLOGIC LOG**

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE (SPECIFY)

DRILLING METHOD **AIR**

FLUID

**DESCRIPTION**

Describe material, grain, size, color, etc.

DEPTH FROM SURFACE  
Fl. to Fl.

0	18	Red Dirt & Clay
18	52	Greenstone
52	55	Fracture
55	380	Greenstone
380	650	Greenstone w/Soft Spots
650	660	Fractured Rock
660	760	Greenstone

**RECEIVED**  
JAN 18 2005  
ENVIRONMENTAL HEALTH

**WELL OWNER**

Name **Ed Vanderzyl**

Mailing Address **3331 La Mesa Dr., #2**

**San Carlos**  
CITY

CA  
STATE

94070  
ZIP

**WELL LOCATION**

Address **16710 River Ranch Road**

City **Grass Valley CA 95949**

County **Nevada**

APN Book 27

Page 020

Parcel 01

Township 14 N

Range 9 E

Section 6

Latitude

DEG. MIN. SEC.

DEG. MIN. SEC.

**LOCATION SKETCH**

NORTH

ACTIVITY (✓)

☒ NEW WELL

MODIFICATION/REPAIR

Deepen

Other (Specify)

DESTROY (Describe  
Procedures and Materials  
Under "GEOLOGIC LOG")

**PLANNED USES (✓)**

WATER SUPPLY

☒ Domestic ☐ Public  
☐ Irrigation ☐ Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY)

WEST  
EAST  
SOUTH  
Illustrate or Describe Distance of Well from Roads, Buildings,  
Fences, Rivers, etc. and attach a map. Use additional paper if  
necessary. PLEASE BE ACCURATE & COMPLETE.

**WATER LEVEL & YIELD OF COMPLETED WELL**

DEPTH TO FIRST WATER **650** (Fl.) BELOW SURFACE

1

DEPTH OF STATIC

WATER LEVEL **40**

(Fl.) & DATE MEASURED **1/12/2005**

ESTIMATED YIELD **3.5** (GPM) & TEST TYPE **Air**

TEST LENGTH **4**

(Hrs.) TOTAL DRAWDOWN (Fl.)

May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING **760** (Feet)

TOTAL DEPTH OF COMPLETED WELL **760** (Feet)

DEPTH FROM SURFACE Fl. to Fl.	BORE-HOLE DIA. (Inches)	CASING (S)						DEPTH FROM SURFACE Fl. to Fl.	ANNULAR MATERIAL TYPE						
		TYPE (✓)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)		GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	CE- MENT (✓)	BEN- TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)	
680	700	✓	✓	✓	✓			F-480							4"
700	720	✓	✓	✓	✓	F-480	4"	CI 160		21	25	✓			
720	760	✓	✓	✓	✓	F-480	4"	CI 160	1/8" x 3"						

**ATTACHMENTS (✓)**

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

**CERTIFICATION STATEMENT**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **PETERS DRILLING & PUMP SERVICE INC.**  
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P.O. Box 1546  
ADDRESS

Grass Valley  
CITY

CA 95945  
STATE ZIP

Signed *[Signature]*  
WELL DRILLER AUTHORIZED REPRESENTATIVE

01/13/05  
DATE SIGNED

456136  
C-57 LICENSE NUMBER

## COUNTY OF NEVADA

Item 1 of 1

## PERMIT RECEIPT

OPERATOR: ehkhalte  
COPY # : 1Sec: Twp: Rng: Sub:Y Blk: Lot:  
APN .....: 2702001000DATE ISSUED.....: 10/26/2004  
RECEIPT #.....: 11898  
REFERENCE ID # ....: 04004497SITE ADDRESS .....: 16710 RIVER RANCH RD  
SUBDIVISION .....:  
CITY .....: GRASS VALLEY  
IMPACT AREA .....:OWNER .....: VANDERZYL ED  
ADDRESS .....: 3331 LA MESA DR. #2  
CITY/STATE/ZIP ....: SAN CARLOS, CA 94070RECEIVED FROM .....: PETERS' DRILLING  
CONTRACTOR .....: LIC # 456136  
COMPANY .....: PETERS DRILLING & PUMP SERVICE  
ADDRESS .....: POB 1546  
CITY/STATE/ZIP ....: GRASS VALLEY, CA 95945  
TELEPHONE .....: 273-8136

FEE ID	UNIT	QUANTITY	AMOUNT	PD-TO-DT	THIS REC	NEW BAL
CDA7EHL	PAGES	1.00	3.45	0.00	3.45	0.00
CDA7EHS	PAGES	2.00	0.90	0.00	0.90	0.00
EH4565	FLAT	1.00	299.50	0.00	299.50	0.00
TOTAL PERMIT :			303.85	0.00	303.85	0.00

METHOD OF PAYMENT	AMOUNT	NUMBER
CHECK	303.85	16972
TOTAL RECEIPT :		303.85

NEVADA COUNTY DEPARTMENT OF  
ENVIRONMENTAL HEALTH

RECEIVED

950 Maidu Avenue  
Nevada City, CA 95959  
(530) 265-1222  
Fax (530) 265-7056

10075 Levon Avenue Suite 105  
Truckee, CA 96161  
(530) 582-7880  
Fax (530) 582-0712

DEC 9 15 2004

NEVADA COUNTY  
COMMUNITY DEVELOPMENT AGENCY

JOB NUMBER: 04004952  
APN: 27 - 020 - 01  
PERMIT NUMBER NO 9340  
No Charge Destruction:  
See Permit #9302  
Both Assessor's Parcel Number and Permit  
Number must show on Well Driller's Report.

**APPLICATION/PERMIT TO CONSTRUCT, REPAIR OR DESTROY A WELL**

Property Owner: Ed Vanderzyl Owner's Mailing Address: 3331 La Mesa Dr., #2, San Carlos, CA 94070  
Job Site Address: 16710 River Ranch Road City: Grass Valley Zip: 95949  
Nearest Cross Street: Dog Run Rd Parcel Acreage: 40.0

PROPOSED WORK: ☐ New Well ☐ Deepening ☒ Destruction (Include Diagram of Proposal)

☐ Repair or Modification: (Proposed Work) \_\_\_\_\_

(Include Diagram of Proposal)

TYPE OF WELL: ☒ Class I ☐ Class II ☐ Monitoring PROPOSED USE: Domestic

Angular Seal Depth Proposed: \_\_\_\_\_

CASING TYPE: ☐ Plastic ☐ Steel Diameter \_\_\_\_\_ Wall Thickness or Gauge \_\_\_\_\_

SEALING MATERIAL: ☐ Bentonite ☐ Concrete ☐ Other (Please Specify) \_\_\_\_\_

Sealing Application: ☐ Pumped/Tremie ☐ Dropped

PROPOSED SEAL DATE AND TIME: Date \_\_\_\_\_ Time Will Call

WELL CONTRACTOR: Peters' Drilling and Pump Service C-57 License No. 456136

Business Address: P.O. Box 1546, Grass Valley, CA 95945 Phone: (530) 273-8136

I hereby certify that the work described in this application will be done in accordance with the provisions of the Nevada County Land Use and Development Code, Chapter X, pertaining to well construction, repair, modification, deepening, and destruction. Within 90 days of completion of work, I will furnish the Nevada County Department of Environmental Health a complete and accurate copy of the water well "Driller's Report", DWR Form No. 188.

WELL CONTRACTOR X [Signature]

DATE 11/30/04

PERMIT EXPIRES ONE YEAR FROM DATE OF ISSUE

DEPARTMENT USE ONLY—Do Not Write Below This Line

PERMIT REQUIREMENTS: Maintain All County Setback Requirements Including 25 Feet Minimum From Well To Waste Plumbing Within A Structure.

Permit Issued By [Signature]

Date 1-10-05

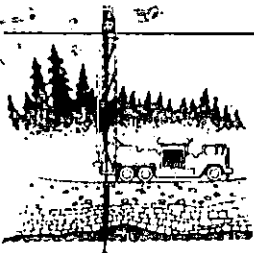
SEAL: Date 1/6/05 Depth N/A Inspector Dave Presta

COMPLETED WELL: Date Completed 1/6/05 Total Depth N/A Yield\* N/A

Construction Final Approval By [Signature] Date 2/9/05

\*NOTE: This rate is provided by the well driller and is stated solely for the purpose of obtaining clearance for a building permit. For this purpose, this well yield is valid for one (1) year from date of well completion. Well yield can change over time.





# PETERS'

DRILLING &  
PUMP SERVICE

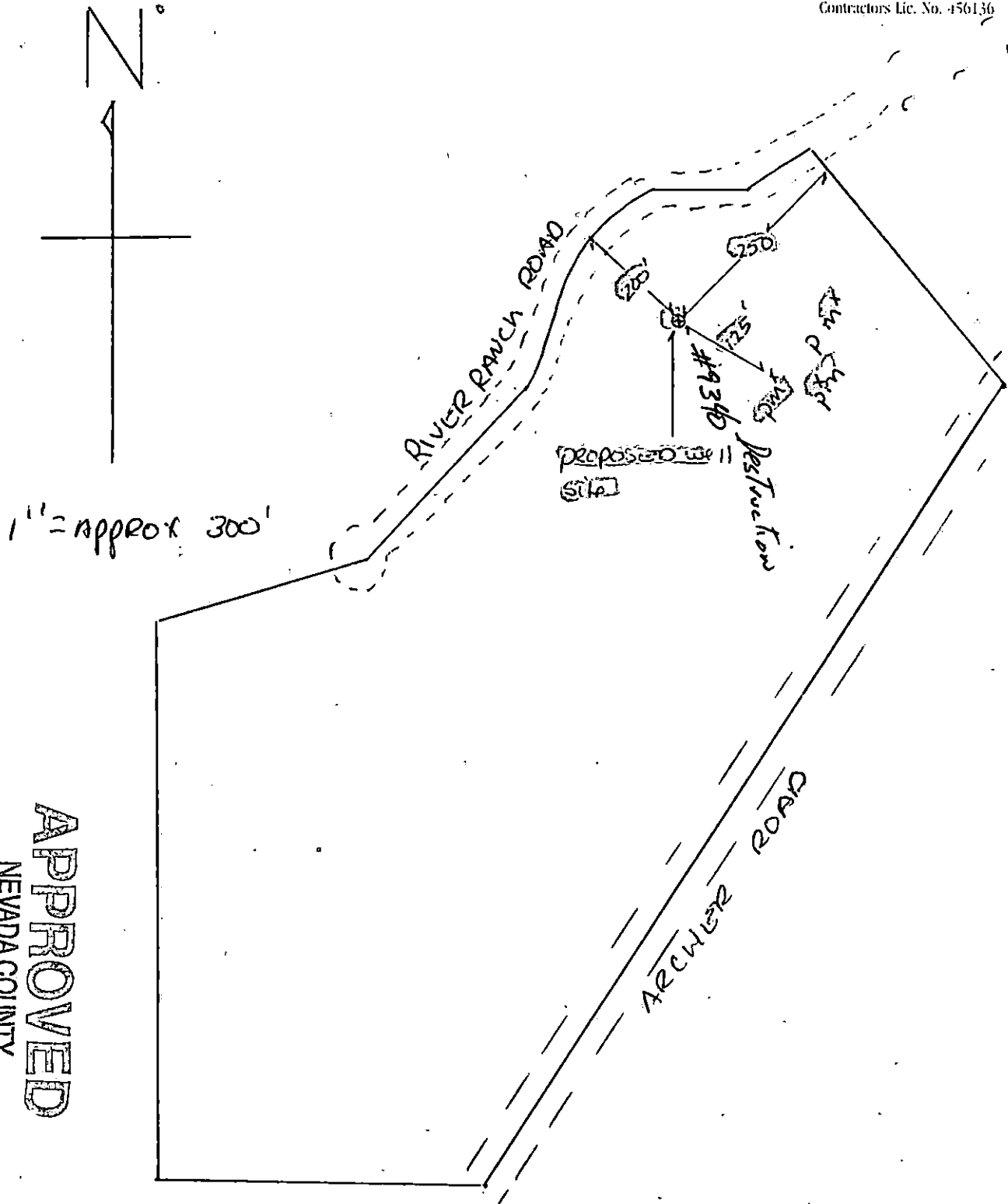
ED VANDERZYL  
16710 RIVER RANCH RD  
GRASS VALLEY CA 95945  
AC 40'

P.O. Box 1546  
Grass Valley, CA 95945  
Valley (530) 273-8136  
FAX (530) 273-1213

APN 27-020-01

Colfax (530) 346-6210  
Auburn (530) 888-7311  
Lincoln (916) 645-0692  
Yuba County (530) 751-9009

Contractors Lic. No. 456136



APPROVED

NEVADA COUNTY

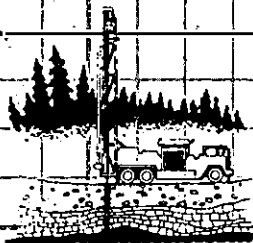
ENVIRONMENTAL HEALTH DEPARTMENT

DATE: 1-18-05

BY: [Signature]

OR: Classline 11th 9346 / 16 410-24952

Destruction



# PETERS'

DRILLING &  
PUMP SERVICE

P.O. Box 1546

Grass Valley, CA 95945

Grass Valley (530) 273-8136

FAX (530) 273-1213

Colfax (530) 346-6210

Auburn (530) 888-7311

Lincoln (916) 645-9692

Yuba County (530) 751-9009

Contractors Lic. No. 456136

Top 25' Bentonite

Gravel  
Gravel  
Gravel

Casing broke off flush  
with surface of ground

25' - 740' Clean Fill

T.D. 740'



COUNTY OF NEVADA COMMUNITY DEVELOPMENT AGENCY  
ENVIRONMENTAL HEALTH DEPARTMENT

www.new.mynevadacounty.com

950 MAIDU AVENUE, NEVADA CITY, CA 95959-8617  
(530) 265-1222 FAX (530) 265-9853

10075 LEVON AVENUE, SUITE 105, TRUCKEE, CA 96161  
(530) 582-7884 FAX (530) 582-0712

WELL CONSTRUCTION INSPECTION FORM

Recd. 7:40 am. 1/6/05  
Date: 1/6/05 Time In: 11:50 Time Out: 12:45  
(and destruction) Well Seal Request Date/Time: 1/6/05 12:45  
APN: 27 020 - 01 Permit #: 9302 Job #: 040-04952  
(9340: destruction)  
Location: 16710 River Ranch Rd. Nearest Cross Street: Archer Rd.  
Property Owner: (for Ed Vandenseal.)  
Well Contractor: (Ranch) Peters Drilling  
Depth of Well: \_\_\_\_\_ Estimated Yield: \_\_\_\_\_ (gpm)  
Depth of Casing: 40' Casing Material: ☒ PVC ☐ Steel  
Annular Seal Depth: 25' Annular Seal Thickness: 2" No. of Bags: 15/2 GPS: ☐ Yes ☒ No  
Annular Material: ☐ Cement ☒ Bentonite ☐ Grout How Applied: ☒ Dropped ☐ Tremie  
Packer Type: ☒ Plastic ☐ Boot First Water: \_\_\_\_\_ Static Level: \_\_\_\_\_

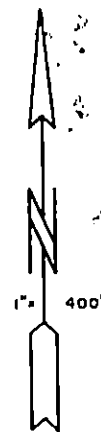
- ☐ Well drilled in approved location: ☒ Yes ☐ No Annular seal witnessed: ☒ Yes ☐ No  
☐ Well location has not received final approval pending Department review of permit application.  
☐ Wells that produce less than 3gpm require a pumped yield test and 1000 gallons of water storage.  
☐ Erosion control in place: ☒ Yes ☐ No

Comments: PACKER SET BEFORE INSPECTOR ARRIVED, WELL DEPTH  
80' SO FAR TODAY. 15 BAGS BENTONITE, 2 BAGS CONCRETE ON  
SURFACE.

OBSERVED DESTRUCTION OF NEW DRILL WELL, FILLED APPROX 700'  
WITH CUTTINGS INSIDE WELL CASING, THEN 7 BAGS BENTONITE  
TO SURFACE, WELL CASING BROKEN OFF JUST BELOW SURFACE.

Received By: [Signature] ☒ Driller ☐ Helper ☐ Owner/Representative

Inspector: [Signature]



**ASSESSOR'S PARCEL MAP**  
This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building setbacks.

1982 5-1-86  
3-1-83 3-1-82  
3-1-84 1-1-87

ORIGINAL  
File with DWR

Page 1 of 1

Owner's Well No. 05-1

Date Work Began 1/6/2005, Ended 1/6/2005

Local Permit Agency Nevada Co Environmental Health

Permit No. 9340 Permit Date 1/6/2005

STATE OF CALIFORNIA  
**WELL COMPLETION REPORT**

Refer to Instruction Pamphlet

No. **E020650**

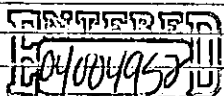
DWR USE ONLY -- DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/TRS/OTHER	

**GEOLOGIC LOG**

ORIENTATION (✓) ☒ VERTICAL ☐ HORIZONTAL ☐ ANGLE (SPECIFY)  
DRILLING METHOD **AIR** FLUID

DEPTH FROM SURFACE  
FL. to FL. DESCRIPTION  
Describe material, grain, size, color, etc.

740 25 CLEAN FILL  
25 0 BENTONITE  
Well was destroyed in accordance with State  
of California Department of Water Resources  
Bulletin 74-81.



**RECEIVED**

JAN 18 2005

ENVIRONMENTAL HEALTH

**WELL OWNER**

Name **Ed Vanderzyl**  
Mailing Address **3331 La Mesa Dr., #2** CA **94070**  
**San Carlos** CITY STATE ZIP

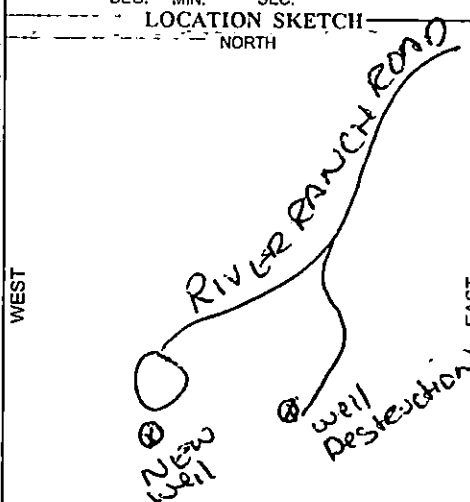
**WELL LOCATION**

Address **16710 River Ranch Road**  
City **Grass Valley CA 95949**  
County **Nevada**  
APN Book **27** Page **020** Parcel **01**  
Township **14 N** Range **9 E** Section **6**  
Latitude

DEG. MIN. SEC. DEG. MIN. SEC.

**LOCATION SKETCH**

NORTH



**ACTIVITY (✓)**

NEW WELL

MODIFICATION/REPAIR  
Deepen  
Other (Specify)

☒ DESTROY (Describe  
Procedures and Materials  
Under "GEOLOGIC LOG")

PLANNED USES (✓)  
WATER SUPPLY  
☒ Domestic ☐ Public  
☐ Irrigation ☐ Industrial

MONITORING

TEST WELL

CATHODIC PROTECTION

HEAT EXCHANGE

DIRECT PUSH

INJECTION

VAPOR EXTRACTION

SPARGING

REMEDIATION

OTHER (SPECIFY)

SOUTH  
Illustrate or Describe Distance of Well from Roads, Buildings,  
Fences, Rivers, etc. and attach a map. Use additional paper if  
necessary. PLEASE BE ACCURATE & COMPLETE.

**WATER LEVEL & YIELD OF COMPLETED WELL**

DEPTH TO FIRST WATER-- (FL.) BELOW SURFACE **1**

DEPTH OF STATIC  
WATER LEVEL (FL.) & DATE MEASURED

ESTIMATED YIELD \* (GPM) & TEST TYPE

TEST LENGTH (Hrs.) TOTAL DRAWDOWN (FL.)

May not be representative of a well's long-term yield.

DEPTH FROM SURFACE FL. to FL.	BORE-HOLE DIA. (Inches)	CASING (S)					DEPTH FROM SURFACE FL. to FL.	ANNULAR MATERIAL TYPE		
		TYPE (✓) BLANK SCREEN CON- DUCTOR FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)		CE- MENT BEN- TONITE FILL (✓) (✓) (✓)	FILTER PACK (TYPE/SIZE)	DESTROY
740 25							25 0	CLEAN FILL	DESTROY	DESTROY

**ATTACHMENTS (✓)**

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

**CERTIFICATION STATEMENT**

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **PETERS DRILLING & PUMP SERVICE INC.**  
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P.O. Box 1546  
ADDRESS

Signed **Greg Stoffer**  
WELL DRILLER/AUTHORIZED REPRESENTATIVE

Grass Valley  
CITY

CA 95945  
STATE ZIP

01/13/05  
DATE SIGNED

456136  
C-57 LICENSE NUMBER