

STATE OF NEVADA  
DIVISION OF WATER RESOURCES  
**WELL DRILLER'S REPORT**

OFFICE USE ONLY  
Log No. **115779**  
Permit No. \_\_\_\_\_  
Basin No. **228**  
NOTICE OF INTENT NO. **32292**  
WELL NAME (if applicable): **ER-EC-14**

PRINT OR TYPE IN BLACK INK ONLY  
DO NOT WRITE ON BACK

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

1. OWNER/CLIENT NAME National Nuclear Security  
MAILING ADDRESS Administration, P.O. Box 98518  
Las Vegas, NV 89193-8518

DETAILED ADDRESS AT WELL LOCATION Nevada Test and Training Range, EC South Area  
Subdivision Name: \_\_\_\_\_ County: Nye

2. PLS LOCATION SE 1/4 NW 1/4 21 Sec T9 NS 49 E  
PERMIT/WAIVER NO. R-1024E  
issued by Water Resources Current Parcel No.

Latitude 37° 08' 25" UTM E 543,386.20  NAD 27  
Longitude 116° 30' 38" UTM N 4,110,534.90  NAD 83/WGS 84

3. WORKED PERFORMED  
 New Well  Deepen: Orig WL# \_\_\_\_\_  
 Replacement: Original well log # \_\_\_\_\_  
 Recondition: Original well log # \_\_\_\_\_

4. PROPOSED USE  
 Domestic  Irrigation  Monitor  
 Mining / Dewater  Com / Ind  Stock  
 Test / Other  Mun / QM  Rec

5. WELL TYPE  
 Auger  Rotary  RVC  
 Air  Mud  Sonic  
 Other

6. LITHOLOGIC LOG

Material Encountered	Lost Circ.	Water Strata	From	To	Thickness
Alluvium: gravel, sand	N	N	0	70	70
Ash-flow tuff: partly to moderately welded, devitrified (Ttr)	N	N	70	130	60
Bedded tuff: vitric (Tfb)	N	N	130	185	55
Basalt lava flow: dense (Tf)	N	Y	185	215	30
Bedded and non-welded tuffs: zeolitic (Tfb)	N	Y	215	1230	1015
Ash-flow tuff: non-to partially welded, quartzo-feldspathic alteration (Tma)	N	Y	1230	1360	130
Ash-flow tuff: moderately welded, quartzo-feldspathic alteration (Tma)	N	Y	1360	1490	130
Ash-flow tuff: moderately to densely welded, quartzo-feldspathic alteration (Tma)	N	Y	1490	2378	888

9. WELL CONSTRUCTION

Depth Drilled: 2378 Feet      Depth Cased: 2266.8 Feet

HOLE DIAMETER (BIT SIZE)

From	To
<u>42</u> Inches	<u>0</u> Feet <u>73</u> Feet
<u>22</u> Inches	<u>73</u> Feet <u>1068.9</u> Feet
<u>14.75</u> Inches	<u>1068.9</u> Feet <u>2378</u> Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
<u>30</u>	<u>162.33</u>	<u>0.515</u>	<u>0</u>	<u>71</u>
<u>16</u>	<u>84</u>	<u>0.495</u>	<u>0</u>	<u>1010.9</u>
<u>7.625</u>	<u>26.4</u>	<u>0.328</u>	<u>0</u>	<u>1005.5</u>

PERFORATIONS:

Type of perforation: Slotted, 0.076 to 0.080 inches wide in 6-5/8"  
Size of perforation: 2 inches long, spaced on 6 inch centers

From 1358.8 Feet To 1666 Feet  
From 1953 Feet To 2266.8 Feet  
From \_\_\_\_\_ Feet To \_\_\_\_\_ Feet

ANNULAR MATERIALS

Sanitary Seal 71 ft to 0 ft  
 Neat Cement \_\_\_\_\_ to \_\_\_\_\_  Pumped  Poured  
 Cement Grout 71 ft to 0 ft  Pumped  Poured  
 Concrete Grout \_\_\_\_\_ to \_\_\_\_\_  Pumped  Poured  
 Bentonite Chips \_\_\_\_\_ to \_\_\_\_\_  Pumped  Poured  
 Bentonite Grout \_\_\_\_\_ to \_\_\_\_\_  Pumped  Poured

15%  20%  Other, explain: \_\_\_\_\_

Gravel Pack [ > 0.2 in. ] see to page 2  Pumped  Poured  
 Sand Pack [ < 0.2 in. ] see to page 2  Pumped  Poured  
 Other, explain: see to page 2  Pumped  Poured

7. WATER QUALITIES

Static water level: 1021 Feet below land surface  
Artesian Flow: No G.P.M. \_\_\_\_\_ P.S.I.  
Water Temperature: 101 ° Fahrenheit  
Water Quality: \_\_\_\_\_

10. DRILLER'S CERTIFICATION

This well was drilled under my supervision. This report is true to the best of my knowledge.

Name \_\_\_\_\_ Contractor  
Address \_\_\_\_\_ Contractor

8. WELL TEST RESULTS

Test Method:  Bailor  Pump  
G.P.M. \_\_\_\_\_ Draw Down (Feet Below Static) \_\_\_\_\_ Recorded Time (Hours) \_\_\_\_\_

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Nevada contractor's license number as issued by the State Contractor's Board: \_\_\_\_\_  
Nevada well driller's license number as issued by the Nevada Division of Water Resources (on-site driller): FP 2219

Signed: Michael W. White  
By driller performing actual drilling on site or contractor  
Date: 10/25/12

**WELL DRILLER'S REPORT (cont)**

NOTICE OF INTENT NO. 32292

Well ER-EC-14

CASING SCHEDULE (cont.)				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6-5/8" stainless steel (SS)	18.99	0.280	1005.5	2266.8
<b>Tubing in 14-3/4" hole beside 7-5/8" and 6-5/8" production casing</b>				
<b>First String</b>				
2-7/8" SS* tbg behind the casing (slotted)	7.66	0.276	1945.7	2259.2
2-7/8" SS tbg behind the casing (blank)	7.66	0.276	997.8	1945.1
2-3/8" CS tbg behind the casing	4.70	0.190	0	997.8
<b>Second String</b>				
2-7/8" SS* tbg behind the casing (slotted)	7.66	0.276	1351.9	1667.0
2-7/8" SS tbg behind the casing (blank)	7.66	0.276	996.1	1351.9
2-3/8" CS tbg behind the casing	4.70	0.190	0	996.1

\*SS=Stainless Steel

\*\*CS=Carbon Steel

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**WELL DRILLER'S REPORT (cont)**

NOTICE OF INTENT NO. 32292

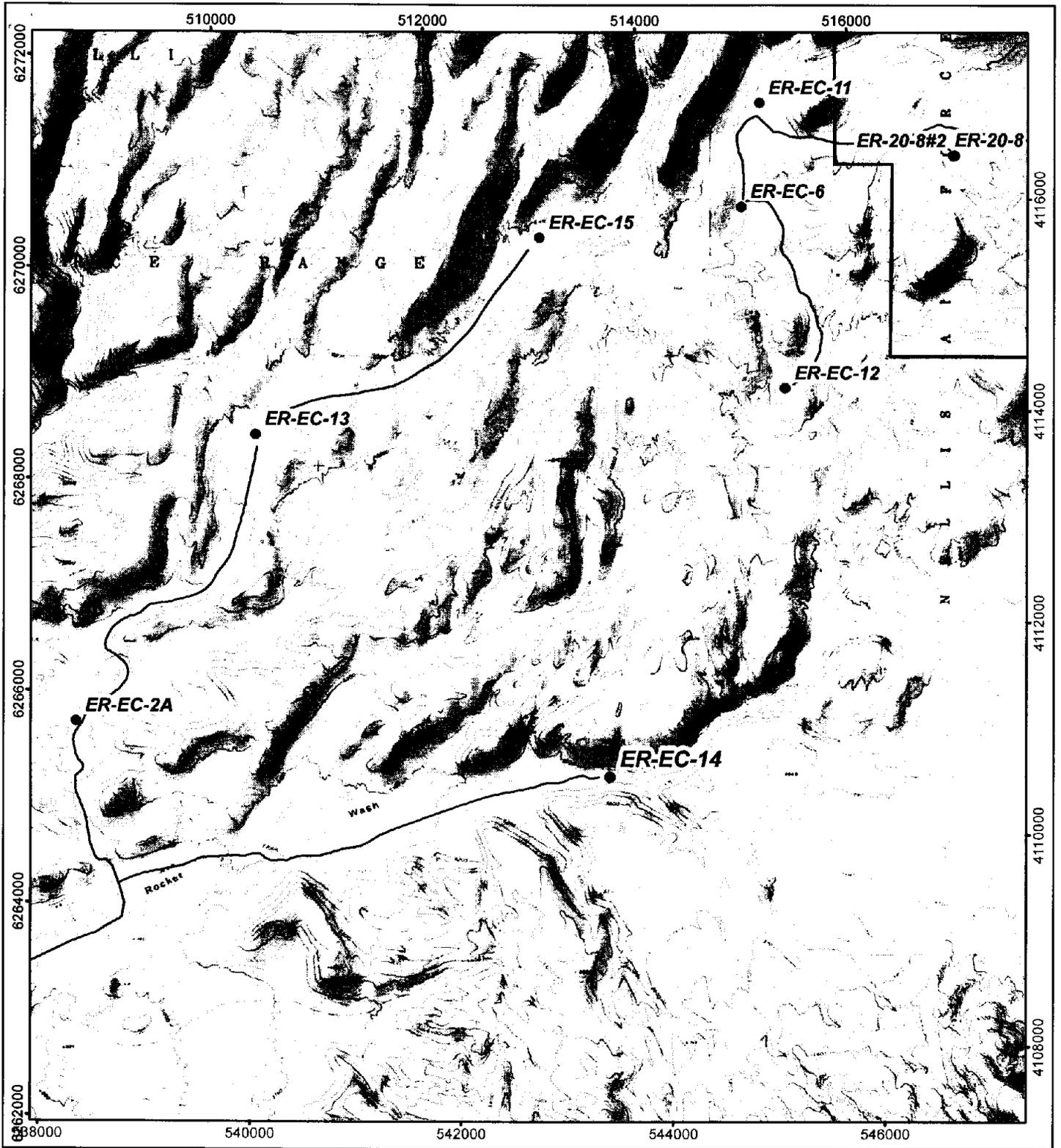
Well ER-EC-14

ANNULAR MATERIALS (cont)	
First Zone	
Gravel Pack [>0.2 in.]	X Yes No to X Pumped Poured
Type:	3/8 inch washed #4 gravel from top of fill at 2372' to 1921'
Sand Pack [<0.2 in.]	
Type:	6/9 silica sand 1921' to 1904'
Type:	20/40 silica sand 1904' to 1889.5'
Other:	
Type:	Portland Type II neat cement 1889.5' to 1704'
Second Zone	
Gravel Pack [>0.2 in.]	
Type:	3/8 inch washed #4 gravel from 1704' to 1328'
Sand Pack [<0.2 in.]	
Type:	6/9 silica sand 1328' to 1313'
Type:	20/40 silica sand 1313' to 1295'
Other:	
Type:	Portland Type II neat cement 1295' to 1191'

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● Existing drill hole  
 ● ER-EC-14 well location  
 — Unpaved road

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Nevada Central State Plane Projection (meters), North American Datum 1983  
 Source: NSTec, 2011

3,000 1,500 0 3,000 6,000 ft  
 1,000 500 0 1,000 2,000 m

Black tick marks are in Nevada State Plane, Central Zone, NAD83, meters  
 Blue tick marks are in Universal Transverse Mercator, NAD83, meters

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