ORIGINAL

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

OFFICE USE ONLY
Log No. 1184946
Permit No. 4P03
Basin No. 064

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

NOTICE OF INTENT NO. 70196
WELL NAME (If applicable): PW 27R

1. OWNER/CLIENT NAME: NV Energy
MAILING ADDRESS: PO Box 10100 Reno Nv, 89520

DETAILED ADDRESS AT WELL LOCATION: North Valmy Power Plant
Subdivision Name:
County: LANDER

2. PLS LOCATION: NE ¼ SE ¼ 31 Sec 35 N/S 45 E
PERMIT/WAIVER NO. 41003 (Issued by Water Resources) Current Parcel No.

Latitude 40* 51.813 N UTM E
Longitude 116* 56.670 W UTM N
☐ NAD 27 ☒ NAD 83/WGS 84

3. WORKED PERFORMED
☐ New Well ☐ Deepen: Orig WL#
☒ Replacement: Original well log # 22693
☐ 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
Top Soil			0'	2'	2'
Silty Clay			2'	18'	16'
Sand & Clay Layers			18'	33'	15'
Sand, Gravel & Clay			33'	64'	31'
Sandy Clay			64'	94'	30'
Blue Clay			94'	119'	25'
Brown Clay			119'	128'	9'
Brown Clay & Sand			128'	141'	13'
Sand & Gravel			141'	172'	31'
Brown Clay, Sand &			172'	189'	17'
Gravel					
Sand & Gravel			189'	212'	23'
Brown Clay, Sand &			212'	223'	11'
Gravel					
Brown Clay			223'	231'	8'
Sand, Gravel & Clay			231'	278'	47'
Brown Clay				289'	11'
Brown Clay & Sand			289'	303'	14'
Sand, Gravel & Cobbles			303'	344'	41'
Basalt			344'	412'	68'
Clay, Sand & Gravel			412'	419'	7'
Sand & Gravel			419'	480'	61'
Basalt			480'	509'	29'
Sand & Gravel			509'	545'	34'
Clay & Volcanic Rock			545'	560'	15'
Clay , Sand & Gravel			560'	710'	150'

Date started: 3-Sep , 20 13
Date completed: 25-Sep , 20 13

9. WELL CONSTRUCTION
Depth Drilled: 881' Feet Depth Cased: 700' Feet

HOLE DIAMETER (BIT SIZE)

		From		To	
36"	Inches	0'	Feet	100'	Feet
24"	Inches	100'	Feet	710'	Feet
17.5"	Inches	710'	Feet	881'	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
26"		.375"	0'	100'
14.625"		.312"	+2'	700'
2.3"		Sch. 40	+2'	370'

PERFORATIONS:
Type of perforation: Louvered
Size of perforation: 0.060"
From 460' Feet To 690' Feet
From Feet To Feet
From Feet To Feet

ANNULAR MATERIALS

☒ Sanitary Seal		to		
☒ Neat Cement	0'	to 100'	☒ Pumped	☐ Poured
☒ Cement Grout	715'	to 725'	☒ 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.]	0'	to 715'	☐ Pumped	☒ Poured
☐ Sand Pack [< 0.2 in.]		to	☐ Pumped	☒ Poured
☐ Other, explain:		to	☐ Pumped	☐ Poured

7. WATER QUALITIES
Static water level: 71.1' Feet below land surface
Artesian Flow: No G.P.M. 0 P.S.I.
Water Temperature: Cool ° Fahrenheit
Water Quality: N/A

8. WELL TEST DATA
Test Method: ☐ Bailer ☒ Pump ☐ Air Lift

	G.P.M.	Draw Down (Feet Below Static)	Recorded Time (Hours)
Constant	1200	117.72'	72 Hours

Replaced well log 22693
NAD27
40.8636429 N 116.9435663 W

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision. This report is true to the best of my knowledge.
Name: Hydro Resources-West, Inc. (Contractor)
Address: 4975 W. Winnemucca Blvd. Winnemucca, NV 89445 (Contractor)

Nevada contractor's license number as issued by the *State Contractor's Board*: 56797
Nevada well driller's license number as issued by the *Nevada Division of Water Resources (on-site driller)*: # 2158

Signed: Michelle Strother (By driller performing actual drilling on site or contractor)
Date: 10/31/13

(Rev. 08-12)

USE ADDITIONAL SHEETS IF NECESSARY