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

OFFICE USE ONLY
Log No. 107636
Permit No.
Basin 179 pgl

PRINT OR TYPE 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. 62276

1. OWNER Nevada Power Co.
MAILING ADDRESS 705 Altman St. Suite #3
Ely, Nevada 89301

ADDRESS AT WELL LOCATION US. 93 at Lages Station
Subdivision Name: County: White Pine

2. LOCATION NE ¼ NW ¼ Sec 35 T 26N N/S R 65 E
PERMIT/WAIVER No. 28357 (Issued by Water Resources) 008-030-11 (Parcel No.)
Latitude 40.09042 Longitude 114.6096
UTM E N ☐ NAD 27 ☒ NAD 83/WGS 84

3. WORKED PERFORMED
☒ New Well ☒ Replace ☐ Recondition ☐ Deepen ☐ Other

4. PROPOSED USE
☐ Domestic ☒ Irrigation ☐ Test ☐ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC ☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Well graded gravel with sand		0	50	50
Well graded sand with gravel		50	120	70
Lean clay gray		120	130	10
Sandy clay		130	200	70
Lean clay, trace of sand		200	240	40
Poorly graded sand		240	280	40
Lean clay		280	290	10
Poorly graded sand		290	410	120
Well graded sand with gravel		410	610	200
See Attached				
lith log and well drawing.				
N 40.090487				
W 114.608745 NAD27				

Date started: 8-May, 20 08
Date completed: 25-May, 20 08

9. WELL CONSTRUCTION
Depth Drilled 610 Feet Depth Cased 600 Feet

HOLE DIAMETER (BIT SIZE)

		From		To	
36"	Inches	0	Feet	38	Feet
28"	Inches	38	Feet	610	Feet
	Inches		Feet		Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
30"	118.6	.375	+2	38
16"	52.36	.312	+2	60
16"	52.36	.312	260	280

Perforations:
Type of perforation Louvered Roscoe Moss
Size of perforation .125 slot
From 60 feet to 260 feet
From 280 feet to 590 feet
From feet to feet
From feet to feet
From feet to feet

Annular Seal: ☒ Yes ☐ No
☐ Neat Cement to ☐ Pumped ☐ Poured
☒ Cement Grout 0 to 50 ☒ Pumped ☐ Poured
☐ Concrete Grout to ☐ Pumped ☐ Poured
☐ ≥30% Bentonite Grout to ☐ Pumped ☐ Poured
Gravel Pack: ☒ Yes ☐ No 55 to 610 ☒ Pumped ☐ Poured
Type:
Bentonite Chips: ☐ Yes ☒ No 50 to 55 ☒ Pumped ☐ Poured
Type: Sand Seal

7. Water Level
Static water level: 85.54 feet below land surface
Artesian Flow: No G.P.M. No P.S.I.
Water Temperature: °F
Quality:

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

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
Air lift	250		48

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name WDC Exploration and Wells (Contractor)
Address 580 W. Silver St. (Contractor)
Elko Nevada 89801
Nevada contractor's license number issued by the *State Contractor's Board* 0012852
Nevada driller's license number issued by the Division of Water Resources, the *on-site driller* 1616
Signed (By driller performing actual drilling on site or contractor)
Date 6/23/2008

(Rev. 05-06)
USE ADDITIONAL SHEETS IF NECESSARY

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

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NOTICE OF INTENT NO. 62276

1. OWNER Nevada Power Co.
MAILING ADDRESS 705 Altman St. Suite #3
Ely, Nevada 89301

ADDRESS AT WELL LOCATION US. 93 at Lages Station
Subdivision Name: County: White Pine

2. LOCATION NE ¼ NW ¼ Sec 35 T 26N N/S R 65 E
PERMIT/WAIVER No. 008-030-11
Issued by Water Resources Parcel No.

Latitude 40.09042
Longitude 114.6096
UTM E N
☐ NAD 27 ☒ NAD 83/WGS 84

3. WORKED PERFORMED
☒ New Well ☒ Replace ☐ Recondition
☐ Deepen ☐ Other

4. PROPOSED USE
☐ Domestic ☒ Irrigation ☐ Test
☐ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Well graded gravel with sand		0	50	50
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Well graded sand with gravel		410	610	200
See Attached				
lith log and well drawing.				

Date started: 8-May, 20 08
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Depth Drilled 610 Feet Depth Cased 600 Feet

HOLE DIAMETER (BIT SIZE)

		From		To	
36"	Inches	0	Feet	38	Feet
28"	Inches	38	Feet	610	Feet
	Inches		Feet		Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
16"	52.36	.312	590	600

Perforations:
Type of perforation
Size of perforation
From feet to feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Annular Seal: ☒ Yes ☐ No
☐ Neat Cement to ☐ Pumped ☐ Poured
☒ Cement Grout 0 to 50 ☒ Pumped ☐ Poured
☐ Concrete Grout to ☐ Pumped ☐ Poured
☐ ≥30% Bentonite Grout to ☐ Pumped ☐ Poured
Gravel Pack: ☒ Yes ☐ No to ☒ Pumped ☐ Poured
Type:
Bentonite Chips: ☐ Yes ☒ No 50 to 55 ☒ Pumped ☐ Poured
Type: Sand Seal

7. *Water Level*
Static water level: 85.54 feet below land surface
Artesian Flow: No G.P.M. No P.S.I.
Water Temperature: °F
Quality:

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

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
Air lift	250		48

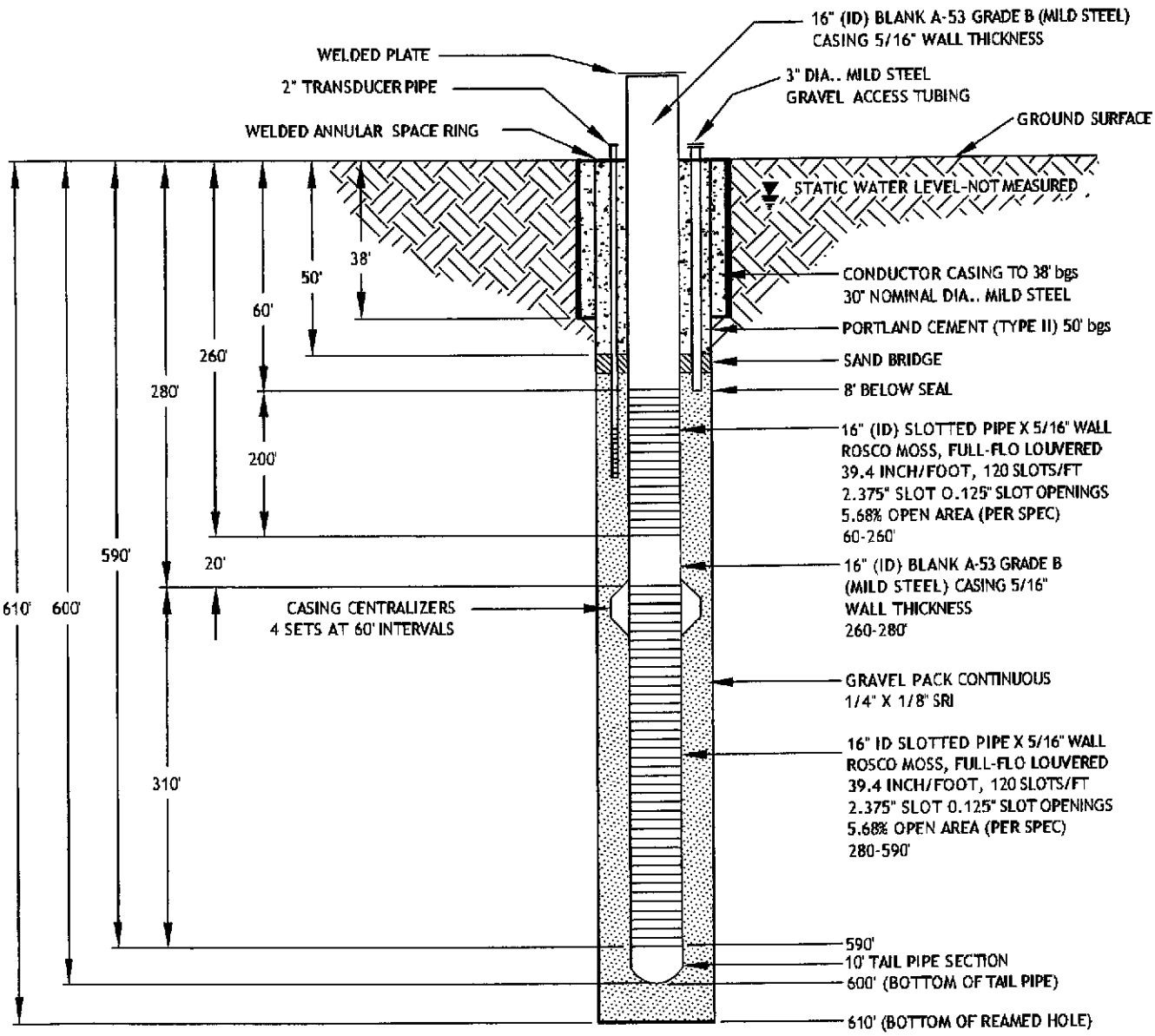
10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name WDC Exploration and Wells
Contractor
Address 580 W. Silver St.
Contractor
Elko Nevada 89801
Nevada contractor's license number issued by the *State Contractor's Board* 0012852
Nevada driller's license number issued by the Division of Water Resources, the *on-site driller* 1616
Signed
By driller performing actual drilling on site or contractor
Date 6/23/2008

(Rev. 05-06)

USE ADDITIONAL SHEETS IF NECESSARY

Log # 107636 pg3

9432-R



9432-R WELL AS-BUILT

ELY ENERGY CENTER
Steptoe Valley - Hooper Irrigation Well
White Pine County, Nevada

Scale	N.T.S.	File No.	H2-PD
Date	07/02/08	Project No.	06-33159-02
Drafted By	GRD	Drawing No.	6
Checked By	JMD		
Approved By			

CONVERSE CONSULTANTS

Over 60 Years of Dedication in Engineering and Environmental Sciences

Log #107636
pg 4

Log No. 9432-R

Date of Drilling: 05/16/08 **Location:** See Drawing No. **Elevation (ft):** Not Measured **North:** **East:**
Driller: WDC **Borehole Diameter:** 17.5" **Equipment:** Taylor 4000 mud rotary
Logged By: K. Howerton **Groundwater Depth (ft):** **Driving Wt. and Drop:**

DRAFTED BY KJH

APPROVED BY ON

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read with the report. This summary applies only at the location and time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplified model of the actual conditions encountered.	Samples: Drive	Samples: Bulk	Samples: Blow Count	Drill Rate (sec/ft)	Moisture (%)	Dry Density (lb/cf)	Field or Lab Tests
0		*** Conductor Casing - Not Logged ***							
12									
24									
36									
		WELL GRADED GRAVEL With Sand (GW); brown, angular							
48		WELL GRADED SAND (SW); few gravel, brown, angular							
60		--- With Gravel; trace fines							
72		--- medium brown, subangular							
84		--- With Clay							
96		--- With Gravel; few clay, brown							
108									
120									

Converse Sampler (white symbol=no recovery) SPT Sampler (white symbol=no recovery)

EEC PROJECT - HOOPER REPLACEMENT
Lages Station
Ely, Nevada

Project No.
06-33159-02

Drawing No.

Converse Consultants

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Log# 107636
pg 5

Log No. 9432-R

Date of Drilling: 05/16/08 **Location:** See Drawing No. **Elevation (ft):** Not Measured **North:** **East:**
Driller: WDC **Borehole Diameter:** 17.5" **Equipment:** Taylor 4000 mud rotary
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DRAFTED BY KJH

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Depth (ft)	Graphic Log	Summary of Subsurface Conditions	Samples: Drive	Samples: Bulk	Samples: Blow Count	Drill Rate (sec/ft)	Moisture (%)	Dry Density (lb/cf)	Field or Lab Tests
		LEAN CLAY (CL); gray							
132		SANDY CLAY (SC); brown							
		--- few gravel, subangular to subrounded							
144									
156									
168		--- With Gravel							
180									
192									
204		LEAN CLAY (CL); trace sand, blue							
		--- no sand							
216		--- brown							
228		--- blue							
240									

APPROVED BY ON

Converse Sampler (white symbol=no recovery) SPT Sampler (white symbol=no recovery)

EEC PROJECT - HOOPER REPLACEMENT
Lages Station
Ely, Nevada

Project No.
06-33159-02

Drawing No.

Converse Consultants

Over 60 Years of Dedication in Engineering and Environmental Sciences

Log# 107636
P56

Log No. 9432-R

Date of Drilling: 05/16/08 **Location:** See Drawing No. **Elevation (ft):** Not Measured **North:** **East:**
Driller: WDC **Borehole Diameter:** 17.5" **Equipment:** Taylor 4000 mud rotary
Logged By: K. Howerton **Groundwater Depth (ft):** **Driving Wt. and Drop:**

DRAFTED BY KJH

APPROVED BY ON

SUMMARY OF SUBSURFACE CONDITIONS

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Depth (ft)	Graphic Log	Summary of Subsurface Conditions	Samples: Drive	Samples: Bulk	Samples: Blow Count	Drill Rate (sec/ft)	Moisture (%)	Dry Density (lb/cf)	Field or Lab Tests
		POORLY GRADED SAND (SP); few gravel, trace fines							
252									
264									
276									
		LEAN CLAY (CL); few sand							
288									
		POORLY GRADED SAND (SP); few clay, few gravel							
300		--- subangular							
312		--- trace fines, angular							
324		--- With Gravel							
		--- subangular							
336		--- brown							
348									
360									

Converse Sampler (white symbol=no recovery) SPT Sampler (white symbol=no recovery)

EEC PROJECT - HOOPER REPLACEMENT
Lages Station
Ely, Nevada

Project No.
06-33159-02

Drawing No.

Converse Consultants

Over 60 Years of Dedication in Engineering and Environmental Sciences

Log # 107636
Pg 7

Log No. 9432-R

Date of Drilling: 05/16/08 **Location:** See Drawing No. **Elevation (ft):** Not Measured **North:** **East:**
Driller: WDC **Borehole Diameter:** 17.5" **Equipment:** Taylor 4000 mud rotary
Logged By: K. Howerton **Groundwater Depth (ft):** **Driving Wt. and Drop:**

DRAFTED BY KJH

Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS This log is part of the report prepared by Converse for this project and should be read with the report. This summary applies only at the location and time of the exploration. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplified model of the actual conditions encountered.	Samples: Drive	Samples: Bulk	Samples: Blow Count	Drill Rate (sec/ft)	Moisture (%)	Dry Density (lb/cf)	Field or Lab Tests
		POORLY GRADED SAND With Gravel (SP); brown							
372		--- few gravel, subangular							
384		--- trace clay							
396		--- no clay							
408		WELL GRADED SAND With Gravel (SW); brown, subangular to subrounded							
420									
432		--- brown and red with multicolors							
444									
456									
468									
480									

APPROVED BY ON

Converse Sampler (white symbol=no recovery) SPT Sampler (white symbol=no recovery)

EEC PROJECT - HOOPER REPLACEMENT
Lages Station
Ely, Nevada

Project No.
06-33159-02

Drawing No.

Converse Consultants

Over 60 Years of Dedication in Engineering and Environmental Sciences

Log # 107636
Pg 8

Log No. 9432-R

Date of Drilling: 05/16/08
Driller: WDC
Logged By: K. Howerton

Location: See Drawing No.
Borehole Diameter: 17.5"
Groundwater Depth (ft):

Elevation (ft): Not Measured **North:** **East:**
Equipment: Taylor 4000 mud rotary
Driving Wt. and Drop:

DRAFTED BY KJH

SUMMARY OF SUBSURFACE CONDITIONS

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Depth (ft)	Graphic Log	Summary of Subsurface Conditions	Samples: Drive	Samples: Bulk	Samples: Blow Count	Drill Rate (sec/ft)	Moisture (%)	Dry Density (lb/cf)	Field or Lab Tests
		WELL GRADED SAND With Gravel (SW); brown, subangular							
492									
504									
516		--- angular							
528		--- subangular							
540									
552									
564									
576		--- trace fines							
588									
600									

End of Exploration at 600.0'

Converse Sampler (white symbol=no recovery)

SPT Sampler (white symbol=no recovery)

APPROVED BY ON

EEC PROJECT - HOOPER REPLACEMENT
Lages Station
Ely, Nevada

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