WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

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

OFFICE USE ONLY
Log No. 109808
Permit No.
Basin 179

NOTICE OF INTENT NO. ~~60707~~ 60707

1. OWNER William Utter Sierra Pacific
MAILING ADDRESS US.93 @ Lages Station
ADDRESS AT WELL LOCATION 1 mile NW of @ Lages station

2. LOCATION NE ¼ SW ¼ Sec. 4 T 25 N/S R 65 E/W White Pine County
PERMIT NO. 23358 Issued by Water Resources
008-110-06 Parcel No.
Utter Ranch well Subdivision Name
LAT 40.06966 Long: -114.63296 NAD 83

3. WORK PERFORMED	4. PROPOSED USE	5. WELL TYPE
☒ New Well ☒ Replace ☐ Recondition	☐ Domestic ☒ Irrigation ☐ Test	☐ Cable ☐ Rotary ☒ RVC
☐ Deepen ☐ Abandon ☐ Other	☐ Municipal/Industrial ☐ Monitor ☐ Stock	☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Sand + Clay		0	40	40
Sand + silt		40	70	30
Sand with silt		70	80	10
Sand with Clay		80	130	50
Clay with gravel		130	140	10
Sandy Clay		140	150	10
Clay with Sand		150	170	20
Sand with Clay + gravel		170	180	10
Clay white to tan		180	200	20
Gravel Sand + Clay		200	220	20
Clay with Sand		220	260	40
gravel with Clay + Sand		260	270	10
gravel with Clay + Sand		270	280	10
Clay with Sand		280	300	10
Sandy Clay with gravel		300	340	40
gravel with Clay		340	370	30
gravel with Sand		370	380	10
gravel with Sand		380	390	10
gravel with Sand		390	430	40
Sand + gravel		430	450	20
Sandy Clay		450	460	10
Sandy Clay with Clay		460	470	10
Sand with Clay +		470	480	10
gravel		480	520	40

40.069727° N
114.632104° W
NAD 27 (A)

Date started 10-04, 20 07
Date completed 2-07, 20 07

7. WELL TEST DATA

TEST METHOD: ☐ Bailer ☐ Pump ☒ Air Lift

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
150	No draw down info.	24 hours

8. WELL CONSTRUCTION

Depth Drilled 520 Feet Depth Cased 510 Feet

HOLE DIAMETER (BIT SIZE)

	From	To
36 Inches	0 Feet	40 Feet
26 Inches	40 Feet	520 Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
16		.312	+2	180
16		.312	280	340
16		.312	500	510

Perforations:
Type perforation louvered
Size perforation .125
From 180 feet to 280 feet
From 340 feet to 500 feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 60
Placement Method: ☒ Pumped ☐ Poured
Seal Type: ☐ Neat Cement ☒ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 520 feet to 60 feet

9. WATER LEVEL

Static water level 60 feet below land surface
Artesian flow N-A G.P.M. N-A P.S.I.
Water temperature °F Quality

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 + Wells (Contractor)
Address 580 W. Silver St. (Contractor)
Elko Nv. 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 2/12/08

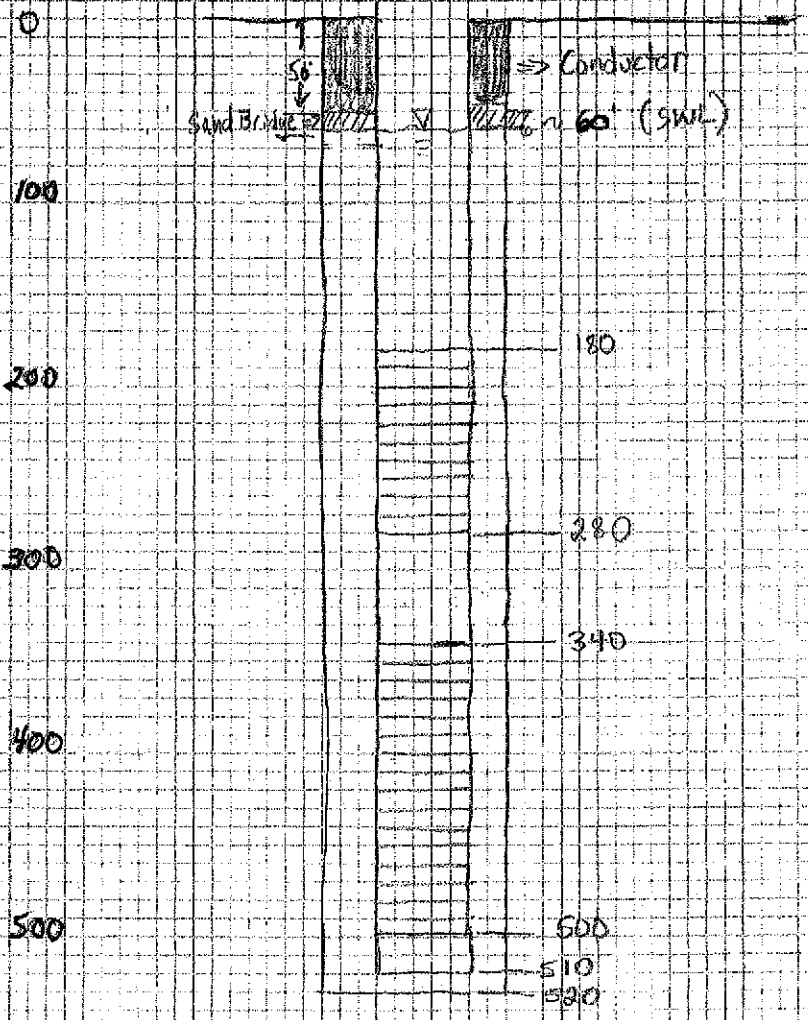
(Rev. 12-01) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

Log # 109808

BY JMD DATE 11/5/07 CLIENT SHEET NO. 1 OF 1

CHKD. BY DATE PROJECT NO.

PROJECT UTTER Replacement Irrigation Well



- Blank Casing: A53 Grade B Mild Steel, 16" Nominal Diam., 5/16" Thickness
- Slotted Casing: A53 Grade B Mild Steel, 16" Nominal Diam., 5/16" Thickness
  - Slot Size = .0.125" x 2.5" to 30" (~~Mill Slot~~) Louvered
- Gravel Pack: ~~Gravel~~ (SRI or Tacna) 1/8 X 1/4 SRI
- Blank Schedule: 0-180, 280-340, 500-510 = 250'
- Screen Schedule: 180-280, 340-500 = 260'

Converse Consultants

SIGNED

REG. NO.

SHEET NO.

Log No. Utter Replacement

Log # 109808

Date of Drilling: 11/5/07
Driller: WDC
Logged By: Kati Gibler

Location: Lages Junction
Borehole Diameter: 17.5"
Groundwater Depth (ft):

Ground Surface Elevation (ft):
Equipment:
Driving Wt. and Drop:

DRAFTED BY KG

APPROVED BY ON

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.

Depth (ft)	Graphic Log	Summary of Subsurface Conditions	Samples: Drive	Samples: Bulk	Blow Count	% Gravel	% Sand	% Fines	Field or Lab Tests
0		(SM) SILTY SAND; light brown, dry with <5% pea size gravel.							
		GRAVEL with SILT AND SAND; light brown, subrounded							
12		Not logged; conductor casing in place. Presumed composition is sand, silt, and clay							
24									
36									
		(SC) SAND with SILT and CLAY; light brown, subangular							
48									
60									
72		(SM) SAND with SILT; light brown, small amount of gray coarse sand, subangular							
		(SC) SAND with CLAY; coarse, subangular sand, light tan to whitish clay							
84									
96		--- coarse to fine sand with clay							
108									
120		--- light brown sand and white to tan clay with gravel							

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

EEC Project - Lages Station
Lages Station (60 miles north of Ely)
Nevada

Project No.
06-33159-02

Drawing No.

Converse Consultants

Over 60 Years of Dedication in Engineering and Environmental Sciences

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Log# 109808

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Depth (ft)	Graphic Log	Samples: Drive	Samples: Bulk	Blow Count	% Gravel	% Sand	% Fines	Field or Lab Tests
132								
	(CL) CLAY with GRAVEL; tan to white clay with <10% gravel							
144								
	(sc) SANDY CLAY; brown soft, plastic							
156								
	(CL) CLAY with SAND; brown, soft							
168								
	(SC) SAND with CLAY AND GRAVEL; 45% light brown clay, 1 cm diameter, red subangular gravel							
180								
	(CH) CLAY with consolidated clumps; white to tan, 5% cm size clumps							
192								
204	(GC) GRAVEL, SAND, CLAY; 85% gray, subangular, 0.5 to 1 cm, gravel with tan to white clay and sand							
	--- 55% gravel							
216								
	(CL) CLAY with SAND; white to tan clay with medium grain size, gray, angular sand.							
228								
240	--- 10% sand, light brown clay							

APPROVED BY ON

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Depth (ft)	Graphic Log	Samples: Drive	Samples: Bulk	Samples: Blow Count	% Gravel	% Sand	% Fines	Field or Lab Tests
252								
	(SC) SAND with CLAY and GRAVEL; 30% CLAY, 70% fine to coarse, light brown, subrounded sand with gravel							
264								
	(GC) GRAVEL with CLAY and SAND; 90% 2.5 cm to 0.5 cm, gray, red, angular to subangular gravel							
276								
	(CH) CLAY with SAND; light brown medium soft clay with <3% fine sand							
288								
	(CL) CLAY with SAND; coarse to fine, subangular sand							
300								
	(GC) GRAVEL with SAND AND CLAY; gray, red, angular to subangular gravel, tan clay, brown sand							
312								
	(SC) SANDY CLAY with GRAVEL; red sand and clay, 10% gravel --- 3 cm to 1 cm size cemented subrounded sand clasts							
324								
	-- less cemented sand clasts							
336								
	(GC) GRAVEL with CLAY; multi- colored, subangular to subrounded 2 cm to 0.5 cm size gravel and sand clasts --- <5% clay and 3 cm to coarse sand size, black and red, angular gravel							
348								
	--- well consolidated gravel with sand and minor clay							
360								
372								

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Depth (ft)	Graphic Log	Samples: Drive	Samples: Bulk	Samples: Blow Count	% Gravel	% Sand	% Fines	Field or Lab Tests
384								
	(GP) GRAVEL with SAND;							
396								
	(GW) GRAVEL with SAND; 3 cm to medium sand size, angular black							
	--- 2.5 cm to coarse sand size, subangular							
408								
	--- 4 cm to medium sand size, red, gray and black gravel							
420								
432								
	(SP) SAND and GRAVEL; 40% gravel and 60% coarse sand, black, red, gray, angular to subangular							
	--- 80% coarse sand, 20% 1.5 to 0.5 cm size gravel							
444								
	(SC) SANDY CLAY with GRAVEL; 20% 1 cm size, angular, black gravel							
456								
	(GC) GRAVEL, SAND, CLAY; 50% 1.5 cm to coarse sand size, black angular gravel, with 30 % tan sand and 20% light brown clay							
468								
	(SC) SAND with CLAY and GRAVEL; 60% brown sand, 20 % clay and 2.5 cm to coarse sand size, black and red gravel							
480								
	--- 75% sand, 10% 1.5 cm size gravel, 15% brown clay							
	--- 70% sand, 10% gravel, 20% clay							
492								

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Depth (ft)	Graphic Log	SUMMARY OF SUBSURFACE CONDITIONS	Samples: Drive	Samples: Bulk	Blow Count	% Gravel	% Sand	% Fines	Field or Lab Tests
504		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.							
		End of Boring							
516									
528									
540									
552									
564									
576									
588									
600									
612									
624									

End of Exploration at 507.0'

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SPT Sampler (white symbol=no recovery)

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KEY TO SYMBOLS

Log#109808

Symbol Description

Strata symbols

 Silty Sand

 Gravelly Lean Clay

 Fill

 Clayey Sand

 Lean Clay

 Fat Clay

 PG Gravel

 WG Gravel

 PG Sand

Notes:

1. Exploratory borings were drilled on 11/5/07 using a 4-inch diameter continuous flight power auger.

2. No free water was encountered at the time of drilling or when re-checked the following day.

3. Boring locations were established with hand-held GPS units

4. These logs are subject to the limitations, conclusions, and recommendations in this report.

5. Results of tests conducted on samples recovered are reported on the logs.