

CNT-121
SHALLOW

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

OFFICE USE ONLY
Log No. 117458
Permit No. _____
Basin 087

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

1. OWNER WASHOE COUNTY
MAILING ADDRESS 4930 ENERGY WAY

ADDRESS AT WELL LOCATION IN PUBLIC STREET
Subdivision Name: @ 2260 PAULINE SPARKS, NV
County: _____

NOTICE OF INTENT NO. 70785

2. LOCATION SE 1/4 NE 1/4 Sec 6 T 19 N R 20 E
PERMIT/WAIVER No. CITY ROW
Issued by Water Resources _____ Parcel No. _____

Latitude 39° 32' 34" UTM E NAD 27
Longitude 119° 46' 23" N 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 SONIC

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
<u>SEE ATTACHED LITH LOG</u>				
<u>RECEIVED</u>				
<u>2013 AUG - 8 AM 11:50</u>				
<u>STATE ENGINEERS OFFICE</u>				
<u>NAD 27</u>				
<u>39.542 776 01</u>				
<u>119.773 056 00</u>				

9. WELL CONSTRUCTION
Depth Drilled 150 Feet Depth Cased 140 Feet
HOLE DIAMETER (BIT SIZE)
From 10 Inches To 150 Feet
Inches _____ Feet _____
Inches _____ Feet _____

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
<u>2"</u>		<u>SCH 80 PVC</u>	<u>0</u>	<u>95</u>

Perforations:
Type of perforation FACTORY SLOT
Size of perforation .020
From 95 feet to 105 feet
From _____ feet to _____ feet

Annular Seal: Yes No
 Neat Cement to _____ Pumped Poured
 Cement Grout 0 to 90 Pumped Poured
 Concrete Grout to _____ Pumped Poured
 ≥30% Bentonite Grout to _____ Pumped Poured

Gravel Pack: Yes No 107 to 93 Pumped Poured
Type: 10X20 SILICA # 60 FINE
Bentonite Chips: Yes No 93 to 90 Pumped Poured
Type: MEDIUM

7. Water Level
Static water level: 43 feet below land surface
Artesian Flow: _____ G.P.M. _____ 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 CASCADE DRILLING Contractor
Address 230 E STONEY Contractor
SPARKS, NV
Nevada contractor's license number _____
issued by the State Contractor's Board 73966
Nevada driller's license number issued by the _____
Division of Water Resources, the on-site driller 2434 M
Signed [Signature]
By driller performing actual drilling on-site or contractor
Date 7-29-13

8. WELL TEST DATA

TEST METHOD:	Bailer	Pump	Air Lift	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Top	Base	Description	WELLID	CTM-121
	0	5 Hand drill to 5'. Boulders, cobbles, gravel, and F-C sand Dark brown sandy gravel with cobbles. Loosely consolidated, non-graded. Angular gravel at 8.5-10'. Localized oxidation. Cobbles		
	5	12.5 R-SR at 12'.		
	12.5	15 Dark olive brown sand with gravel and cobbles. Loose, subangular sand with uniform grain size.		
	15	17.5 Dark grayish brown sandy gangular gravel with trace silt. Loose, non-cohesive. Grades sharply to silty sand at 17'.		
	17.5	19.5 Dark brown F-C sand with trace gravel. Mostly M-C sand. Loose, non-cohesive. Grades to gravel at 19.5'. Olive brown sandy gravel with cobbles and trace silt. Coarsens to 25-30 cobbles between 24-25'. Sand is mostly M-C. Localized		
	19.5	25 pods of oxidation at 25'		
	25	Olive cobbles and gravel in a F-M grained sand and silt matrix. Clasts are rounded; increased angularity with depth. Abundant		
	35	35 oxidation. GD clasts oxidized and friable. Imbricated clasts. Lenses of oxidation and silt/clay increase down-section. 37 Dark brown F-C silty sand. Predominantly fine sand. Oxidation lenses present.		
	37	Olive gray M-C sand. Loose, unconsolidated. Abundant jasper and chert grains. Fines downward to 41' and coarsens from 41-		
	42.5	42.5 42.5'.		
	45	45 Light red clayey silt with trace sand. Mottled black spots 55 Same, with coarse-grained SR-SA sands in matrix from 47-55'.		
	55	65 Brown silt with clay and coarse-grained sand. Very hard, non-cohesive. Crumbly and flakey when dry. Cobbles present at 62'.		
	65	70 Dark brown M-C sand. Loose, non-cohesive, with some silt.		
	70	73.5 Very dark gray sandy silt with lenses of M-C sand. Pods of oxidation.		
	73.5	80 Dark brown F-M sand. Loose, abundant oxidation lenses. Coarsens from 77-79.5'. Reddish gray silt with trace fine sand and clay. Relatively soft, consolidated. Abundant lenses of oxidation with small black to		
	80	85 gray spots (<2mm).		
	85	90 Brown fine silty sand with clay. Loosely consolidated, coarsens downward. Localized oxidation, somewhat cohesive.		
	90	95 Brown silt with clay and very fine-grained sand. Cohesive and soft. Abundant pods of oxidation and black to gray spots (2-4mm).		
	95	98 Dark reddish gray medium grained sand with silt. Loose, very wet. Bands of oxidized sand and beds of silt (2cm thick) at 97'. Dark reddish brown M-C sand with trace silt. Beds of oxidized coarse sand and thin beds (2-3cm thick) of silty sand. Abundant		
	98	105 water. Coarsens at 100' to predominantly silt-free, coarse, saturated sand. Dark grayish brown silt with trace sand. Very tightly consolidated, hard. Localized oxidation. Fine sand increases to approx. 20%		
	105	113 at 108'. 6" bed of soft, wet, medium-grained sand at 110'.		
	113	115 Reddish brown F-C sand. Saturated. Mostly medium-grained. Oblate pods of oxidized silt and clay (5-7 cm) at 115'.		

- 115 122 Reddish-brown silt with fine sand and clay. Oxidation spots common. Increase in plasticity down section.
- 122 Dark reddish-gray F-C sand with silt. Oxidation present locally. Grades to fine consolidated sand at 124'. Fine silty sand w/trace coarse grains.
- 125 135 Light olive brown silt with trace clay. Non-plastic, non-cohesive. Oxidation spots (1-3mm) common.
- 135 137.5 Olive, medium-grained silty sand with subordinate fine sand. Saturated. Grades to coarse sand at 137.5'.
- 137.5 148.5 Very dark brown M-C sand, predominantly coarse grains.
- 148.5 149.5 Very dark brown coarse-grained sandy gravel.
- 149.5 150 Dark reddish-brown sandy silt, firm, abundant oxidation spots.