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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

# WELL DRILLERS REPORT

OFFICE USE ONLY
Log No. 32046
Permit No.
Basin 6-87

1/3

PRINT OR TYPE ONLY

Please complete this form in its entirety

NOTICE OF INTENT NO. 12791

1. OWNER Chent Brown & Caldwell
MAILING ADDRESS 723 S Street
Sacramento, CA 95814-7092

ADDRESS AT WELL LOCATION ARCO STATION 6017
2240 B STREET
Sparks NV 89431

2. LOCATION NE ¼ NE ¼ Sec. 6 T. 19 N N/S R. 20 E Washoe County
PERMIT NO. M/W 500 (Issued by Water Resources) | Parcel No. | El Rancho & B Street (Subdivision Name)

3. TYPE OF WORK
New Well ☐ Recondition ☐
Deepen ☐ Other MW ☐

4. PROPOSED USE
Domestic ☐ Irrigation ☐ Test ☐
Municipal ☐ Industrial ☐ Stock ☐

5. TYPE WELL
Cable ☐ Rotary ☐
Other ☐

6. LITHOLOGIC LOG

| Material | Water Strata | From | To | Thickness |
|---|---|---|---|---|
| Attached | | | | |
| | #/MW-4 | | | |

Date started 5/5/, 1989
Date completed 5/5/, 1989

7. WELL TEST DATA

| Pump RPM | G.P.M. | Draw Down | After Hours Pump |
|---|---|---|---|
| | | | |

BAILER TEST
G.P.M. ..... Draw down ..... feet ..... hours
G.P.M. ..... Draw down ..... feet ..... hours
G.P.M. ..... Draw down ..... feet ..... hours

8. WELL CONSTRUCTION
Diameter hole ..... inches Total depth ..... feet
Casing record .....
Weight per foot ..... Thickness .....

| Diameter | From | To |
|---|---|---|
| ..... inches | ..... feet | ..... feet |
| ..... inches | ..... feet | ..... feet |
| ..... inches | ..... feet | ..... feet |
| ..... inches | ..... feet | ..... feet |
| ..... inches | ..... feet | ..... feet |
| ..... inches | ..... feet | ..... feet |

Surface seal: Yes ☐ No ☐ Type .....
Depth of seal ..... feet
Gravel packed: Yes ☐ No ☐
Gravel packed from ..... feet to ..... feet

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

9. WATER LEVEL
Static water level ..... feet below land surface
Flow ..... G.P.M. ..... P.S.I.
Water temperature ..... ° F. Quality .....

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

Name ..... (Contractor)
Address ..... (Contractor)
Nevada contractor's license number .....
Nevada contractor's drillers number .....
Nevada driller's license number ..... (Actual Driller)
Signed ..... (Contractor)
Date .....

USE ADDITIONAL SHEETS IF NECESSARY

(Rev. 6-81) O-627 CR434

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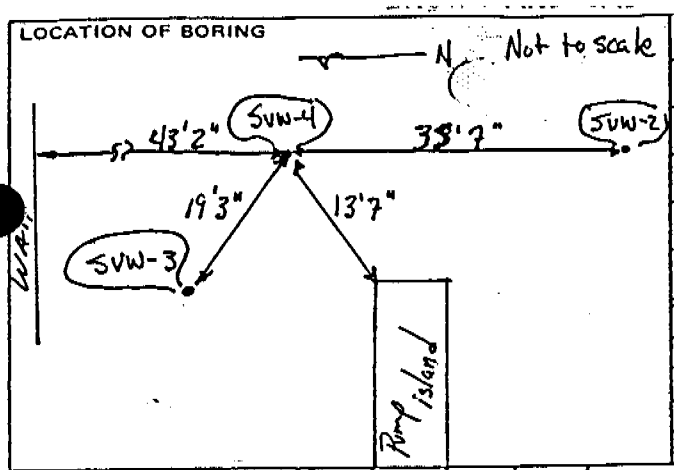
LOCATION OF BORING




| | |
|---|---|
| CLIENT | ARCO PRODUCTS COMPANY |
| LOCATION | 2240 B ST, SPARKS, |
| JOB NO. | 4165 |
| BORING NO. | SVW-4 |
| SHEET | 1 OF 2 |
| WATER LEVEL | |
| TIME | |
| DATE | |
| CASING DEPTH | |
| DRILLING START TIME | 0930 |
| DRILLING FINISH TIME | 1730 |
| DATE | 5/5/89 |
| DATE | 5/5/89 |
| DRILLING CONTRACTOR | WAYNE DRILLING |
| DRILLING METHOD | ODEX 190 System with 8 5/8" drive Lift casing. |
| SAMPLING METHOD | 5 3/8" Tubing (T); Hand Auger (HA) |

N/S | E/W | ELEV.

SURFACE CONDITIONS Asphalt

| WELL CONST. CASING | WELL CONST. ANNULUS | SAMPLER TYPE | INCHES DRIVEN / INCHES RECOVERED | SAMPLE NO. / SAMPLE DEPTH | BLOWS/6" SAMPLER | DEPTH IN FEET | SOIL CALLOUT | MATERIALS ENCOUNTERED AND DRILLING CONDITIONS (*) |
|---|---|---|---|---|---|---|---|---|
| 3" ID Sch 40 PVC blk casing, fitted with slip/thread coupling | CN1 cement; 2.5 ft #3 sand; grout; bent. | HA | | | | 0 | Asphalt | 0-0.5 ft; Asphalt |
| | | | | | | 1–3 | FILL | 0.5-3.0 ft; Sand; 80% fine to medium sand rounded, well graded, ~~poorly sorted~~; 20% non plastic fines; moist; loose to slightly firm — most likely road base or set sand for compaction purposes. Color Dark yellowish orange (10YR 6/6). No HC odors noted. |
| | | | | | | 4–6 | GP | 3.0-6.0 ft; ~~[illegible]~~ cobbley gravel; 60% medium ~~[illegible]~~ gravel (3/4"), rounded, ~~[illegible]~~ consists of mafic volcanics that are felsic in texture; 25% cobbels, rounded volcanic; 10% v. fine to coarse sand, rounded, well graded ~~[illegible]~~, quartz present & some micas; 5% low plastic fines; Moist; firm to loose; drilling easy; fast penetration of tool; Moderate brown (5YR 3/4). No HC odors noticed in cuttings. |
| | | | | | | 7 | GM | |
| | | | | | | 8–9 | GP | |
| 3" ID Sch 40 PVC .020 slotted casing | Sand; Monterey | ODEX | | | | 10–11 | GM | 6.0-8.0 ft; ~~Clay~~ Sandy ~~[illegible]~~ gravel; 40% gravel medium ~~[illegible]~~ rounded, ~~[illegible]~~; 30% v. fine to coarse sand, rounded, well graded, ~~[illegible]~~ consisting of volcanics and quartz; 15%-20% low-non plastic fines; 15%-20% ~~[illegible]~~ cobbles, rounded, ~~[illegible]~~; gravels and cobbles black (N1); Clay & sand Moderate brown (5YR 4/4). loose, hard drilling, No HC odors noted in drill cuttings. |
| | | | | | | 12–14 | GP | |
| | | | | | | 15–16 | GC/GM | 8.0-10.0 ft; Boulders; 90% Boulders, rounded 0.5-1.0 in diameter; 5% gravel - medium ~~[illegible]~~; 5% sand - medium to coarse, rounded, moderately graded; v. hard drilling; Boulders, gravels & sand Black (N1) to Dark gray (N3). No HC odors noted, losing air pressure into formation. |
| | | | | | | 17–18 | GP | |
| | | | | | | 19 | SP | |
| | | | | | | 20 | GC/GM | 10.0-12.0 ft; Same as above at 6.0-8.0 ft except for color at 13.0 ft; Olive gray (5Y 3/2). |

(*) Estimated percentages from cyclone discharge.

DRILLER Gary Heeman & Rick Wortman

RIG 7660-Schramm

BY Tim Havel

DATE 5/5/89

CHK'D BY

LOG # 32046

BROWN AND CALDWELL — BOREHOLE LOG

3/3

Log # 32046

LOCATION OF BORING

See pg. #1

| | | | | |
|---|---|---|---|---|
| CLIENT | ARCO PRODUCTS COMPANY | | | |
| LOCATION | 2240 B ST, SPARKS, NV. | JOB NO. | 4165 | |
| WATER LEVEL | | | | |
| TIME | | | | |
| DATE | | | | |
| CASING DEPTH | | | | |

BORING NO. SVW-4

SHEET 2 OF 2

| DRILLING | |
|---|---|
| START | FINISH |
| TIME | TIME |
| DATE 5/5/89 | DATE 5/5/89 |

DRILLING CONTRACTOR WAYNE DRILLING

DRILLING METHOD ODEX

SAMPLING METHOD 5 3/8" Tubing (T) driven with an at surface with a casing hammer.

N/S | E/W | ELEV.

SURFACE CONDITIONS Asphalt

| WELL CONST. CASING | WELL CONST. ANNULUS | SAMPLER TYPE | INCHES DRIVEN / INCHES RECOVERED | SAMPLE NO. / SAMPLE DEPTH | BLOWS/6" SAMPLER | DEPTH IN FEET | SOIL CALLOUT |
|---|---|---|---|---|---|---|---|
| 3" ID sch 40 PVC .020 slot casing | #3 Monterey sand | ODEX | | | | 20 | GC/GM |
| | | | | | | 21 | |
| | | | | | | 22 | |
| | | | | | | 23 | |
| | | | | | | 24 | |
| | | Tubing | | | | 25 | |
| | | | | | | 26 | |
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MATERIALS ENCOUNTERED AND DRILLING CONDITIONS*

12.0-15.0 ft.; Boulders; 80% ~~[illegible]~~ boulders, rounded, ~~[illegible]~~, consisting of mafic volcanics; 10% medium gravel, rounded ~~[illegible]~~, consist of volcanics; 5% medium to coarse sand, rounded contains quartz; Cobbles & gravels are black (N1) to Dark gray (N4); Very hard drilling, loss of air circulation due to permeability of formation, No HC odors noted from the drill cuttings.

15.0-16.5; ~~[illegible]~~ cobbley gravel; 60% medium fine ~~[illegible]~~ gravel, rounded, ~~[illegible]~~; 25% medium to low plastic fines; 10% ~~[illegible]~~ cobbles, rounded, ~~[illegible]~~ consists of mafic volcanics; 5% v. fine to medium sand; hard to moderately easy drilling; Dark yellowish brown (10YR 4/2), No HC odors noted in drill cuttings.

16.5-18.5; Boulders; same as above at 12.0-15.0 ft.

18.5-19.0; Sand - 90% medium to coarse sand, rounded, ~~moderately~~ poorly graded, ~~poorly~~ ~~[illegible]~~; 10% non plastic fines, easily drilled by tool; Moderate yellowish brown (10YR 6/4). HC odors noted in drill cuttings very slight.

19.0-27.5. same as above at 15.0-16.5 ft. except for color light olive gray (5Y 5/2) to Olive gray (5Y 3/2). HC odors noted in samples taken from 26.0 and 27.5 ft below grade (SVW-4-1) and (SVW-4-2) respectively. TLV measure - 100ppm (SVW-4-1) TPH; and 150ppm TPH (SVW-4-2): Total depth of borehole = 27.5 ft.

Borehole completed with 3" ID sch 40 PVC .020 slotted casing from 25' to 5' below grade; 3" ID sch 40 PVC blank casing from 5' to 0.5 ft below grade; blank casing fitted with slip to thread PVC 4' coupling with NPT PVC end cap at 2.5" below graded. Annulus of well backfill with #3 monterey sand from 27.5 to 4.5' below grade, 4.5-3.5 ft below grade with bentonite, ~~#3 sand from~~ neat cement from 3.5-3.0 ft below grade, #3 sand from 3.0 to 1.0 ft. below grade; and 1.0-0.5 ft below grade with sacrete.

*Estimated % from cyclone discharge.

DRILLER Gary Hedman & Rick Wortman

RIG 7660-Schramm

BY Tim Havel

DATE 5/5/89

CHK'D BY