#13

Log No. 7084
Rec. 19
Well No.
Permit No.
Do not fill in

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner: Nellis Air Force Base — Driller: Phelps Pump & Equipment Co.

Address: Nellis AFB, Nevada — Address: 400 E. College Ave. N. Las Vegas, Nev. Lic. No.

Location of well: SW ¼ NE ¼ Sec. 9, T 20 S, R 62 E, in Clark County

or Army Coordinates: N532 517, E656 939 G.S. Elev. 1812.00'

Water will be used for: Domestic — Total depth of well: 694'

Size of drilled hole: 12½" (pilot) & 28½" — Weight of casing per linear foot: -

Thickness of casing: ¼" — Temp. of water: 74 °F

Diameter and length of casing: 14" ID Single wall 2' above G.S. to 694' below G.S.
(Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)

If flowing well give flow in c.f.s. or g.p.m. and pressure: -

If nonflowing well give depth of standing water from surface: 72' below G.S.

If flowing well describe control works: -
(Type and size of valve, etc.)

Date of commencement of well: 5 Nov. 1962 — Date of completion of well: 16 Dec 1962

Type of well rig: Drilled w/rotary rig(mud type); swabbed w/36L Cable tool.

LOG OF FORMATIONS of Well "B"

From feet	To feet	Thickness feet	Type of material
0'	17'	17	Clay: Tan & soft
17'	24'	7	Caliche w/gravel: White, limestone gravel to 2"
24'	40'	16	Caliche: White to buff, firm
40'	80'	40	Clay & Caliche: White & tan, soft
80'	90'	10	Clay w/gypsum: Tan, soft sugary gypsum.
90'	100'	10	Clay: tan, soft.
100'	150'	50	Caliche: White & buff, soft.
150'	315'	165	Clay: Tan, soft & indurated.
315'	330'	15	Clay w/gypsum: Firm & soft, brn, gypsum is sugary.
330'	375'	45	Clay: Gray brn. Soft.
375'	385'	10	Silt: Gray brn, soft.
385'	410"	25	Sandy silt: Tan, soft & indurated Sand is fine.
410'	436'	26	Sandy clay w/gypsum: Gray brn, soft & indurated. Sand is fine, sugary gypsum.
436'	445'	9	Clay: Brn, soft & indurated.
445'	484'	39	Sandy Silt: Gray brn, soft; sand is fine.
484'	560'	76	Clay: Brn, soft.

(OVER)

Water-bearing Formation, Casing Perforations, Etc.

Chief aquifer (water-bearing formation)
from 664 to 694 ft.

Other aquifers: 78 to 105; 605 to 610

First water at 78' feet.

Casing perforated
from 274' to 674' ft.

Size of perforations
Horizontal Louvier 1/8"x 3" staggered rows 2-2/3" apart.

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LOG OF FORMATIONS—*Continued*

From feet	To feet	Thickness	Type of material
560'	620'	60	Clay: Gray brn w/lt. gray streaks, soft
620'	650'	30	Silt & clay: Brn & gray, soft. Silt is brn & clay gray & brn streaks.
650'	680'	30	Clay: Lt gray & tan, soft.
680'	700'	20	Clay: Lt gray, soft & indurated streaks. Well completed @ 694'.
700'	1000'	300	Clay w/gypsum: Gray & greenish gray, soft & indurated streaks, some clay streaks are very lean. Gypsum if of the Selenite (platy) variety. 694' to 1000' only opened by drilling 12¼" pilot hole. Not opened full size due to brackish water from gypsum as shown by electric log.

CASING RECORD

Diam. casing	From feet	To feet	Length	"Remarks"—Seals, Grouting, Etc.
30"	2'above G.S.	50'	52'	Surface casing grouted entire depth.
14"	2' above G.S.	694'	696'	Perforated from 274' below G.S. to 675' below G.S. Gravel packed well using 3/8" max. gravel Used 106 cubic yard of gravel.

GENERAL INFORMATION—Pumping Test, Quality of Water, Etc.

Static W.L. 72'. Chemical analysis was made & contained 446 PPM total dissolved solids.

A little high on flouride (1.7 PPM) Ph = 7+

200 GPM w/55' DD	500 GPM w/ 129' DD
360 " " 90' "	640 " " 166' DD
420 " " 97' "	740 " " 196' DD , Sanding condition

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and the above information is true to my best information and belief.

Signed Phelps Pump & Equipment Co.
Well Driller

By.....

License No. 98

Dated March 19, 19 63

(Not to be filled in by Driller)

RECEIVED
MAR 26 1963
DIV. OF WATER RESOURCES
BRANCH OFFICE
LAS VEGAS, NEVADA