United States Department of the Interior

U. S. GEOLOGICAL SURVEY

2730 N. Deer Run Rd.
Carson City, NV 89701
Phone: 775-887-7614

May 20, 2011

MEMORANDUM

To: Devin L. Galloway, Groundwater Specialist, Water Science Field Team, USGS, Sacramento, CA

From: Weiquan Dong, Hydrologist, Southern Nevada Water Authority, Ramon C Naranjo, Hydrologist, Nevada WSC, U.S. Geological Survey, and Keith J. Halford, Ground-Water Specialist, Nevada WSC, U.S. Geological Survey

Subject: AQUIFER TEST—Analysis of water level fluctuations from pumpage for irrigation during 1978—1989 in Penoyer Valley, HA170, Lincoln and Nye counties, NV

Ranges of transmissivity and specific yield of the basin fill were estimated by analyzing water-level changes in multiple observation wells that were caused by development of irrigated fields in Penoyer Valley, HA170, near Rachel, NV (Figure 1). Irrigated acreage totaled 900 acres during 1978 and increased to 2,300 acres during 1986—1989. Annual effective ground-water withdrawals were estimated between 2,600 and 11,800 acre-feet (ac-ft) during the 1978—1989 irrigation seasons. Hydraulic property estimates from the Penoyer aquifer test will constrain calibration of regional ground-water flow models.

Site and Geology

The aquifer test occurred near Rachel, NV in Penoyer Valley where an area of more than 100 mi² was affected by pumpage for irrigation (Figure 1). The basin fill was pumped largely between 100 and 300 ft below land surface where undifferentiated intervals of sand and gravel occurred. Insufficient information exists to differentiate the hydraulic properties of basin-fill which will be cited as homogeneous, coarse-grained fill (Appendix A).

The groundwater flow system was interpreted with a thickness of 1,000 ft even though the thickness of basin fill exceeds 10,000 ft (Belcher, 2004). The thickness of

more permeable sediments is unknown, but a thickness must be assigned in the numerical flow model used to analyze the aquifer test. Hydraulic conductivity of the basin fill in Penoyer Valley was not estimated or reported because of the uncertainty in the thickness of the aquifer.

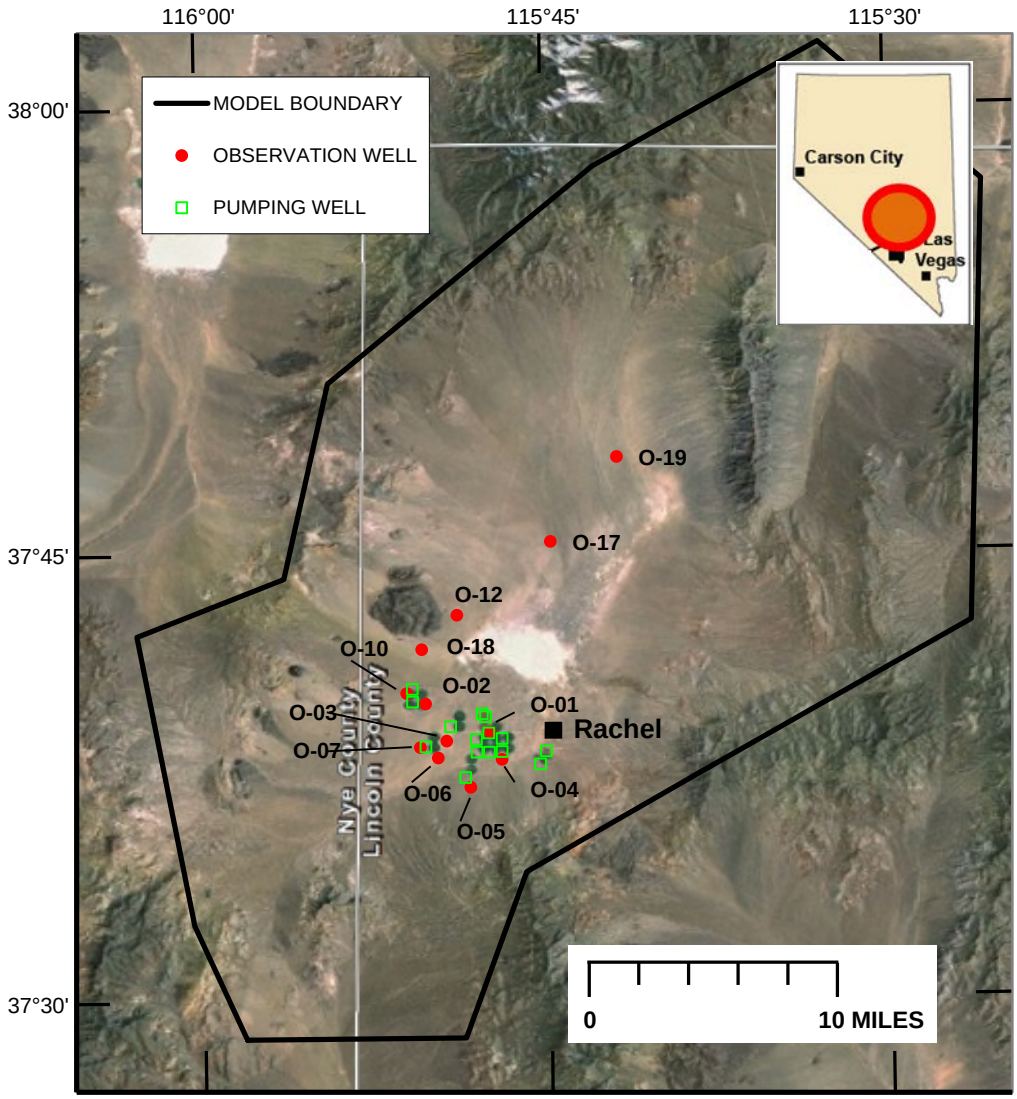

Figure 1.—Location of pumping and observation wells in Penoyer Valley near Rachel, Nevada (Universal Transverse Mercator projection, Zone 11).

Observation wells generally surrounded the pumping wells and irrigated areas (Table 1, Figure 1) and were completed between 30 and 540 ft below land surface. Observation well completions generally were shallower than the pumping well completions.

Table 1.—Well location and construction data for observation wells that were used in the Penoyer irrigation analysis aquifer test (See figure 1 for well locations).

[Latitude and longitude are in degrees, minutes, and seconds and referenced to North American Datum of 1927; ft amsl, feet above North American Vertical Datum of 1929 (NAVD 29) except as noted; ft bgs, feet below ground surface.]

Map Identifier	SITE IDENTIFIER	Well name	Latitude	Longitude	Ground surface elevation, ft	Hole depth, ft bgs
O-01	373907115461701	170 S03 E55 28DC 1	37°38'59"	115°47'32"	4,838	250
O-02	373955115490201	170 S03 E55 19CC 1	37°39'58"	115°50'20"	4,850	238
O-03	373842115492301	170 S03 E55 32BCB 1	37°38'42"	115°49'26"	4,850	157
O-04	373813115454001	170 S03 E55 34CC 1	37°38'04"	115°47'02"	4,870	537
O-05	373708115482201	170 S04 E55 08AA 1	37°37'08"	115°48'25"	4,910	250
O-06	373817115483301	170 S03 E55 31 1	37°38'08"	115°49'49"	4,890	250
O-07	373830115503201	170 S03 E55 31CBBC1 Vineyard	37°38'30"	115°50'35"	4,879	280
O-10	374020115494101	170 S03 E54 24 2	37°40'19"	115°51'10"	4,860	327
O-12	374256115485501	170 S03 E55 05BDDD1 USBLM - Black Rock Well	37°42'56"	115°48'56"	4,751	29
O-17	374523115440901	170 S02 E55 24CB 1 USGS-MX	37°45'23"	115°44'48"	4,800	153
O-18	380738115502901	170 S03 E55 07CC 2 USGS-MX	37°41'47"	115°50'29"	4,922	148
O-19	380338115422001	170 S02 E56 05AD 1 USGS-MX	37°48'13"	115°41'52"	4,922	193

Period and Area of Analysis

Water level declines during the 1978–1989 irrigation seasons were analyzed because intensive irrigation began during 1978, crops had been inventoried, and sufficient water-levels were measured during this period. Irrigated acreage and groundwater withdrawals by well were estimated in Penoyer Valley during 1960–1998 (Moreo and others, 2003). Irrigated crops covered between 900 and 2,300 acres during the period of analysis. The irrigation water was entirely ground-water except for local precipitation because surface-water supplies are absent. Annual ground-water pumping for irrigation ranged between 2,600 and 11,800 ac-ft assuming application rates of 3 and 5 ft/yr (Figure 2). These application rates range from the minimum to most likely (Moreo and others, 2003).

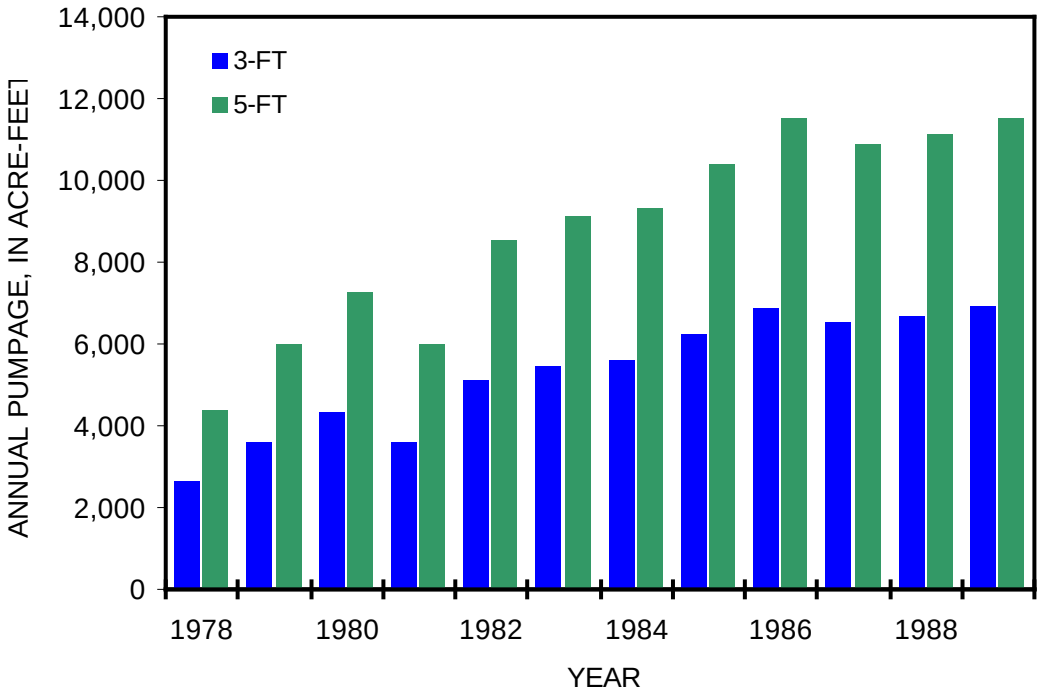

Figure 2.—Annual pumpage from Penoyer Valley for application rates of 3 and 5 ft/yr.

Water Levels and Drawdowns

Water-level changes were observed in twelve wells that were affected by ground-water pumping for irrigation (Table 1, Figure 1). Water levels have been measured as frequently as weekly and as infrequently as annually. Annual and quarterly measurements occurred during the 1978–1989 period of analysis (Figure 3). Water levels in the observation wells ranged between 20 and 240 ft below land surface.

Drawdowns were estimated by subtracting water levels measured during the test period from water levels that were measured during October 1978 prior to most pumping (Moreo and others, 2003). Drawdown rates ranged between 0.5 and 1 ft/yr and these extremes were observed in wells O-12 and O-02, respectively (Figure 3). Well O-12 was more than 2 mi from the nearest pumping well and well O-02 was within 2,000 ft of the nearest pumping well (Figure 1).

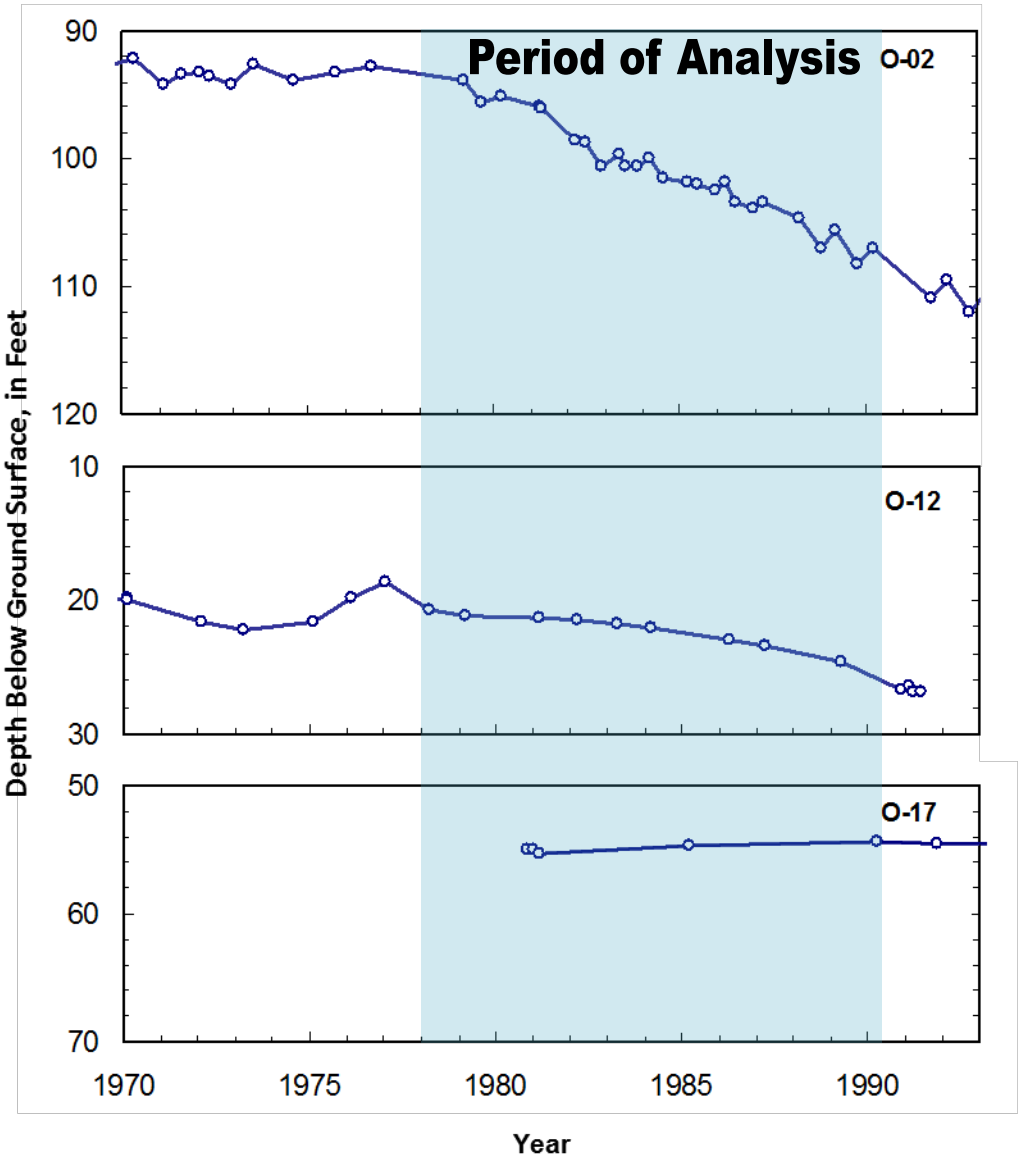

Figure 3.—Water level changes in selected observation wells and period of analysis.

Numerical Analysis

Hydraulic properties of the basin fill were estimated by minimizing differences between simulated and measured drawdowns. Drawdowns were simulated with a three-dimensional, MODFLOW model that simulated seasonal, spatially distributed pumping (Harbaugh and McDonald, 1996). Parameter estimation was performed by minimizing a weighted sum-of-squares objective function with MODOPTIM (Halford, 2006).

The model domain was discretized into 233 rows and 169 columns (Figure 4). Rows and columns were assigned widths of 1,000 ft where observation wells and the majority of pumping wells existed. Row and column widths were multiplied by 1.1 from the area of 1000-ft on a side cells to the edges of the model that extended laterally 330,000 ft away. All lateral model boundaries were specified as no-flow boundaries. The model grid was oriented north-south in UTM, zone 11 for convenience where the lower, left model corner was easting 590,567 m and northing 4,148,254 m. The basin fill was simulated with a single 1000-ft thick layer. The base of the aquifer system was specified as a no-flow boundary. Changes in the saturated thickness of the aquifer were not simulated because the maximum drawdown near the water table was small relative to the total thickness.

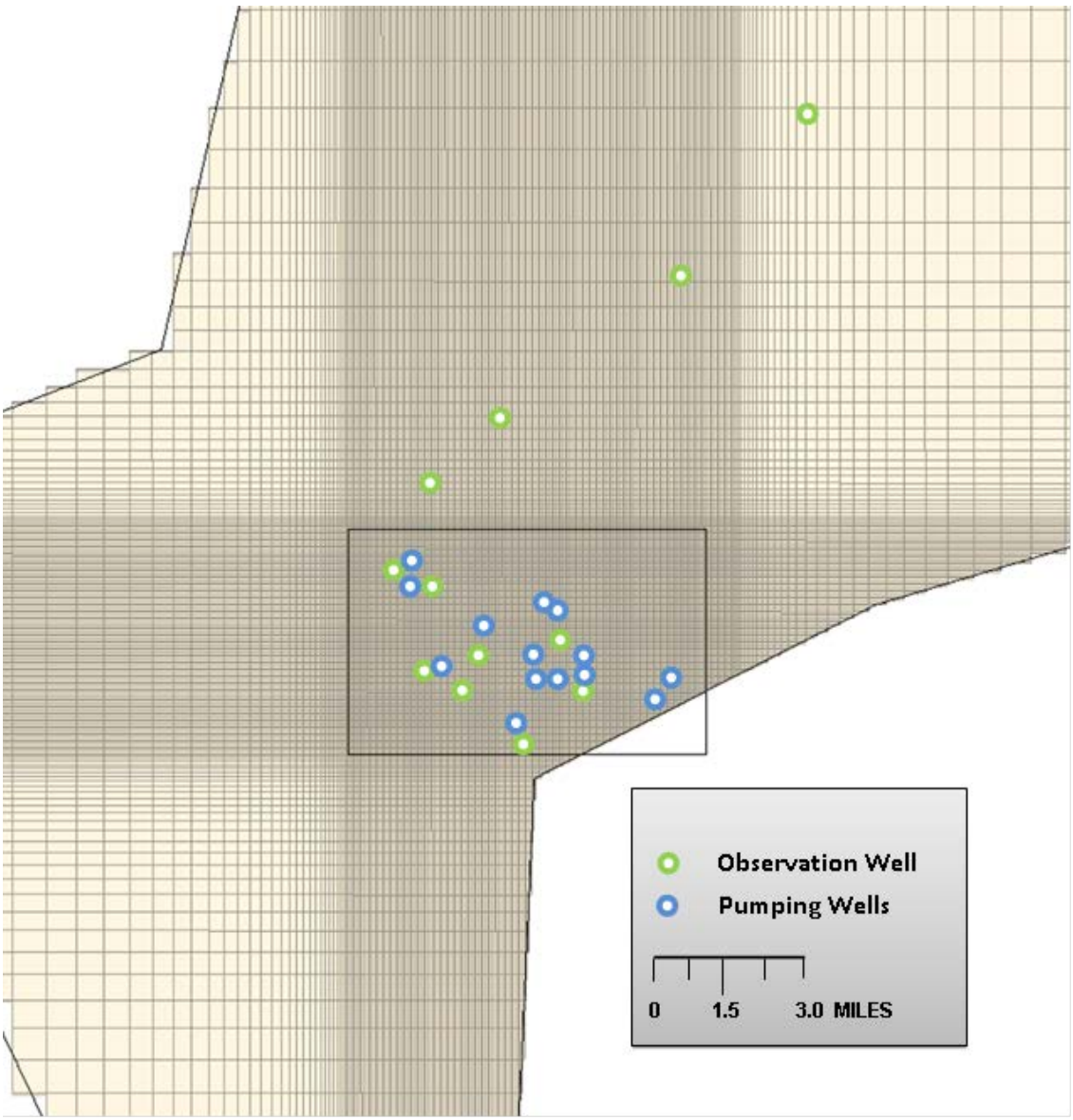

Figure 4.—Numerical model grid, pumping wells, and observation wells in Penoyer Valley.

The 1978–1989 irrigation seasons were simulated with twenty-four stress periods and the first period started April 1, 1978. Each stress period was divided into 25 time steps, the initial time step was about 0.0001 d, and successive time steps were 1.3 times greater than the previous time step. Recovery from each irrigation season occurred during the even numbered stress periods when no pumpage was simulated. Initial conditions of zero drawdown were assigned throughout the model domain.

Hydraulic Property Estimates

Transmissivity and specific yield of the basin fill were estimated as homogeneous, isotropic properties throughout Penoyer Valley to match measured drawdowns. Simulated drawdowns matched measured drawdowns with a weighted RMS error of 0.4 ft (Figure 5). This is a small error relative to drawdowns of 20 ft after 12 years of irrigation.

Simulated and measured rates of annual decline agreed well in representative wells O-2 and O-12 (Figure 5) and all other wells (Appendix B). This suggests that the hydraulic properties of the basin fill can be interpreted reasonably with homogeneous units where the hydraulic diffusivity, transmissivity divided by storage coefficient, is 100,000 ft^2/d. The hydraulic diffusivity estimate is relatively constant for annual application rates between 3 and 5 ft.

Transmissivity of the basin fill ranged between 10,000 and 17,000 ft^2/d for annual application rates of 3 and 5 ft, respectively (Table 2). Specific yield ranged between 0.10 and 0.17 for annual application rates of 3 and 5 ft, respectively. Transmissivity and specific yield estimates increased proportionally with increased application rates.

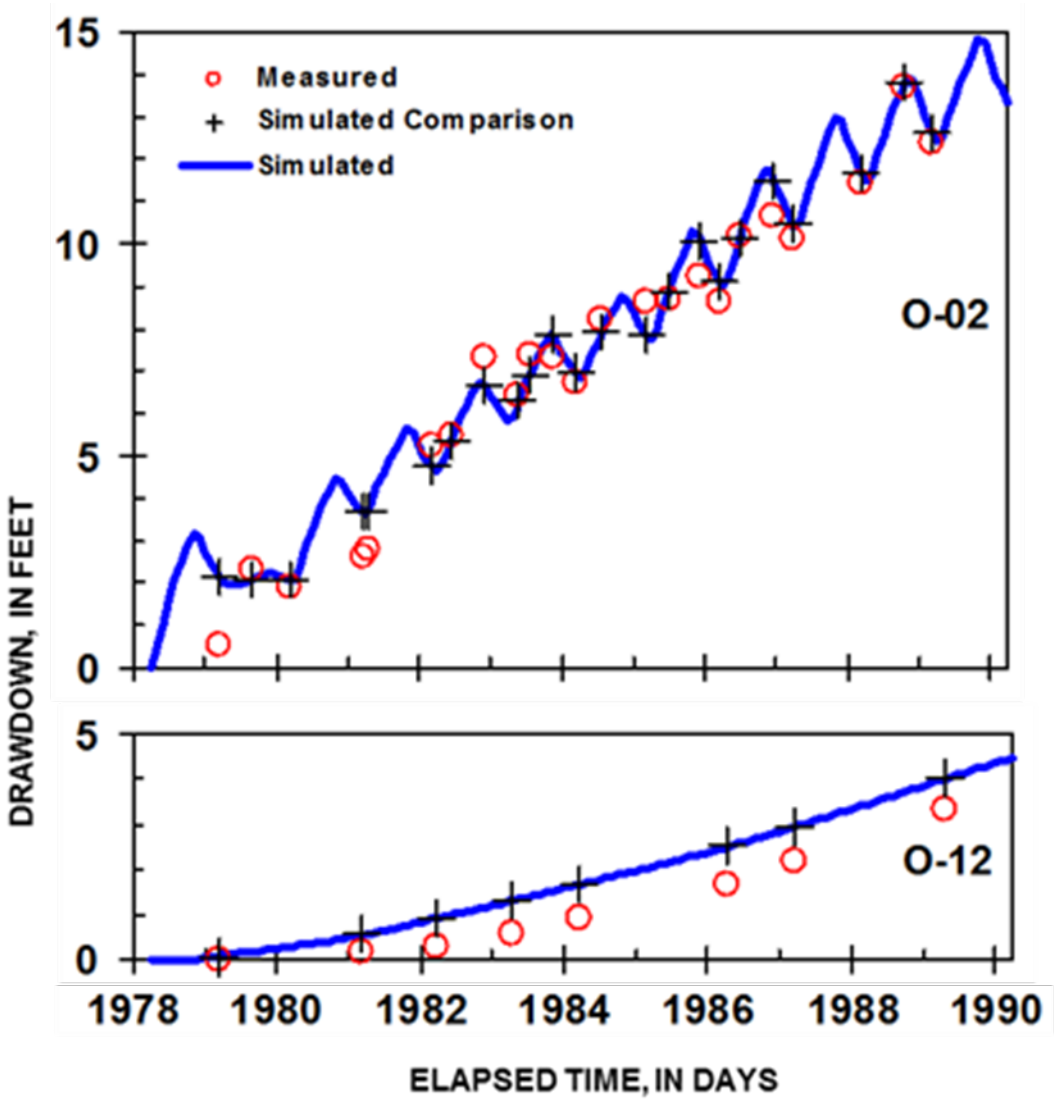

Figure 5.—Simulated and measured drawdowns in representative observation wells O-02 and O-12 during 1978-1989 irrigation seasons with an annual application rate of 5 ft.

Table 2.—Hydraulic properties estimated with the numerical model.

Hydraulic Property	Application Rate 3-ft	Application Rate 5-ft
Specific yield	0.10	0.17 d'less
Transmissivity	10,000	17,000 ft²/d

Simulated drawdowns between 0.2 and 1 ft affected between 210,000 and 110,000 acres, respectively, after the 1989 irrigation season (Figure 6). Hydraulic property estimates are integrated values for an area of about 110,000 acres if the detection threshold for drawdown is assumed to be 1 ft. Between 68 and 90 percent of the pumped volume was released from storage between simulated drawdowns of 4 and 1 ft, respectively. The affected areas and percentages of pumped volumes were not affected by differences in annual application rates of 3 or 5 ft.

The contributing area for the Penoyer aquifer test was much greater than the contributing area of conventional aquifer tests because the pumped volume ranged between 64,000 and 106,000 ac-ft. This is about 2,000 times greater than the volume pumped during a conventional aquifer (pumping) test. For example, continuously pumping 3,000 gpm during a 3-d period removes less than 40 ac-ft from an aquifer.

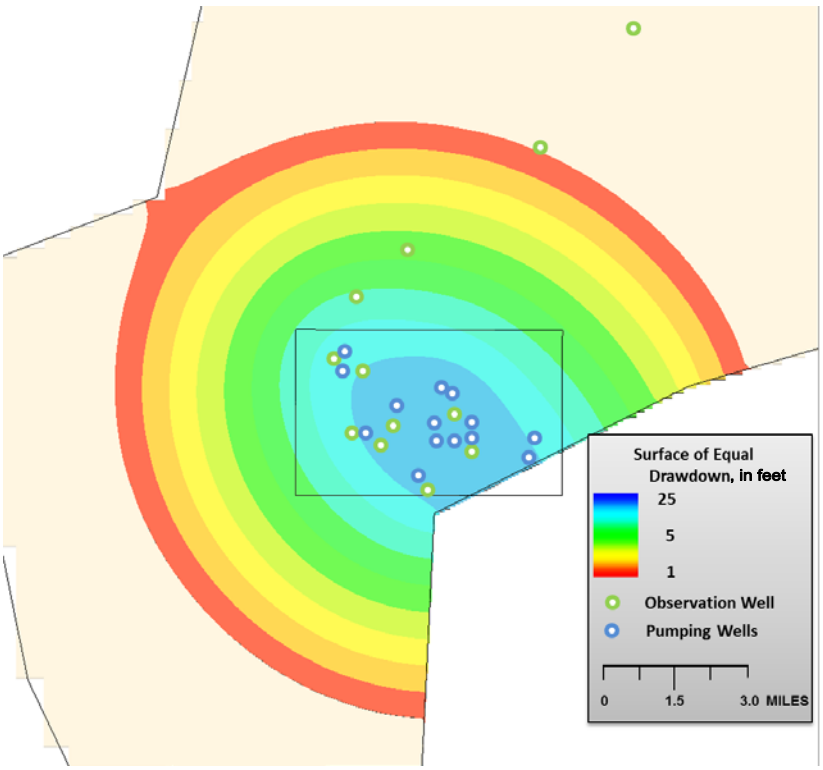

Figure 6.—Simulated drawdowns on March 31, 1990 at the end of stress period 24 after recovering from the 1989 irrigation season.

References

Belcher, W.R., ed., 2004, Death Valley regional ground-water flow system, Nevada and California—Hydrogeologic framework and transient ground-water flow model: U.S. Geological Survey Scientific Investigations Report 2004-5205, 408 p.

Halford, K.J., 2006, MODOPTIM: a general optimization program for ground-water flow model calibration and groundwater management with MODFLOW: U.S. Geological Survey Scientific Investigations Report 2006-5009, 62 p.

Harbaugh, A.W., and McDonald, M.G., 1996, Programmer's documentation for MODFLOW-96, an update to the U.S. Geological Survey modular finite difference ground-water flow model: U.S. Geological Survey Open-File Report 96-486, 220 p.

Moreo, M.T., Halford, K.J., La Camera, R.J., and Laczniak, R.J., 2003, Estimated ground-water withdrawals from the Death Valley regional flow system, Nevada and California, 1913-98: U.S. Geological Survey Water-Resources Investigations Report 03-4245, 28 p., on-line at http://pubs.usgs.gov/wri/wrir034245/

Appendix A—Driller’s logs from Penoyer Valley

19119

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Log No. 5738
Rec. March 17, 1961
Well No.
Permit No. 18818
Do not fill in

Owner EDWIN W GUNDERSON Driller SAM PINKERTON

Address PENOYER RANCH TEMPLETON NEV. Address SAME Lic. No. 324

Location of well: SW ¼ SW ¼ Sec. 19, T. 3 S, R. 55 E, in LINCOLN County

or PENOYER VALLEY

Water will be used for AGRICULTURE & DOMESTIC Total depth of well 138'

Size of drilled hole 18" Weight of casing per linear foot

Thickness of casing ¼" Temp. of water 83°

Diameter and length of casing 14" - 138'-2"

(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 102'

If flowing well describe control works

(Type and size of valve, etc.)

Date of commencement of well JUNE 5, 1960 Date of completion of well JULY 15, 1960

Type of well rig ROTARY DRILL

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	8	8	SOIL MATERIAL
8	18	10	FINE REDISH SAND
18	76	58	COARSE SAND WITH FEW BOULDERS
76	77	1	HARD PAN OR ROCK
77	101	24	MEDIUM SAND
101	134	33	FINE SAND & BOULDERS
134	138	4	LARGE GRAVEL

NOTE: WASHED SAMPLES OF THESE MATERIALS AT VARIOUS DEPTHS WERE SENT TO ENGINEERS OFFICE AFTER COMPLETION BY LLOYD ROOKE OF THE U.S.D.A., S.C.S.

Water-bearing Formation, Casing Perforations, Etc.

Chief aquifer (water-bearing formation)

from 102 to 138-2" ft.

Other aquifers

First water at 102 feet.

Casing perforated

from 40' to 138'-2" ft.

Size of perforations

9/32" X 2½"

LOG OF FORMATIONS—*Continued*

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	"Remarks"—Seals, Grouting, Etc.

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

WELL DRILLER'S STATEMENT

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

Signed Sam D. Pinkerton
Well Driller

By Owner

License No. 324

Dated July 20, 1960

(Not to be filled in by Driller)

MAR 17 AM 9 12 1961
OFFICE

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. 104631
Permit No.
Basin 170

NOTICE OF INTENT NO. 30708

1. OWNER ROBERT MAYO
MAILING ADDRESS 1612 COUNCIL BLUFF LANE, LAS VEGAS NV 89031
ADDRESS AT WELL LOCATION 71 COYOTE LANE RACHEL NV 89001

2. LOCATION NE ¼ SE ¼ Sec. 35 T. 3 N S R. 55 E LINCOLN County
PERMIT NO. Issued by Water Resources | 010-162-06 Parcel No. | SUNRISE ACRES Subdivision Name

3. WORK PERFORMED
☑ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
TOP SOIL - SILT		0	7	7
RED SAND & GRAVEL		7	27	20
HARD RED GRAVEL		27	31	4
RED SAND & SOME CLAY		31	92	61
BROWN SANDY CLAY		92	105	13
BROWN SAND & GRAVEL	YES	105	114	9
BROWN CLAY		114	117	3
SAND & GRAVEL		117	149	32
GRAVEL & COBBLES		149	185	36

DCNR/DWR RECEIVED DEC 24 2007 LAS VEGAS OFFICE

Date Started 30 - SEPT, 2007, 19
Date completed 01 - DEC, 2007, 19

7. WELL TEST DATA
TEST METHOD: ☑ Bailer ☐ Pump ☐ Air Lift

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
10	2-3	4
GPS	-WG-84	
	N 37° 38.381'	
	W 115° 45.258'	
ELEVATION	4798	

8. WELL CONSTRUCTION
Depth Drilled 185 Feet Depth Cased 185 Feet

HOLE DIAMETER (BIT SIZE)

		From	To
9 7/8" Inches		0 Feet	55 Feet
7 7/8" Inches		55 Feet	185 Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
5"	PVC	SC 40	+1	185

Perforations:
Type perforation VERTICAL / BLADE
Size perforation 1/8" x 6" x 4 ROWS
From 140 feet to 180 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☑ Yes ☐ No
Depth of Seal 50.5
Placement Method: ☐ Pumped ☑ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☑ Concrete Grout
Gravel Packed: ☑ Yes ☐ No
From 185 feet to 50.5 feet

9. WATER LEVEL
Static water level 96 feet below land surface
Artesian flow NONE G.P.M. P.S.I.
Water temperature 61 °F Quality GOOD

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name RCB3 INC Contractor
Address 6411 W DEER SPRING WAY Contractor
LAS VEGAS NV 89131
Nevada contractor's license number issued by the State Contractor's Board 0020301
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 2064
Signed [signature] By driller performing actual drilling on site or contractor
Date 21 - DEC. 2007

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

DIVISION OF WATER RESOURCES

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 11130
Permit No. 21797
Basin

1. OWNER William Pidcoe ADDRESS

2. LOCATION SW ¼ SW ¼ Sec. 4 T. 4 N/S R. 55 E. Lincoln County
PERMIT NO. #21797

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

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

5. TYPE WELL
Cable ☒ Rotary ☐
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
drilled by others		0	235	235
loose sand & gravel		235	273	38
cemented gravel		273	400	127

JUL 27 1970
DIV. OF WATER RESOURCES
BRANCH OFFICE
LAS VEGAS, NEVADA

Date started November 1, 1970
Date completed November 15, 1970

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
	2200	206	

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
16"-235' 12"-400'
Diameter hole 12"-400' inches Total depth 400 feet
Casing record
Weight per foot Thickness ¼"

Diameter	From	To
16 inches	0 feet	273 feet
12 3/4 inches	260 feet	400 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 Mills perforater
Size perforation 3/8" x 3"
From 260 feet to 400 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 136' Feet below land surface
Flow G.P.M.
Water temperature cool ° F. Quality good

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

Name PATRICK H. THOMPSON
Address 3215 CINDER LANE-LAS VEGAS, NEV.
Nevada contractor's license number 4286
Nevada driller's license number 581
Signed Patrick H. Thompson
Date July 27, 1970

USE ADDITIONAL SHEETS IF NECESSARY

5471

DIVISION OF WATER RESOURCES

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 15488
Permit No. 29340
Basin

1. OWNER Union Carbide Corp., Metals Div. ADDRESS

Project No. 936-1156 Tempiute Well

2. LOCATION SW ¼ SE ¼ Sec. 17 T. 3 N/S R. 56 E. Lincoln County
PERMIT NO. 29340

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

4. PROPOSED USE
Domestic ☒ Irrigation ☐ Test ☐ mining X
Municipal ☐ Industrial ☐ Stock ☐

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
sand		0	20	20
coarse sand & gravel		20	40	20
gravel		40	90	50
cemented gravel		90	110	20
coarse sand & gravel		110	140	30
coarse sand & gravel w/ clay		140	180	40
clay, gravel, & sand		180	220	40
clay, Rock, gravel, & sand		220	245	25

RECEIVED
APR 23 1976
Div. of Water Resources
Branch Office — Las Vegas, Nev.

Date started March 16, 19 76
Date completed April 8, 19 76

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
	650	54	72 hrs
	600	50	72 hrs
	500	39	72 hrs
	400	30	72 hrs
	300	19	72 hrs

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 18" inches Total depth 245' feet
Casing record
Weight per foot 45.68 Thickness .312

Diameter	From	To
14" inches	0 feet	185 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type cement
Depth of seal 50 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 245 feet

Perforations:
Type perforation Screen
Size perforation
From 185 feet to 205 (14") feet
From 205 feet to 245 (10") feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 104' Feet below land surface
Flow G.P.M.
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 Thompson Drilling Co., Inc.
Address 3215 Cinder Ln.-Las Vegas, NV
Nevada contractor's license number 4286 A
Nevada driller's license number 581
Signed Patrick H. Thompson
Date April 20, 1976

USE ADDITIONAL SHEETS IF NECESSARY

5471

CANARY—CLIENT'S COPY
PINK—WELL DRILLER'S COPY

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 24548
Permit No. 45085
Basin 170

In Book #0664

OWNER James Franklin ADDRESS Alamo Nev Box 22

2. LOCATION SW ¼ NE ¼ Sec. 2 T. 4 N/S R. 55 E LINCOLN County
PERMIT NO. 45085 Relocate 60 No of old well

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	18	18
Hard pan		18	29	11
Clay Gravel + Sand		29	135	106
Hard pan w/ some clay		135	148	13
Gravel + Sand		148	207	59
Clay		207	216	9
Gravel		216	277	61
Hard pan - Clay		277	289	12
Gravel		289	333	44
Clay		333	347	14
Gravel - Sand		347	378	32
Clay		377	390	11
TD 390'				

RECEIVED MAR 7 1983 Div. of Water Resources Branch Office—Las Vegas, Nev.

Date started 8-6, 1982
Date completed 1-29, 1983

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
1700	1350	100'	30

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

8. WELL CONSTRUCTION
Diameter hole 26 inches Total depth 390 feet
Casing record
Weight per foot ..... Thickness .252

Diameter	From	To
16 inches	0 feet	390 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 60 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 60 feet to 390 feet

Perforations:
Type perforation Fact Cut
Size perforation ⅛ x 4
From 140' feet to 390 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL
Static water level 150' Feet below land surface 152
Flow ..... G.P.M.
Water temperature Cold ° F. Quality Good

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

Name Cecil Robinson Jr
Address Box 470 Pioche Nev.
Nevada contractor's license number
Nevada driller's license number 904
Signed Cecil Robinson Jr
Date 2-16-83

USE ADDITIONAL SHEETS IF NECESSARY

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 25369
Permit No. 11049
Basin RAILROAD V. 10-173(A)

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 2794

1. OWNER Joe Fallini
MAILING ADDRESS Wingo Springs Ranch
Tonopah Nev.

ADDRESS AT WELL LOCATION

2. LOCATION NW ¼ NW ¼ Sec. 35 T. 3 N/S R. 53 E. Nye County
PERMIT NO. 11049-2910 (Issued by Water Resources) | Parcel No. | Subdivision Name

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	10	10
Sand + Some Clay		10	165	155
Hard pan		165	180	15
Gravel + Sand		180	290	110
Clay		290	300	10
Replace old well that had sanded down new well 20 ft. of old well				

Date started 4-23, 1984
Date completed 4-26, 1984

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 30 Draw down 7 feet 1 hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter hole 12¼ inches Total depth 300 feet
Casing record
Weight per foot Thickness .188

Diameter	From	To
8 inches	0 feet	300 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 55 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 55 feet to 300 feet

Perforations:
Type perforation Factory Cut
Size perforation ⅛ x 4
From 150 feet to 300 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 180 feet below land surface
Flow G.P.M. P.S.I.
Water temperature 60.1° F. Quality Fresh

10. DRILLERS CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Bill Dan Clay (Contractor)
Address 1200 470 Pecos Las Vegas (Contractor)
Nevada contractor's license number 7654
Nevada contractor's drillers number
Nevada driller's license number 1333 (Actual Driller)
Signed [signature] (Contractor)
Date 5-2-84

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 26945
Permit No. 45902
Basin 170

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 1829

OWNER Miriam Gibson
MAILING ADDRESS Box 35 St. 12
Rachell, Nevada

ADDRESS AT WELL LOCATION Rachell Nevada

2. LOCATION SW ¼ NW ¼ Sec. 34 T. 3 S N/S R. 55 E Lincoln County

PERMIT NO. 45902 (Issued by Water Resources) | Parcel No. | Subdivision Name

3. TYPE OF WORK: New Well ☒ Recondition ☐ Deepen ☐ Other ☐

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

5. TYPE WELL: Cable ☒ Rotary ☐ Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
top soil		0	25	25
gravel		25	40	15
sand in gravel		40	160	120
gravel		160	190	30
sand in clay		190	204	14
Brown				

Concrete seal not installed at this time. We felt the well needed more pumping and its still taking some gravel. This seal will be installed at a later date, under my supervision.
D.H. Free

RECEIVED
NOV 2 1984
Div. of Water Resources
Branch Office: Las Vegas, NV

Date started Aug 3, 1984
Date completed Oct 26, 1984

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
1200	800	20'	30
1300	888	30'	30
1500	888	50'	30

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

20" – 50' 16" 50' to 204'
Diameter hole ..... inches Total depth 204 feet
Casing record 16" to 204'
Weight per foot ..... Thickness ¼

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 concrete
Depth of seal ..... feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 204 feet

Perforations:
Type perforation Torch
Size perforation ¼ X 12"
From 164' feet to 204 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL

Static water level 72 feet below land surface
Flow ..... G.P.M. ..... P.S.I.
Water temperature Cold F. Quality good

10. DRILLERS CERTIFICATION

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

Name Darell H. Free (Contractor)
Address Box 122 Panaca NV (Contractor)
Nevada contractor's license number 3422
Nevada contractor's drillers number 30
Nevada driller's license number 445 (Actual Driller)
Signed Darell H. Free (Contractor)
Date Oct. 26, 1984

USE ADDITIONAL SHEETS IF NECESSARY

(Rev. 6-81) O-627 CR434

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 35216
Permit No.
Basin 170

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 2714

1. OWNER Dick Lund
MAILING ADDRESS Same
ADDRESS AT WELL LOCATION Lot # 6 Sunset acres Rachel Nev. 89017

2. LOCATION N/E ¼ S/W ¼ Sec. 36 T ~~75~~ 3S. N (S) R ~~55~~ 55E. E Lincoln County
PERMIT NO. 0 (Issued by Water Resources) Parcel No. Lot # 6 Subdivision Name Sunset Acres Rachel Nev. 89001

3. TYPE OF WORK: New Well ☒ Recondition ☐ Deepen ☐ Other ☐

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

5. TYPE WELL: Cable ☐ Rotary ☒ Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	12	12
Fine Sand		12	100	88
Clay-Sand		100	155	55
Pea gravel	X	155	185	30
Hard Rock		185	190	5

RECEIVED
JUL 03 1991
Div. of Water Resources
Branch Office - Las Vegas, NV

Date started 6-15-91, 19
Date completed 6-16-91, 19

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
	N A		

BAILER TEST
G.P.M. 14 Draw down 2 feet 5 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter 10 5/8 inches Total depth 190 feet
inches
inches
Casing record N A
Weight per foot N A Thickness .188

Diameter	From	To
6 5/8 inches	0 feet	190 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type cement
Depth of seal 50 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 190 feet

Perforations:
Type perforation factory
Size perforation 1/8 x 3"
From 90 feet to 110 feet
From 130 feet to 150 feet
From 170 feet to 190 feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 145 feet below land surface
Flow 0 G.P.M. 0 P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling (Contractor)
Address P.O. Box 54 Hiko Nev. 89017 (Contractor)
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada contractor's driller's number issued by the Division of Water Resources 0
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 6-30-91

(Rev. 11-85) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 3521
Permit No.
Basin 170

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 7708

1. OWNER Tom Miller
MAILING ADDRESS 3795 Kolanut LN.
Las Vegas Nev 89115

ADDRESS AT WELL LOCATION Sunset Acres
Rachel Nev. 89001

2. LOCATION S/E ¼ S/E ¼ Sec. 36 T. ~~35~~ 3 So. N/S R. ~~55~~ 55 E. E. Lincoln County

PERMIT NO. ____ Issued by Water Resources | Parcel No. | Subdivision Name: Sunset acres

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	15	15
Fine Sand		15	52	37
Hard Pan		52	55	3
coarse Sand		55	79	24
coarse gravel		79	105	26
cemented gravel		105	110	5
coarse sand	X	110	165	35
Pea gravel	X	165	175	10
clay-gravel		175	180	5

RECEIVED
JUL 03 1991
Div. of Water Resources
Branch Office - Las Vegas, NV

Date started 5-26-91, 19__
Date completed 5-29-91, 19__

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
N-A			

BAILER TEST
G.P.M. 14 Draw down 5 feet 3 hours
G.P.M. ____ Draw down ____ feet ____ hours
G.P.M. ____ Draw down ____ feet ____ hours

8. WELL CONSTRUCTION
Diameter ~~[illegible]~~ inches Total depth 180 feet
10 5/8 inches
____ inches
Casing record NA
Weight per foot NA Thickness .188

Diameter	From	To
6 5/8 inches	0 feet	180 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type cement
Depth of seal 50' feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 180' feet

Perforations:
Type perforation factory
Size perforation 1/8" x 3"
From 80' feet to 100' feet
From 120' feet to 140' feet
From 160' feet to 180' feet
From ____ feet to ____ feet
From ____ feet to ____ feet

9. WATER LEVEL
Static water level 97 feet below land surface
Flow 0 G.P.M. 0 P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling - pumps (Contractor)
Address P.O. Box 54 Hiko, Nev. 89017 (Contractor)
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada contractor's driller's number issued by the Division of Water Resources 0
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed [signature]
By driller performing actual drilling on site or contractor
Date ____

(Rev. 11-85) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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. 44609
Permit No.
Basin 170

NOTICE OF INTENT NO. 10751

1. OWNER Russ Osthus
MAILING ADDRESS HCR Star Route Hiko Nev 89017
ADDRESS AT WELL LOCATION Central Ave. Rachel - Nev 89017

2. LOCATION N/E ¼ S/W ¼ Sec. 36 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO. 0 (Issued by Water Resources) | 21 (Parcel No.) | Sunset Acres (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
Top Soil		0	18	18
Coarse sand - gravel		18	80	62
Coarse sand - boulders		80	110	30
Fine sand, boulders	X	110	150	40
Clay - sand - boulders	X	150	175	25
Clay		175	178	3

178' TD

RECEIVED
JUN 7 1994
Div. of Water Resources
Branch Office - Las Vegas, NV

Date started 4-30-94, 19
Date completed 4-31-94, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
28	35	3

8. WELL CONSTRUCTION
Depth Drilled 178 Feet Depth Cased 178 Feet

HOLE DIAMETER (BIT SIZE)

Inches	From Feet	To Feet
10 5/8	0	178

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8		.188	0	178

Perforations:
Type perforation Factory
Size perforation 1/8" x 3"
From 138 feet to 138 feet
From 158 feet to 178 feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50'
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout
Gravel Packed: ☒ Yes ☐ No
From 50' feet to 178' feet

9. WATER LEVEL
Static water level 105 feet below land surface
Artesian flow 0 G.P.M. P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling (Contractor)
Address P.O. Box 54 (Contractor)
Hiko Nev. 89017
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike D Davis (By driller performing actual drilling on site or contractor)
Date 5-5-94

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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. 46844
Permit No.
Basin 170

NOTICE OF INTENT No. 1415

1. OWNER D C Day
MAILING ADDRESS Star Route Box 33 Alamo Nev. 89001
ADDRESS AT WELL LOCATION Hiway # 375 Rachel Nev. 89017

2. LOCATION N/W ¼ S/W ¼ Sec. 36 T. 3 N (S) R 55 E Lincoln County
PERMIT NO. 0 Issued by Water Resources | 10-173-03 Parcel No. | Sunset Acres Subdivision Name

3. WORK PERFORMED
[X] New Well [ ] Replace [ ] Recondition
[ ] Deepen [ ] Abandon [ ] Other

4. PROPOSED USE
[X] Domestic [ ] Irrigation [ ] Test
[ ] Municipal/Industrial [ ] Monitor [ ] Stock

5. WELL TYPE
[ ] Cable [X] Rotary [ ] RVC
[ ] Air [ ] Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
TOP Soil		0	18	18
Sand - boulders		18	70	52
Coarse Sand	X	70	167	97
Hard Rock		167	170	3
TD 170'				

RECEIVED
DEC 12 1994
Div. of Water Resources
Branch Office - Las Vegas, NV

Date started 11-21-94, 19
Date completed 11-22-94, 19

7. WELL TEST DATA
TEST METHOD: [X] Bailer [ ] Pump [ ] Air Lift

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
28	4	2

8. WELL CONSTRUCTION
Depth Drilled 170 Feet Depth Cased 170 Feet

HOLE DIAMETER (BIT SIZE)

Inches	From (Feet)	To (Feet)
10 5/8	0	170

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8	—	.188	0	170

Perforations:
Type perforation factory
Size perforation 1/8" x 3"
From 110 feet to 130 feet
From 150 feet to 170 feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: [X] Yes [ ] No
Depth of Seal 50'
Placement Method: [ ] Pumped [X] Poured
Seal Type: [ ] Neat Cement [ ] Cement Grout [X] Concrete Grout

Gravel Packed: [X] Yes [ ] No
From 50 feet to 170 feet

9. WATER LEVEL
Static water level 76 feet below land surface
Artesian flow 0 G.P.M. 0 P.S.I.
Water temperature Cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling Contractor
Address P.O. Box 54 Hiko Nev. 89017 Contractor
Nevada contractor's license number issued by the State Contractor's Board. 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller. 1191
Signed Mike Davis By driller performing actual drilling on site or contractor
Date 11-23-94

(Rev. 3-91)
USE ADDITIONAL SHEETS IF NECESSARY
(O)-627

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. 58034
Permit No. 36454
Basin 170

NOTICE OF INTENT NO. 31917

1. OWNER PENOYER FARMS
MAILING ADDRESS STAR ROUTE BOX 49
ALAMO, NV 89001

ADDRESS AT WELL LOCATION

2. LOCATION SW ¼ SE ¼ Sec. 5 T. 4 N(S) R. 55 E. LINCOLN County
PERMIT NO. 36454, 5, 6, 7 (Issued by Water Resources) | Parcel No. | Subdivision Name

3. WORK PERFORMED
☐ New Well ☒ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
TOP SOIL AND ROCK		0	25	25
GRAVEL		25	55	30
HARD ROCK		55	95	40
HARD ROCK AND SANDY CLAY		95	100	5
HARD ROCK		100	116	16
SANDY CLAY AND ROCK		156	167	11
ROCK		167	181	4
ROCK, SMALL GRAVEL		181	337	156
ROCK, SAND AND GRAVEL		337	366	29
SANDY CLAYS AND ROCK		366	390	24
ROCK AND SMALL GRAVEL		390	505	115

RECEIVED 96 NOV -4 AM 11:33 STATE ENGINEERS OFFICE

Date started OCTOBER 7, 19 96
Date completed OCTOBER 30, 19 96

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
1800	26.5	9

8. WELL CONSTRUCTION
Depth Drilled 505 Feet Depth Cased 503 Feet

HOLE DIAMETER (BIT SIZE)

		From	To
28 Inches		0 Feet	505 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
16	42.05	.250	+1	300
16	42.05	.250	500	503

Perforations:
Type perforation WIRE WRAP SCREEN
Size perforation 100 SLOT
From 300 feet to 500 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 53'
Placement Method: ☒ Pumped ☐ Poured
Seal Type: ☒ Neat Cement ☐ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 53 feet to 505 feet

9. WATER LEVEL
Static water level 184.5 feet below land surface
Artesian flow G.P.M. P.S.I.
Water temperature WARM °F Quality GOOD

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name SARGENT IRRIGATION COMPANY (Contractor)
Address 9955 NORTH VIRGINIA STREET (Contractor)
RENO, NEVADA 89506
Nevada contractor's license number issued by the State Contractor's Board 0021246
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1593
Signed (By driller performing actual drilling on site or contractor)
Date 11-1-96

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (01-627)

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. 58035
Permit No. 36447
Basin 170

NOTICE OF INTENT NO. 31918

1. OWNER PENOYER FARMS
MAILING ADDRESS STAR ROUTE BOX 49
ALAMO, NEVADA 89001

ADDRESS AT WELL LOCATION

2. LOCATION SW ¼ SE ¼ Sec. 24 T. 3 N(S) R. 54 E LINCOLN County
PERMIT NO. 36447 (Issued by Water Resources) | Parcel No. | Subdivision Name

3. WORK PERFORMED
☐ New Well ☒ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
CLAY AND SAND		0	10	10
GRAVEL		10	15	5
ROCK AND GRAVEL		15	115	100
ROCK, GRAVEL, CLAY		115	120	5
HARD ROCK		120	125	5
HARD ROCK - GRAVEL		125	180	55
HARD ROCK, GRAVEL		180	200	20
SAND AND GRAVEL		200	285	85
SAND, CLAY, GRAVEL		285	315	30
GRAVEL AND CLAY		315	325	10
FINE SAND, GRAVEL, CLAY		325	340	15
GRAVEL AND CLAY		340	425	85
GRAVEL AND CLAY 50/50		425	445	20
8070 CLAY, 2070 GRAVEL		445	465	20

RECEIVED
96 NOV 14 AM 11:24
STATE ENGINEER'S OFFICE

Date started OCTOBER 23, 19 96
Date completed NOVEMBER 8, 19 96

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
1000	71.54	9.5

8. WELL CONSTRUCTION
Depth Drilled ____ Feet Depth Cased ____ Feet

HOLE DIAMETER (BIT SIZE)

		From	To
28 Inches		0 Feet	465 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
16	42.05	.250	+1	259
16	42.05	.250	459	461

Perforations:
Type perforation WIRE WRAP SCREEN
Size perforation 100 SLOT
From 259 feet to 459 feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50 FEET
Placement Method: ☒ Pumped ☐ Poured
Seal Type: ☒ Neat Cement ☐ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 50 feet to 461 feet

9. WATER LEVEL
Static water level 155.6 feet below land surface
Artesian flow ____ G.P.M. ____ P.S.I.
Water temperature ____ °F Quality GOOD

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name SARGENT IRRIGATION COMPANY (Contractor)
Address 9955 NORTH VIRGINIA STREET (Contractor)
RENO, NEVADA 89506
Nevada contractor's license number issued by the State Contractor's Board 0021246
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1593
Signed ____ (By driller performing actual drilling on site or contractor)
Date 11-12-96

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES
This is a Copy of orig. in Book
WELL DRILLERS REPORT
Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65388
Permit No.
Basin 170

1. OWNER Penoyer Farm ADDRESS Alamo Ave (Rachel)

2. LOCATION SW ¼ SW ¼ Sec. 29 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO.

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	16	16
Hard pan		16	28	12
Sand + Gravel		28	93	65
Hard S. Stone		65	111	46
Gravel - Sand.		111	118	7
Gravel - water		118	139	21
Gravel Rock		139	142	3
Void Loss Cir		142	148	6
Regain Cir w/ mud + Cotton Seed Hulls				
Gravel + Sand		148	171	23
Hard		171	175	4
Gravel - water		175	195	20
Sand Stone		195	197	2

RECEIVED
FEB 22 1980
Div. of Water Resources
Branch Office — Las Vegas, Nev.

Date started 6-14, 1979
Date completed 7-28, 1979

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 100 Draw down 122 feet 3 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter hole 15 inches Total depth feet
Casing record
Weight per foot Thickness 188

Diameter	From	To
8 inches	0 feet	197 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 197 feet

Perforations:
Type perforation Fast Cut
Size perforation 18 x 4
From 100 feet to 197 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 119 Feet below land surface 119
Flow G.P.M.
Water temperature 60 ° F. Quality Good

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

Name C. M. Robinson Jr.
Address Box 20 Hiko Nev
Nevada contractor's license number 10991
Nevada driller's license number 904
Signed C. M. Robinson Jr.
Date 8-20-79

USE ADDITIONAL SHEETS IF NECESSARY

5471

DIVISION OF WATER RESOURCES

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65384
Permit No.
Basin 170

1. OWNER Faye J. Hansen ADDRESS #10 Westcliff Villa
New Port Beach, California

2. LOCATION SW ¼ NE ¼ Sec. 31 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO.

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐ R.C.

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
soil		0	20	20
gravel		20	40	20
sand & gravel		40	250	210

RECEIVED
FEB 23 1971
DIV. OF WATER RESOURCES
BRANCH OFFICE
LAS VEGAS, NEVADA

Date started February 15, 19 71
Date completed February 18, 19 71

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
	2000	12	8

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 20 inches Total depth 250 feet
Casing record
Weight per foot 42# Thickness 250

Diameter	From	To
16 inches	0 feet	250 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 Milled slots
Size perforation 3/16 x 3-16 rows-6 centers
From 130 feet to 250 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 128 Feet below land surface
Flow G.P.M.
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 PATRICK H. THOMPSON
Address 3215 Cinder Lane-Las Vegas, Nev.
Nevada contractor's license number 4286
Nevada driller's license number 581
Signed Patrick H. Thompson
Date February 22, 1971

USE ADDITIONAL SHEETS IF NECESSARY

5471

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65387
Permit No.
Basin 170

1. OWNER Lincoln Co Tele Ph. ADDRESS Pioche Nev

2. LOCATION S.E. ¼ N.E. ¼ Sec. 35 T. 3 N/S R. 55 E. Lincoln County

? PERMIT NO.

3. TYPE OF WORK	4. PROPOSED USE	5. TYPE WELL
New Well ☒ Recondition ☐	Domestic ☐ Irrigation ☐ Test ☐	Cable ☐ Rotary ☒
Deepen ☐ Other ☐	Municipal ☐ Industrial ☒ Stock ☐	Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	15	15
Hard pan		15	25	10
Sand-Sandy Gravel		25	95	70
Water Sand		95	120	25
Rock & Gravel		120	185	65
Water-Sand		185	195	10
Rock		195	197	2

RECEIVED
AUG 28 1979
State of Nevada Water Resources
Branch Office — Las Vegas, Nev.

Date started 6-30, 1979
Date completed 7-10, 1979

7. WELL TEST DATA

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

BAILER TEST

G.P.M. 100 Draw down 1 feet 2 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION

Diameter hole 15 inches Total depth 197 feet
Casing record
Weight per foot Thickness 188 w/

Diameter	From	To
8 inches	0 feet	197 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 50 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 197 feet

Perforations:
Type perforation Torch Cut
Size perforation 1/8 X 10
From 85 feet to 197 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL

Static water level 96 Feet below land surface 96'
Flow G.P.M.
Water temperature Cold °F. Quality Good

10. DRILLERS CERTIFICATION

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

Name C. M. Robinson Jr.
Address Box 20 Hiko Nev
Nevada contractor's license number 10791
Nevada driller's license number 904
Signed C. M. Robinson Jr.
Date 7-16-79

USE ADDITIONAL SHEETS IF NECESSARY

5471

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65369
Permit No.
Basin 170

1. OWNER Boyd Steel ADDRESS

2. LOCATION N.E. ¼ S.E. ¼ Sec. 35 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO.

3. TYPE OF WORK	4. PROPOSED USE	5. TYPE WELL
New Well ☒ Recondition ☐	Domestic ☒ Irrigation ☐ Test ☐	Cable ☐ Rotary ☒
Deepen ☐ Other ☐	Municipal ☐ Industrial ☐ Stock ☐	Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		8	12	12
Hard Pan		12	23	11
Sandy Gravel		23	95	72
Rocky Gravel		95	160	65
Hard Rock		160	172	12
Water Sand		172	185	13
Hard Rock		185	187	2

RECEIVED
AUG 28 1979
Div. of Water Resources
Branch Office — Las Vegas, Nev.

Date started 7-1, 1979
Date completed 7-24, 1979

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 100 Draw down 2 feet 3 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION

Diameter hole 15 inches Total depth 187 feet
Casing record
Weight per foot Thickness 188

Diameter	From	To
8 inches	0 feet	187 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 50 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 0 feet to 50 feet

Perforations:
Type perforation Factory cut
Size perforation 1/8 X 4
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 96 Feet below land surface 96
Flow G.P.M.
Water temperature Cold °F. Quality Good

10. DRILLERS CERTIFICATION

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

Name C. M. Robinson Jr.
Address Box 20 Hiko Nev.
Nevada contractor's license number 10791
Nevada driller's license number 904
Signed C. M. Robinson Jr.
Date 7-24-79

USE ADDITIONAL SHEETS IF NECESSARY

•5471

WHITE—DIVISION OF WATER RESOURCES
CANARY—CLIENT'S COPY
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STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65393
Permit No.
Basin 170

1. OWNER Ed. Fallin ADDRESS Gen Del Rachel Nev

2. LOCATION NW ¼ SW ¼ Sec. 36 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO. MDBM

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Topsoil		0	15	15
HARD		15	20	5
Med Hard - Gravel		20	70	50
Gravel & Sand	✓	70	100	30
Hard		100	110	10
Med Hard -		110	165	55
Gravel	✓	165	175	10
Hard pan		175	181	6

TD 181

RECEIVED
JAN 12 1981
Div. of Water Resources
Branch Office — Las Vegas, Nev.

Date started 7-2, 1980
Date completed 7-25, 1980

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 30 Draw down 5 feet 2 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter hole 15 inches Total depth 181 feet
Casing record
Weight per foot Thickness 188

Diameter	From	To
8 5/8 inches	0 feet	188 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 50 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 70 feet to 188 feet

Perforations:
Type perforation Torch Cut
Size perforation 1/8 x 12
From 80 feet to 188 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 100 Feet below land surface 90
Flow G.P.M.
Water temperature COLD° F. Quality Good

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

Name C. M. Robinson Jr
Address Box 470 PANACA, NV
Nevada contractor's license number 10791
Nevada driller's license number 904
Signed C M Robinson Jr
Date 7-15-80

USE ADDITIONAL SHEETS IF NECESSARY

O-627

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

In Book

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 65394
Permit No.
Basin 170

1. OWNER Mike Fallini ADDRESS Box Del Rachel Nev

2. LOCATION SW ¼ SW ¼ Sec. 36 T. 3 ☒/S R. 55 E. MDBM / Lincoln County
PERMIT NO.

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Top Soil		0	12	12
Hard pan		12	18	6
Sand & Gravel		18	65	47
Hard Cemented Rock		65	80	15
Gravel & Sand	water	80	105	25
HARD-PAN		105	130	25
Med Hard Rock		130	140	10
Gravel		140	165	25
Gravel		165	172	7
TD. 172				

RECEIVED
JAN 12 1981
Div. of Water Resources
Branch Office — Las Vegas, Nev.

Date started 6-27, 1980
Date completed 7-1, 1980

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 30 Draw down 2 feet 2 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter hole 15 inches Total depth 172 feet
Casing record
Weight per foot Thickness .188

Diameter	From	To
8" inches	0 feet	172 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes ☒ No ☐ Type Cement
Depth of seal 55 feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 55 feet to 172 feet

Perforations:
Type perforation Torch Cut
Size perforation 1/8 x 12"
From 70 feet to 172 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 90 Feet below land surface 75
Flow G.P.M.
Water temperature 68 ° F. Quality Good

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

Name C. Eugene Robertson Jr
Address Box 470 Pahrump Nev
Nevada contractor's license number 10791
Nevada driller's license number 904
Signed C. E. Robertson Jr
Date 7-1-80

USE ADDITIONAL SHEETS IF NECESSARY

O-621

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

PRINT OR TYPE ONLY
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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 69524
Permit No 23218
Basin 170

NOTICE OF INTENT NO 15891

OWNER Dirk Ogee
MAILING ADDRESS PO Box 50 Glamo NV 89001

ADDRESS AT WELL LOCATION 4 miles south of Mile Marker 4 SR 375 Rachel

2. LOCATION SW ¼ SW ¼ Sec. 24 T. 3 N/S R. 54 E Lincoln County
PERMIT NO 23218 Cert #6922 Issued by Water Resources | NA Parcel No. | Subdivision Name

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☒ Deepen ☐ Abandon ☐ 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
Sand - Gravel	X	181	193	12
Lost circulation at		193		

DCN Received DEC 22 1997 LAS VEGAS OFFICE

Date started 12-11-97, 19
Date completed 12-11-97, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
21	6	2

8. WELL CONSTRUCTION
Depth Drilled 11 Feet Depth Cased 40 Feet

HOLE DIAMETER (BIT SIZE)

	From	To
6 Inches	151 Feet	193 Feet
Inches	Feet	Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
5 5/8		.188	153	193

Perforations:
Type perforation factory
Size perforation 1/8" x 3"
From 153 feet to 193 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☐ Yes ☐ No
Depth of Seal
Placement Method: ☐ Pumped ☐ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☐ Concrete Grout
Gravel Packed: ☐ Yes ☐ No
From 0 feet to feet

9. WATER LEVEL
Static water level 165 feet below land surface
Artesian flow 0 G.P.M. 0 P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps Contractor
Address PO Box 54 Contractor
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0025966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mark Davis
By driller performing actual drilling on site or contractor
Date 11-12-97

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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

PRINT OR TYPE ONLY
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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. 69525
Permit No. 23216
Basin 170

NOTICE OF INTENT NO 15893

1. OWNER Dirk Agee
MAILING ADDRESS P.O. Box 50
Alamo NV 89001

ADDRESS AT WELL LOCATION 6 miles Southwest of Rachel on County Road

2. LOCATION S/E ¼ NE ¼ Sec. 12 T. 4 N/S R. 54 E. Lincoln County
PERMIT NO. 23216 cert#6890 (Issued by Water Resources) | NA (Parcel No.) | -0- (Subdivision Name)

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☒ Deepen ☐ Abandon ☐ 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
Sand - Gravel - Boulders		235	295	60

DCN Received DEC 22 1997 LAS VEGAS OFFICE

Date started 12-12-97, 19
Date completed 12-13-97, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
22	12	2

8. WELL CONSTRUCTION
Depth Drilled 60 Feet Depth Cased 80 Feet

HOLE DIAMETER (BIT SIZE)

	From	To
6 1/8 Inches	235 Feet	295 Feet
Inches	Feet	Feet
Inches	Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
5 5/8	-0-	.188	215	295

Perforations:
Type perforation factory
Size perforation 1/8 x 3"
From 215 feet to 295 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

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

Gravel Packed: ☐ Yes ☐ No
From -0- feet to feet

9. WATER LEVEL
Static water level 218 feet below land surface
Artesian flow -0- G.P.M. -0- P.S.I.
Water temperature Hot °F Quality poor

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address P.O. Box 54 (Contractor)
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0028566
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 12-14-97

1

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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. 71355
Permit No.
Basin 170

NOTICE OF INTENT NO. 13804

1. OWNER Jim Barfield
MAILING ADDRESS 6456 Casa Lama Ave
Las Vegas NV 89115

ADDRESS AT WELL LOCATION Lot #24
Sagebrush way Rachel NV 89001

2. LOCATION S/E ¼ S/W ¼ Sec. 36 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO. (Issued by Water Resources) 010-182-09 (Parcel No.) Sunset Acres (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
Top Soil		0	19	19
Sand-gravel		19	137	118
gravel-clay	X	137	145	8
Hard Rock		145	157	12
Pea Gravel	X	157	187	30
Hard Rock		187	190	3

Date started 5-1-98, 19
Date completed 5-3-98, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
14	3	5

8. WELL CONSTRUCTION
Depth Drilled 190 Feet Depth Cased 190 Feet

HOLE DIAMETER (BIT SIZE)

Inches	From (Feet)	To (Feet)
10 5/8	0	190

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8	–	.188	0	190

Perforations:
Type perforation factory
Size perforation 1/8" x 6"
From 90 feet to 110 feet
From 130 feet to 150 feet
From 170 feet to 190 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 50 feet to 190 feet

9. WATER LEVEL
Static water level 96 feet below land surface
Artesian flow 0 G.P.M. 0 P.S.I.
Water temperature cold °F Quality Good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address P.O. Box 54 (Contractor)
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 5-8-98

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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. 71357
Permit No.
Basin 170

NOTICE OF INTENT NO. 13895

1. OWNER Bob Clayborough
MAILING ADDRESS P.O. Box 1772 Pahrump NV 89041
ADDRESS AT WELL LOCATION Lot # 4 Sagebrush Way Rachel NV 89017

2. LOCATION S/W ¼ S/E ¼ Sec. 35 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO. — (Issued by Water Resources) 10-161-87 (Parcel No.) — (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
Top Soil		0	14	14
Clay-sand		14	44	30
Cemented gravel		44	65	21
Sand-gravel		65	130	65
Pea gravel	X	130	137	7
Hard Rock		137	144	7
Sand-gravel	X	144	170	26
Hard Rock		170	173	3

Date started 4-21-98, 19
Date completed 4-23-98, 19

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

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
Pump	28	3	3

8. WELL CONSTRUCTION
Depth Drilled 173 Feet Depth Cased 173 Feet

HOLE DIAMETER (BIT SIZE)

		From	To
10 5/8 Inches		0 Feet	173 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8	—	.188	0	173

Perforations:
Type perforation torch cut
Size perforation 1/8" x 6"
From feet to feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 50 feet to 173 feet

9. WATER LEVEL
Static water level 89 feet below land surface
Artesian flow — G.P.M. — P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address P.O. Box 54 (Contractor)
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed (By driller performing actual drilling on site or contractor)
Date 5-8-98

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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

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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. 71361
Permit No.
Basin 170

NOTICE OF INTENT NO. 15892

1. OWNER Dewayne Davis
MAILING ADDRESS PO. Box 71 Rachel NV 89001
ADDRESS AT WELL LOCATION Lot #8 Mill Circle Drive Rachel NV 89001

2. LOCATION S/W ¼ N/E ¼ Sec 36 T. 3 N/S R. 55 E. Lincoln County
PERMIT NO. — (Issued by Water Resources) 010-173-08 (Parcel No.) (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition ☐ Deepen ☐ Abandon ☐ 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
Top Soil		0	14	14
Sand - Gravel		14	110	96
Pea Gravel	X	110	126	16
Hard Rock		126	150	24
Pea Gravel	X	150	173	23
Clay - Gravel	X	173	192	19
Clay		192	195	3

Date started 4-26-98, 19
Date completed 4-28-98, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
14	2	4

8. WELL CONSTRUCTION
Depth Drilled 195 Feet Depth Cased 195 Feet

HOLE DIAMETER (BIT SIZE)

		From	To
10 5/8 Inches		0 Feet	195 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8	—	.188	0	195

Perforations:
Type perforation Factory
Size perforation 1/8" x 3"
From 105 feet to 115 feet
From 135 feet to 155 feet
From 175 feet to 195 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 50 feet to 195 feet

9. WATER LEVEL
Static water level 103 feet below land surface
Artesian flow — G.P.M. — P.S.I.
Water temperature Cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address PO. Box 54 Hiko NV 89017 (Contractor)

Nevada contractor's license number issued by the State Contractor's Board 0028866
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1181
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 4-29-98

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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

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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. 72422
Permit No.
Basin 170

NOTICE OF INTENT NO. 13794

1. OWNER Sharon Taylor
MAILING ADDRESS HCR Box 48 Alamo NV 89001
ADDRESS AT WELL LOCATION Mill Road 2 Blocks S/W of Little Alamo

2. LOCATION S/W ¼ N/E ¼ Sec 36 T 3 N/S R 55 E Lincoln County
PERMIT NO. 8 (Issued by Water Resources) 1-172-02 (Parcel No.) (Subdivision Name)

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☒ Deepen ☐ Abandon ☐ 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
gravel - sand	X	98	150	52
Hard Pan		150	155	5

Date started 8-15-98, 19
Date completed 8-15-98, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
14	2	3

8. WELL CONSTRUCTION
Depth Drilled 57 Feet Depth Cased 80 Feet

HOLE DIAMETER (BIT SIZE)
5 7/8 Inches From 98 Feet To 155 Feet
Inches Feet Feet
Inches Feet Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
5 1/4		.188	75	155

Perforations:
Type perforation factory
Size perforation 1/8" x 3"
From 115 feet to 155 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☐ Yes ☐ No
Depth of Seal 0
Placement Method: ☐ Pumped ☐ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☐ Concrete Grout
Gravel Packed: ☐ Yes ☒ No
From feet to feet

9. WATER LEVEL
Static water level 94 feet below land surface
Artesian flow 0 G.P.M. P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address P.O Box 54 Hiko, NV 89017 (Contractor)

Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 9-1-98

DOWNTOWN Received SEP 14 1998

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

WHITE--DIVISION OF WATER RESOURCES
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PINK--WELL DRILLER'S COPY

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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. 76550
Permit No.
Basin 170

NOTICE OF INTENT NO. 19465

1. OWNER Ralph Meyenhoff
MAILING ADDRESS P.O. Box 54 Mesquite, NV 89024
ADDRESS AT WELL LOCATION 2 Blocks west of Groom Ave, Lot 8

2. LOCATION S/E ¼ N/E ¼ Sec. 35 T. 38 N/S R. 55 E. Lincoln County
PERMIT NO. (Issued by Water Resources) 010-162-01 (Parcel No.) Sunrise Acres (Subdivision Name)

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ 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
Top Soil		0	7	7
Sand-Gravel		7	81	74
Gravel-Boulders	X	81	169	88
Hard Rock		169	172	3

Date started 7-9-99, 19
Date completed 7-12-99, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
14	6	5

8. WELL CONSTRUCTION
Depth Drilled 172 Feet Depth Cased 172 Feet

HOLE DIAMETER (BIT SIZE)

Inches	From (Feet)	To (Feet)
10 5/8	0	172

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
6 5/8	—	SCH 40	0	172

Perforations:
Type perforation Saw cut
Size perforation 1/8" x 6"
From feet to feet
From 102 feet to 132 feet
From 152 feet to 172 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50
Placement Method: ☐ Pumped ☒ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 50 feet to 172 feet

9. WATER LEVEL
Static water level 59 feet below land surface
Artesian flow — G.P.M. — P.S.I.
Water temperature Cold °F Quality Raw

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling and Pumps (Contractor)
Address P.O. Box 54 (Contractor)
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1181
Signed [signature] (By driller performing actual drilling on site or contractor)
Date 8-1-99

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

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. 94839
Permit No.
Basin 170

NOTICE OF INTENT NO. 25139

1. OWNER Dirk Aagaard
MAILING ADDRESS HC 61 Box 50
Alamo NV 89001

ADDRESS AT WELL LOCATION Two miles South of Rachel in Sand Springs Valley

2. LOCATION S/W ¼ S/W ¼ Sec. 2 T. 4S N (S) R. 55 E. Lincoln County
PERMIT NO. 6891-not a permit # (Issued by Water Resources) Parcel No. not available Subdivision Name

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☒ Deepen ☐ Abandon ☐ 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
Fractured Rock	X	176	205	29
Hard Rock		205	216	11

This stock well was only producing a few gpm. Deepened this 6" well from 176' to 216' Installed 42' factory perf 5" and 10' solid 5" casing so the Liner starts at 164' to TD of 216'
well bailed out with little or no sand problem, I believe because of the Hard Rock Encountered
Customer Installed pump Himself

DCNR/DWR
RECEIVED
NOV 2 2004
LAS VEGAS OFFICE

Date started 11-11-04, 19
Date completed 11-12-04, 19

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

G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
28	20	2

8. WELL CONSTRUCTION
Depth Drilled ____ Feet Depth Cased ____ Feet

HOLE DIAMETER (BIT SIZE)

		From	To
5 5/8 Inches		176 Feet	216 Feet
Inches		Feet	Feet
Inches		Feet	Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
5 1/2		.188	166	216

Perforations:
Type perforation factory
Size perforation 1/16" V 3"
From 176 feet to 216 feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet
From ____ feet to ____ feet

Surface Seal: ☒ Yes ☐ No
Depth of Seal 50' ?
Placement Method: ☐ Pumped ☐ Poured
Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Gravel Packed: ☐ Yes ☐ No unknown
From ____ feet to ____ feet

9. WATER LEVEL
Static water level 168 feet below land surface
Artesian flow ____ G.P.M. ____ P.S.I.
Water temperature cold °F Quality good

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Davis Drilling (Contractor)
Address HC 61 Box 54 (Contractor)
Hiko NV 89017
Nevada contractor's license number issued by the State Contractor's Board 0028966
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1191
Signed Mike Davis (By driller performing actual drilling on site or contractor)
Date 11-15-04

(Rev. 3-91) USE ADDITIONAL SHEETS IF NECESSARY (O)-627

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 6078
Rec. Aug 23 1961
Well No.
Permit No. 19054
Do not fill in

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner Herbert Goss Driller Geo L Taylor 411 Broadway

Address R R 1 Julia Texas Address Plainview Texas Lic. No. 346

Location of well: ¼ ¼ Sec 28, T 3 N/S, R 55 E, in Lincoln County

or South E Corner E half. 57 Miles out Hy #25 from Warm Springs

Water will be used for Irrigation & Domestic Total depth of well Pilot Hole 300 Round 250'

Size of drilled hole 18" Weight of casing per linear foot 40 #

Thickness of casing ¼ Temp. of water set test report later

Diameter and length of casing 16 X 251'
(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 No.

If nonflowing well give depth of standing water from surface 76'

If flowing well describe control works None
(Type and size of valve, etc.)

Date of commencement of well ~~July~~ Aug 15 Date of completion of well Aug 17

Type of well rig

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	6	6	Top soil
6	16	10	Large Gravel Small Rock
16	90	74	Med Gravel fine Sand
90	104	14	Soft formation same returns -
104	163	59	Small gravel & Sand
163	251	88	Fine gravel & Coarse sand
251	300	49	Pilot Hole fine gravel & coarse sand

Water-bearing Formation, Casing Perforations, Etc.

Chief aquifer (water-bearing formation)
from 90 to 300 ft.

Other aquifers
No change in type of gravel & sand same color & size to 300' Pilot Hole

First water at 76 feet.

Casing perforated
from 89 to 251 ft.

Size of perforations
3/16 X 10' X 20' Centers 4 rows

LOG OF FORMATIONS—*Continued*

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	"Remarks"—Seals, Grouting, Etc.
16	Surface	251	251	

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

Well not tested this date test information furnished at later date.

WELL DRILLER'S STATEMENT

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

Signed Lee L. Taylor
Well Driller

By

License No. 246

Dated Aug 25, 1961

(Not to be filled in by Driller)

1961 AUG 23 AM 11 09

STATE ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Log No. 7788
Rec. May 11 1964
Well No.
Permit No. 19330
Do not fill in.

to N 19330 31

Owner Robert Hostetler Driller Virgil Valentine

Address Penoyer Valley Nev. % D. Burnett Address Pioche, Nevada Lic. No. 432

Location of well: S.W.¼ N.W.¼ Sec. 33, T. 3 N/S, R. 55 E, in Lincoln County

or Penoyer Valley - Desert Entry

Water will be used for Irrigation Total depth of well 300'

Size of drilled hole 16" 300' Weight of casing per linear foot

Thickness of casing 10 gauge Temp. of water

Diameter and length of casing 16" 272' 14" 32'
(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 96'

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

Date of commencement of well March 27, 1964 Date of completion of well April 23, 1964

Type of well rig Churn Drill

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	8	8	soil
8	105	97	sand and boulders
105	145	40	gravel
145	175	30	gravel and sand
175	195	20	cemented sand
195	300	105	gravel
			bottom of hole cemented

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 195 to 300 ft.

Other aquifers

First water at 96 feet.

Casing perforated

from 120 to 300 ft.

Size of perforations

1/8 X 1 1/2"

(OVER)

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.

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

WELL DRILLER'S STATEMENT

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

Signed. Darell Free
Well Driller

By Owner

License No. 30

Dated May 4, 19 64

(Not to be filled in by Driller)

1964 MAY 11 AM 10 23

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 7766
Rec. June 1, 1964
Well No.
Permit No. 19331
Do not fill in.

19331

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner: Addie Hostetler — Driller: Virgil Valentine

Address: Pengyer Valley-SW. B. Burnett — Address: Pioche, Nevada — Lic. No. 432

Location of well: SW ¼ SW ¼ Sec. 33, T. 3 N/S, R. 55 E, in Lincoln County

or Penoyer Valley

Water will be used for: Irrigation — Total depth of well 303

Size of drilled hole: 16" — Weight of casing per linear foot:

Thickness of casing: 8 gauge — Temp. of water:

Diameter and length of casing: 16" 284' 14" 20'
(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: 114'

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

Date of commencement of well: May 14, 1964 — Date of completion of well: May 28, 1964

Type of well rig: Cable Tool

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	3	3	soil
3	60	57	gravel
60	120	60	gravel with boulders
120	150	30	cemented gravel
150	170	20	sand
170	190	20	gravel
190	245	55	gravel with boulders
245	260	15	gravel
260	280	20	cemented gravel
280	303	23	gravel

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 190' to 245 ft.

Other aquifers: 280' to 314 ft

First water at 114 feet.

Casing perforated

from 116' to 314 ft.

Size of perforations

1/8 X 1½"

(OVER)

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.

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

WELL DRILLER'S STATEMENT

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

Signed Daniel Free
Well Driller

By.....

License No. 30

Dated May 27, 1984

(Not to be filled in by Driller)

1984 JUN 1 AM 11 54

John Vineyard

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 8225
Rec. Dec. 3 1964
Well No.
Permit No. 12591 23457
Do not fill in.

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner DAN WEBB FOREMAN Driller R. K. GUAINTANCE

Address LENORAH, TEXAS Address EUREKA, NEVADA Lic. No. 413

Location of well NW¼SW¼ Sec. 31, T. 3½ N/S, R. 55 E, in LINCOLN County

or

Water will be used for IRRIGATION Total depth of well 280'

Size of drilled hole 24" Weight of casing per linear foot 42 LB.

Thickness of casing .250 Temp. of water

Diameter and length of casing
(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 135'

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

Date of commencement of well AUG. 15 Date of completion of well SEPT. 15

Type of well rig REVERSE CIRCULATION ROTERY

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0'	10'	10'	TOP SOIL
10'	15'	5'	SAND GRAVEL
15'	25'	10'	GRAVEL CLAY
25'	33'	8'	SAND STONE
33'	45'	12'	SAND GRAVEL
45'	55'	10'	LIME STONE
55'	60'	5'	CEMENT GRAVEL
60'	85'	25'	COURSE GRAVEL
85'	115'	30'	SAND STONE
115'	128	8'	COURSE GRAVEL
128'	150'	23'	SAND GRAVEL
150'	185'	35'	LIME STONE
185'	205'	20'	SAND STONE
205'	233'	28'	COURCE GRAVEL
233'	250'	17'	CEMENT GRAVEL
250'	262'	12'	LIME STONE
262'	274'	12'	COURCE GRAVEL
274'	280'	6'	CEMENT GRAVEL

(OVER)

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)
from 135' to 185' ft.

Other aquifers 205-233
262-274

First water at 135 feet.

Casing perforated
from 125 to 280 ft.

Size of perforations
1/8" by 4"

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
16"	0	125	125'	PLAIN
16"	125	280	155	PERFORATED

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

WELL DRILLER'S STATEMENT

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

Signed R K Quintance
Well Driller

By R W Quintance

License No. 413

Dated NOV. 30, 1964

(Not to be filled in by Driller)

RECEIVED
1964 DEC 3 AM 11 24
MAR 25 19
DIV. OF WATER RESOURCES
BRANCH OFFICE
LAS VEGAS, NEVADA

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 8581
Rec. July 6 1965
Well No.
Permit No. 21813
Do not fill in.

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner Hugh S. Marion Driller Darell Free

Address Hartley Rt. Dumas, Texas Address Panaca, Nevada Lic. No. 30

Location of well: S.W. 1/4 S.E. 1/4 Sec. 24, T. 3 N/S, R. 54 E, in Lincoln County

or in Penoyer Valley

Water will be used for Irrigation Total depth of well 302'

Size of drilled hole 14" Weight of casing per linear foot

Thickness of casing 1/4" Temp. of water

Diameter and length of casing 14" O.D. - 303' 6"
(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 131'

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

Date of commencement of well March 25, 1965 Date of completion of well June 26, 1965

Type of well rig Cable Tool

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	2	2	sandy silt
2	90	88	hardpan
90	255	165	gravel and sand
255	302	47	sand in gravel

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 139' to 302 ft.

Other aquifers

First water at 139 feet.

Casing perforated

from 140' to 302 ft.

Size of perforations

1/8 x 3"

(OVER)

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.

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

WELL DRILLER'S STATEMENT

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

Signed Daniel V. Free
Well Driller

By Owner

License No. 30

Dated June 28, 1965

(Not to be filled in by Driller)

65 11 21 9 30 09

Log No. 8695
Rec. OCT 28 1965
Well No.
Permit No. 21094
Do not fill in.

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

21094

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner ~~Robert P. Corbett~~ GORDON C. Bennett Driller D. E. Sider

Address ~~Box 7001 Tucson Ariz~~ Address ~~Box 218~~ Alamo Nev. Lic. No. 458

Location of well ~~SW~~ ¼ ~~SE~~ ¼ Sec. 5, T. 4 N/S, R 55 E, in Lincoln County

or 100 ft NE of SW Corner

Water will be used for ..... Total depth of well [redacted]

Size of drilled hole 18 in Weight of casing per linear foot 33 lb.

Thickness of casing 7/32 Temp. of water

Diameter and length of casing 16 OD

(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

If flowing well describe control works

(Type and size of valve, etc.)

Date of commencement of well Sept 15-65 Date of completion of well Sept 27-65

Type of well rig Loth Worth Spudder Model H

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	6	6	Top Soil
6	40	34	Boulders Sand & Gravel
40	90	50	hard Sand & Gravel
90	160	70	Course Sand & Gravel
160	165	5	Fine Sand & Gravel
165	180	15	— — —
180	190	10	hard Pack Sand
190	210	20	fine Gravel
210	240	30	Course Gravel & Sand
240	256	16	Gravel & Sand

(OVER)

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 165 to 256 ft.

Other aquifers

First water at 165 feet.

first water 80 Pounds

Casing perforated

from 156 to 256 ft.

Size of perforations

3/8 x 9-128 Per 20 ft

100 ft of Perf. Casing

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.

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

WELL DRILLER'S STATEMENT

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

Signed D. E. Sides
Well Driller

By.....

License No. H58

Dated Sept 27, 1965

(Not to be filled in by Driller)

RECEIVED
OCT 25 1965
DIV. OF WATER RESOURCES
NEVADA

Log No. 9511
Rec. May 25 1967
Well No.
Permit No. 22757
Do not fill in.

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner: Johanna Wackerle Driller: PATRICK H. THOMPSON

Address: Alamo, Nevada Address: Las Vegas, Nevada Lic. No. 192

Location of well: SW ¼ SW ¼ Sec. 34, T. 3 N/S, R 55 E, in Lincoln County

or

Water will be used for: Irrigation Total depth of well: 537'

Size of drilled hole: 16" from 0 to 537' Weight of casing per linear foot: 16" 44# 13 3/8 54

Thickness of casing: 16" ½", 13 3/8" 3/8" Temp. of water: cool

Diameter and length of casing: 16" to 275
(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: 70'

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

Date of commencement of well: October 4, 1966 Date of completion of well: November 8, 1966

Type of well rig: Cable tools

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	34	34	Drilled by others
34	80	46	Sandy clay & gravel
80	190	110	Sand & gravel
190	310	120	Sand & gravel with clay lenses
310	328	18	Hard Sand
328	360	32	Clay & sand
360	387	27	Hard Sand
387	403	16	Brown clay
403	453	12	Sand & gravel
465	490	25	Gravel
490	537	47	Conglomerate

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 465 to 490 ft.

Other aquifers: 80 - 190

190 - 310

310 - 328

360 - 387

403 - 453

453 - 465

First water at 70 feet.

Casing perforated

from 90 to 537 ft.

Size of perforations

3/8 x 3 6 rows

(OVER)

919

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
16"	plus 1	275	276	
8 3/8	270	537	267	

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

pump tested 2500 GPM from 127'

WELL DRILLER'S STATEMENT

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

Signed [illegible]
Well Driller

By [illegible]

License No. 192

Dated 27 April, 19 67

(Not to be filled in by Driller)

DIVISION OF WATER RESOURCES

STATE OF NEVADA

DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 9688
Permit No. 23701, 36444
Basin 10-170
36445, 36446

1. OWNER RUTH M. MARIAN ADDRESS HARTLEY RT., DUMAS TEXAS

2. LOCATION SW ¼ NE ¼ Sec 24 T. 3 N/S R. 54 E. LINCOLN County
PERMIT NO. 23701

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

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

5. TYPE WELL
Cable ☐ Rotary ☒
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
SANDY SILT		0	2	2
HARDPAN SAND		2	90	88
GRAVEL & SAND		90	113	23
CLAY & GRAVEL		113	115	2
GRAVEL & SAND		115	125	10
SAND IN GRAVEL		125	327	202

Date started AUG. 15, 19 64
Date completed SEPT. 1, 19 67

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 20 inches Total depth 327 feet
Casing record 327
Weight per foot ..... Thickness 3/8 + ½

Diameter	From	To
18 inches	0 feet	97 feet
16 inches	97 feet	327 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 3/16 X 3
From 113 feet to 327 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL
Static water level 113 Feet below land surface
Flow ..... G.P.M.
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 L. W. QUAINTACE
Address CURRANT CR. NEV
Nevada contractor's license number
Nevada driller's license number
Signed
Date

Material Taken from log sent by Owner original in permit file

USE ADDITIONAL SHEETS IF NECESSARY

5471

CLIENT'S COPY

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 9848
Permit No. 21858
Basin

OWNER Rita I. Baker ADDRESS Hiko, Nevada

M.D.B.& M.

2. LOCATION SE ¼ SE ¼ Sec. 35 T. WP 350 N/S R. 55 E. Lincoln County

PERMIT NO. 21858 T 3S

3. TYPE OF WORK	4. PROPOSED USE	5. TYPE WELL
New Well ☒ Recondition ☐	Domestic ☐ Irrigation ☒ Test ☐	Cable ☒ Rotary ☐
Deepen ☐ Other ☐	Municipal ☐ Industrial ☐ Stock ☐	Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Sand and gravel	113	113	200	87
Sandy clay		200	208	08
Sand and gravel		208	271	63

Date started Oct. 31, 19 67
Date completed Dec. 5, 19 67

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
NO TEST			

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 16" inches Total depth 271 feet
Casing record 271' pipe in hole 18" above grnd.
Weight per foot ..... Thickness 214

Diameter		From	To
16"	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 torch
Size perforation 1 ft. L.S. times 3/8 wide
From 101 feet to 271 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL

Static water level 110' Feet below land surface 110'
Flow --- G.P.M. ---
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 Carl J. Taylor

Address Gen. Del. Alamo, Nevada

Nevada contractor's license number

Nevada driller's license number 443 3

Signed

Date 1-4-68

USE ADDITIONAL SHEETS IF NECESSARY

5471

DIVISION OF WATER RESOURCES

STATE OF NEVADA

DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 10145
Permit No. 23454
Basin Sand Spg. Valley

1. OWNER O. V. Bennett Jr. ADDRESS Lubbick Tex

2. LOCATION SE ¼ N.W. ¼ Sec. 28 T. 3 S. O/S R. 55 E. Lincoln County
PERMIT NO. 23454

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

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

5. TYPE WELL
Cable ☒ Rotary ☐
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
1-15 SANDY SILT		1	15	15
Gravel		15	120	105
CLAY		120	140	20
Gravel		140	215	75

Date started ....., 19....
Date completed June 20TH, 1968

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
WELL HAS NOT BEEN TESTED			

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 16" inches Total depth 215 feet
Casing record 150' PERFATION
Weight per foot ..... Thickness 188

Diameter	From	To
16" inches	1 feet	215 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 TORCH
Size perforation ¼" TEN INCHS LONG
From 65 feet to 215 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL

Static water level 90 FT. Feet below land surface 90 FT.
Flow ..... G.P.M. .....
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 Carl J. Taylor

Address BOX 62 15 W. OWENS LAS VEGAS

Nevada contractor's license number .....

Nevada driller's license number 442

Signed C. J. Taylor

Date July 2 1968

USE ADDITIONAL SHEETS IF NECESSARY

5471

DIVISION OF WATER RESOURCES

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 10464
Permit No. 23455
Basin Pahoyer Val.

1. OWNER O. V. Bennett, Jr. ADDRESS AUSTIN TEXAS

2. LOCATION SW ¼ SE ¼ Sec. 33 T. 3 SOUTH N/S R. 55 E. LILCOLN County
PERMIT NO. 23455

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

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

5. TYPE WELL
Cable ☒ Rotary ☐
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
SAND AND GRAVEL	80	0	80	80
SAND AND GRAVEL	80	80	235	155

Date started MAY 3, 1968
Date completed JULY FIRST, 1968

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 16" inches Total depth 235 feet
Casing record 188 BUT WELLDED
Weight per foot ..... Thickness 188

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 TORCH
Size perforation ¾" By 6 - 6 Times Arch.
From 80 feet to 235 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL
Static water level 70 Feet below land surface 70
Flow ..... G.P.M. .....
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 C. J. Taylor
Address 15 W. OWENS LAS VEGAS
Nevada contractor's license number .....
Nevada driller's license number 442
Signed C. J. Taylor
Date July 10 1968

USE ADDITIONAL SHEETS IF NECESSARY

5471

DIVISION OF WATER RESOURCES

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 10734
Permit No. 23456
Basin Panaca Val

1. OWNER D. V. BENNETT JR. ADDRESS P. O. BOX 192 ALAMO, NE

2. LOCATION NW ¼ NE ¼ Sec. 33 T. 3 N/S R. 55 E. LINCOLN County
PERMIT NO. 23456

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

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

5. TYPE WELL
Cable ☒ Rotary ☐
Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
~~0-3~~ SANDY SOIL		0	3	3
GRAVEL		3	60	57
GRAVEL WITH BOULDERS		60	120	60
CEMENTED GRAVEL		120	150	30
SAND		150	170	20
GRAVEL		170	190	20
GRAVEL W/ BOULDERS		190	250	60

At present time tools are hung in hole at 143 feet to top of tools

Date started MAY 15, 19 67
Date completed MAY 30, 19 67

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 16.00 inches Total depth 250.0 feet
Casing record 16" — 250'
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 ~~1/4" X 12"~~ TORCH
Size perforation 1/4" X 12"
From 75 feet to 250 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL
Static water level 74 Feet below land surface
Flow ..... G.P.M.
Water temperature COLD ° F. Quality GOOD

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

Name DARRELL FREE
Address PANACA, NEVADA
Nevada contractor's license number 3422
Nevada driller's license number 30
Signed Darrell Free
Date Sep 16-69

USE ADDITIONAL SHEETS IF NECESSARY

5471

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 26944
Permit No.
Basin 170

In Book

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 118

OWNER GARY CASLETON
MAILING ADDRESS
ADDRESS AT WELL LOCATION

2. LOCATION SW ¼ SW ¼ Sec. 29 T. 3 N/S R. 55 E LINCOLN County
PERMIT NO. (Issued by Water Resources) Parcel No. Subdivision Name

3. TYPE OF WORK: New Well [X] Recondition [ ] Deepen [ ] Other [ ]

4. PROPOSED USE: Domestic [ ] Irrigation [X] Test [ ] Municipal [ ] Industrial [ ] Stock [ ]

5. TYPE WELL: Cable [ ] Rotary [X] Other [ ]

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
SAND & CLAY		0	280	280
CEMENT GRAVEL		280	350	70

RECEIVED
MAY 29 1985
Div. of Water Resources
Branch Office - Las Vegas, NV

Date started 5-01, 19 85
Date completed 5-06, 19 85

7. WELL TEST DATA

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

BAILER TEST
G.P.M. 70 Draw down 0 feet 6 hours
G.P.M. Draw down feet hours
G.P.M. Draw down feet hours

8. WELL CONSTRUCTION
Diameter hole 22 inches Total depth 350 feet
Casing record 16"
Weight per foot Thickness 255

Diameter	From	To
16 inches	0 feet	350 feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet
inches	feet	feet

Surface seal: Yes [X] No [ ] Type CEMENT
Depth of seal 50 FT. feet
Gravel packed: Yes [X] No [ ]
Gravel packed from 50 feet to 350 feet

Perforations:
Type perforation FACTORY
Size perforation 16 PER FT.
From 400 feet to 300 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

9. WATER LEVEL
Static water level 133 feet below land surface
Flow 2000 G.P.M. 0 P.S.I.
Water temperature 69 °F. Quality GOOD

10. DRILLERS CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name VEGAS DRILLING (Contractor)
Address 5956 CALVERT (Contractor)
Nevada contractor's license number 15972
Nevada contractor's drillers number 944
Nevada driller's license number 944 (Actual Driller)
Signed Bruce Robinson (Contractor)
Date

USE ADDITIONAL SHEETS IF NECESSARY

(Rev. 6-81) O-627 CR434

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

STATE OF NEVADA
DIVISION OF WATER RESOURCES

WELL DRILLERS REPORT

Please complete this form in its entirety

OFFICE USE ONLY
Log No. 26945
Permit No. 45902
Basin 170

PRINT OR TYPE ONLY

NOTICE OF INTENT NO. 1829

OWNER Miriam Gibson
MAILING ADDRESS Box 35 St. 12
Rachell, Nevada

ADDRESS AT WELL LOCATION Rachell Nevada

2. LOCATION SW ¼ NW ¼ Sec. 34 T. 3 S N/S R. 55 E Lincoln County

PERMIT NO. 45902 (Issued by Water Resources) | Parcel No. | Subdivision Name

3. TYPE OF WORK: New Well ☒ Recondition ☐ Deepen ☐ Other ☐

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

5. TYPE WELL: Cable ☒ Rotary ☐ Other ☐

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
top soil		0	25	25
gravel		25	40	15
sand in gravel		40	160	120
gravel		160	190	30
sand in clay		190	204	14
Brown				

Concrete seal not installed at this time. We felt the well needed more pumping and its still taking some gravel. This seal will be installed at a later date, under my supervision.
D.H. Free

RECEIVED
NOV 2 1984
Div. of Water Resources
Branch Office: Las Vegas, NV

Date started Aug 3, 1984
Date completed Oct 26, 1984

7. WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
1200	800	20'	30
1300	888	30'	30
1500	888	50'	30

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

20" – 50' 16" 50' to 204'
Diameter hole ..... inches Total depth 204 feet
Casing record 16" to 204'
Weight per foot ..... Thickness ¼

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 concrete
Depth of seal ..... feet
Gravel packed: Yes ☒ No ☐
Gravel packed from 50 feet to 204 feet

Perforations:
Type perforation Torch
Size perforation ¼ X 12"
From 164' feet to 204 feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet
From ..... feet to ..... feet

9. WATER LEVEL

Static water level 72 feet below land surface
Flow ..... G.P.M. ..... P.S.I.
Water temperature Cold F. Quality good

10. DRILLERS CERTIFICATION

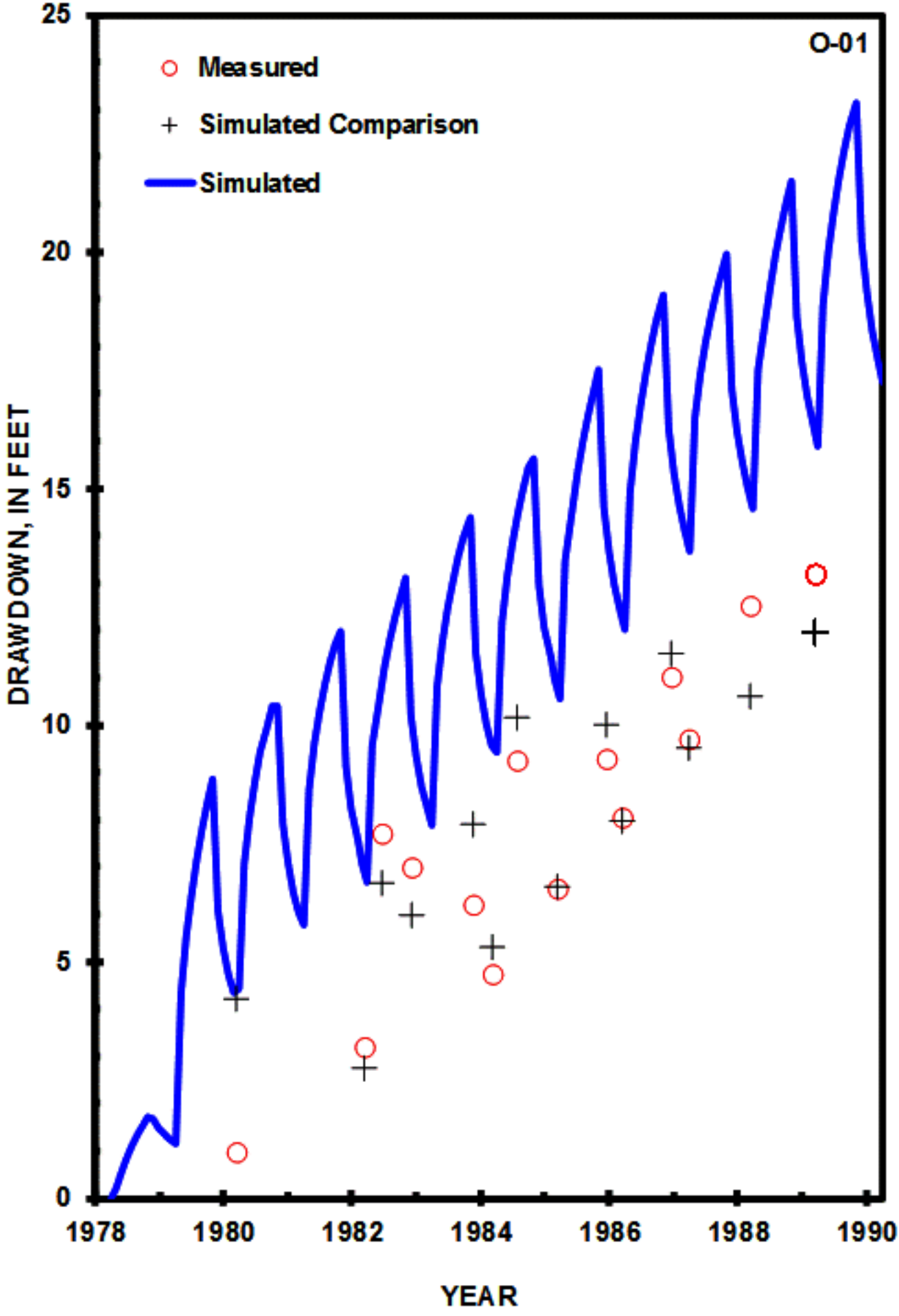
This well was drilled under my supervision and the report is true to the best of my knowledge.

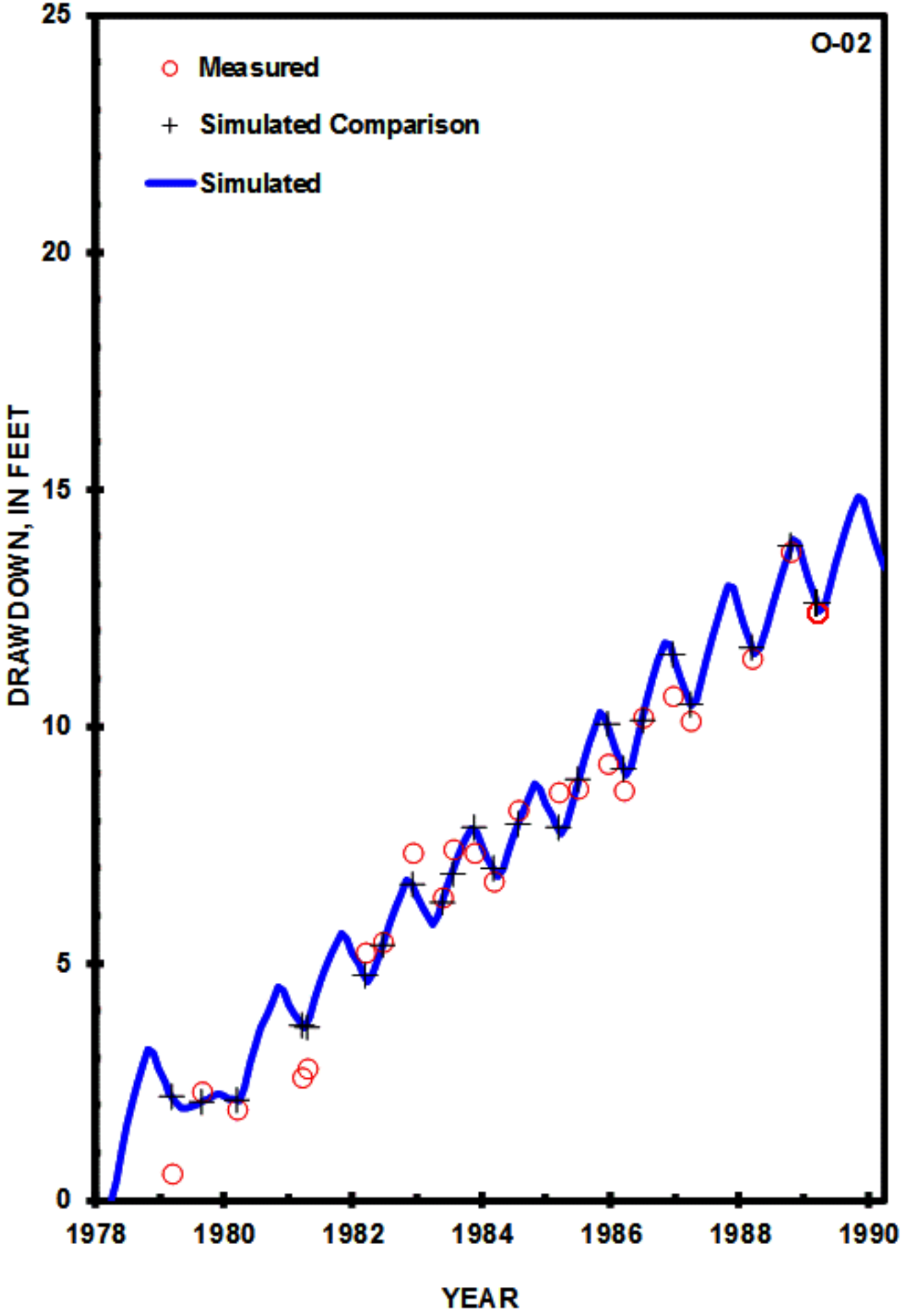
Name Darell H. Free (Contractor)
Address Box 122 Panaca NV (Contractor)
Nevada contractor's license number 3422
Nevada contractor's drillers number 30
Nevada driller's license number 445 (Actual Driller)
Signed Darell H. Free (Contractor)
Date Oct. 26, 1984

USE ADDITIONAL SHEETS IF NECESSARY

(Rev. 6-81) O-627 CR434

Appendix B—Simulated and measured drawdowns, All wells


O-01
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
0
5
10
15
20
25
1978
1980
1982
1984
1986
1988
1990


O-02
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
0
5
10
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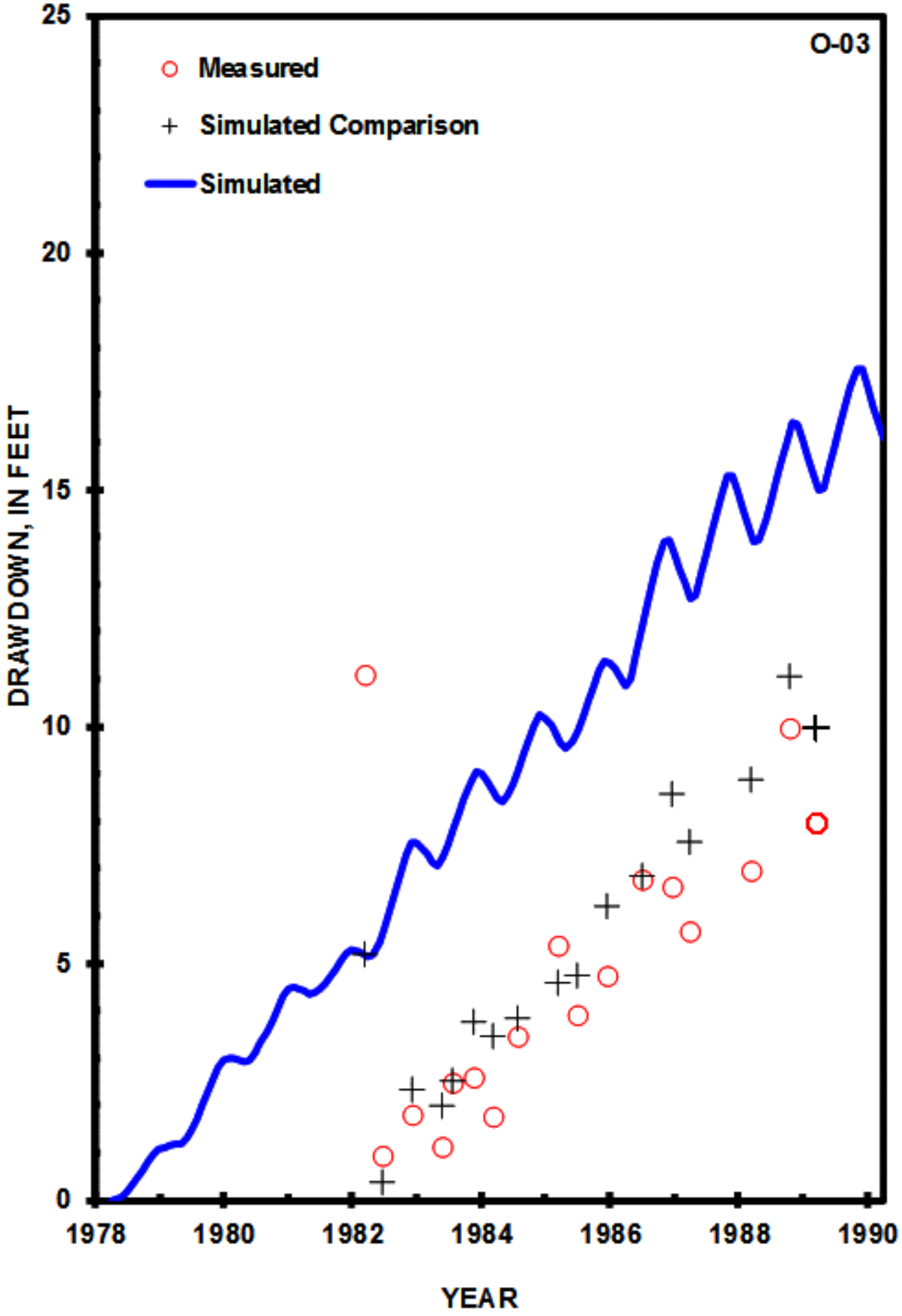
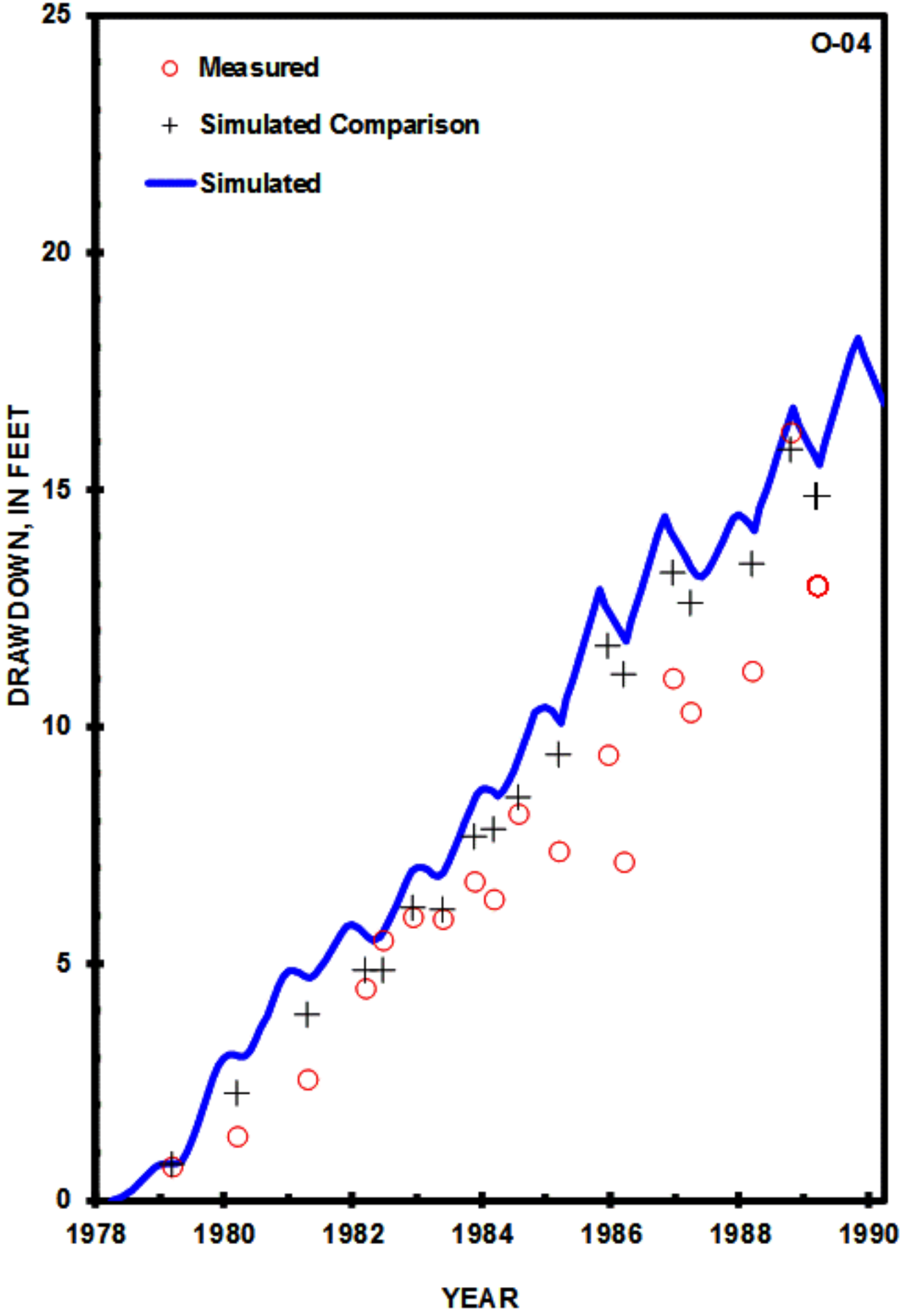
20
25
1978
1980
1982
1984
1986
1988
1990


O-03
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
0
5
10
15
20
25
1978
1980
1982
1984
1986
1988
1990


O-04
Measured
Simulated Comparison
Simulated
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YEAR
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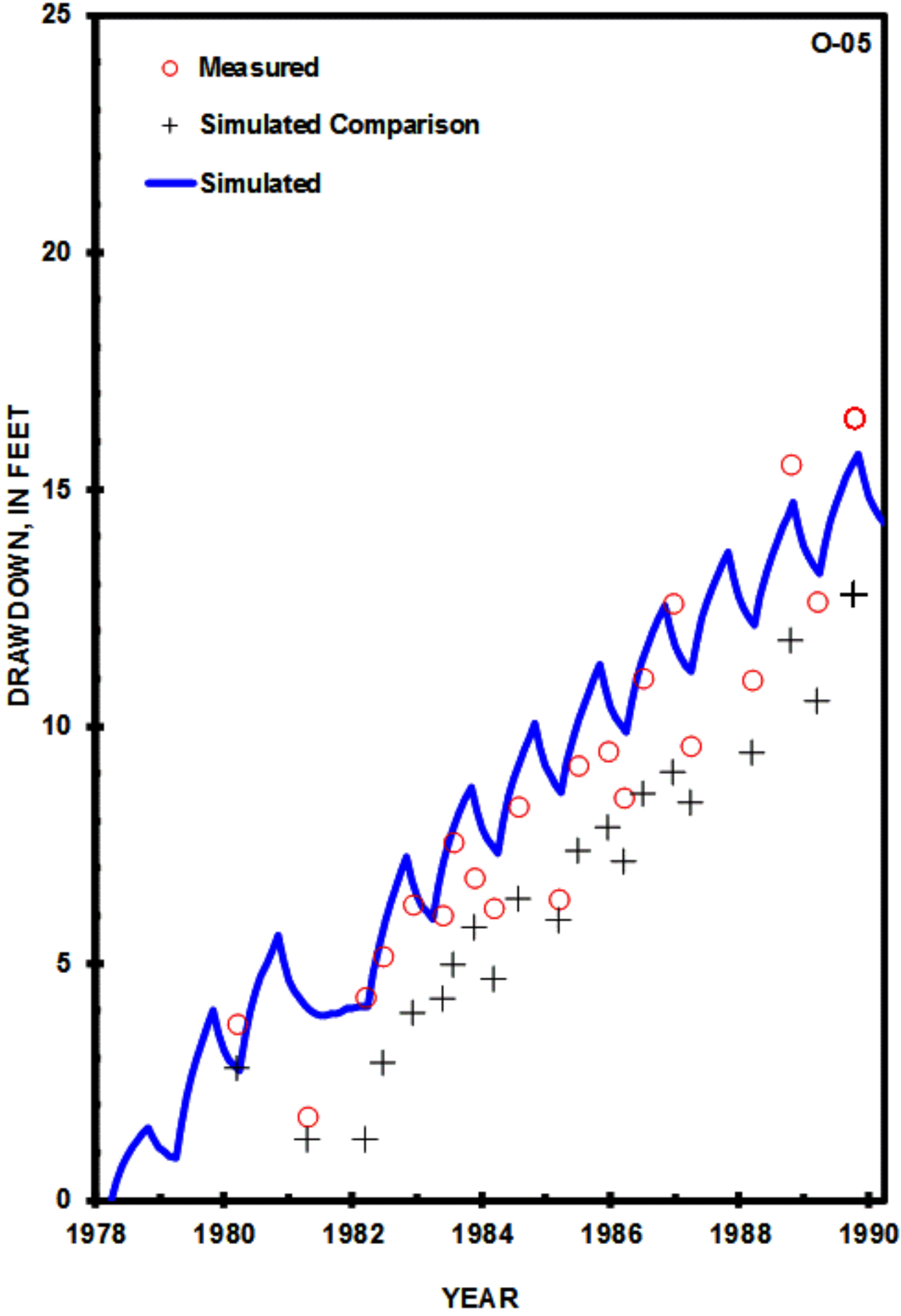
1978
1980
1982
1984
1986
1988
1990


O-05
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
0
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1978
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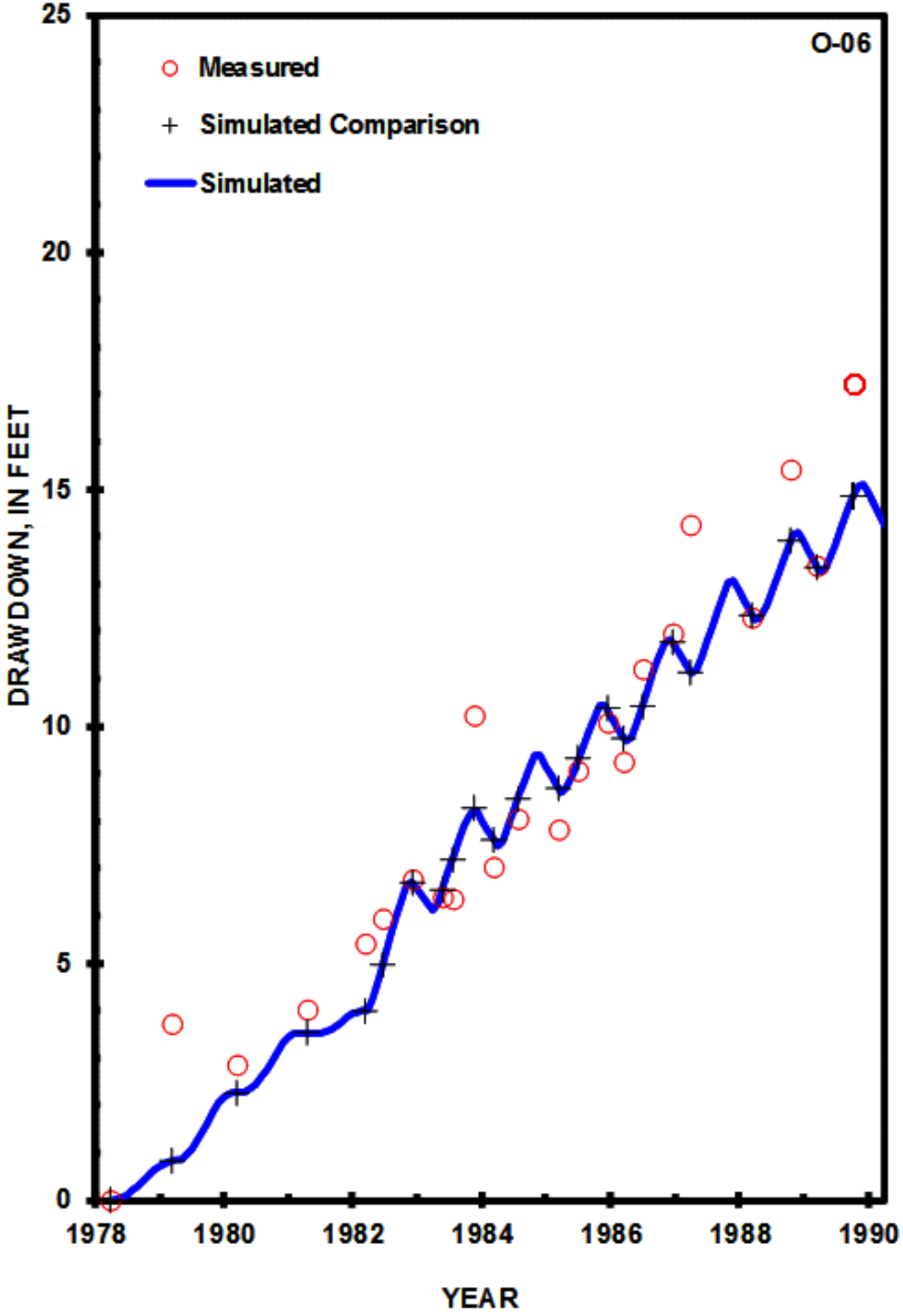
1988
1990


O-06
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
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5
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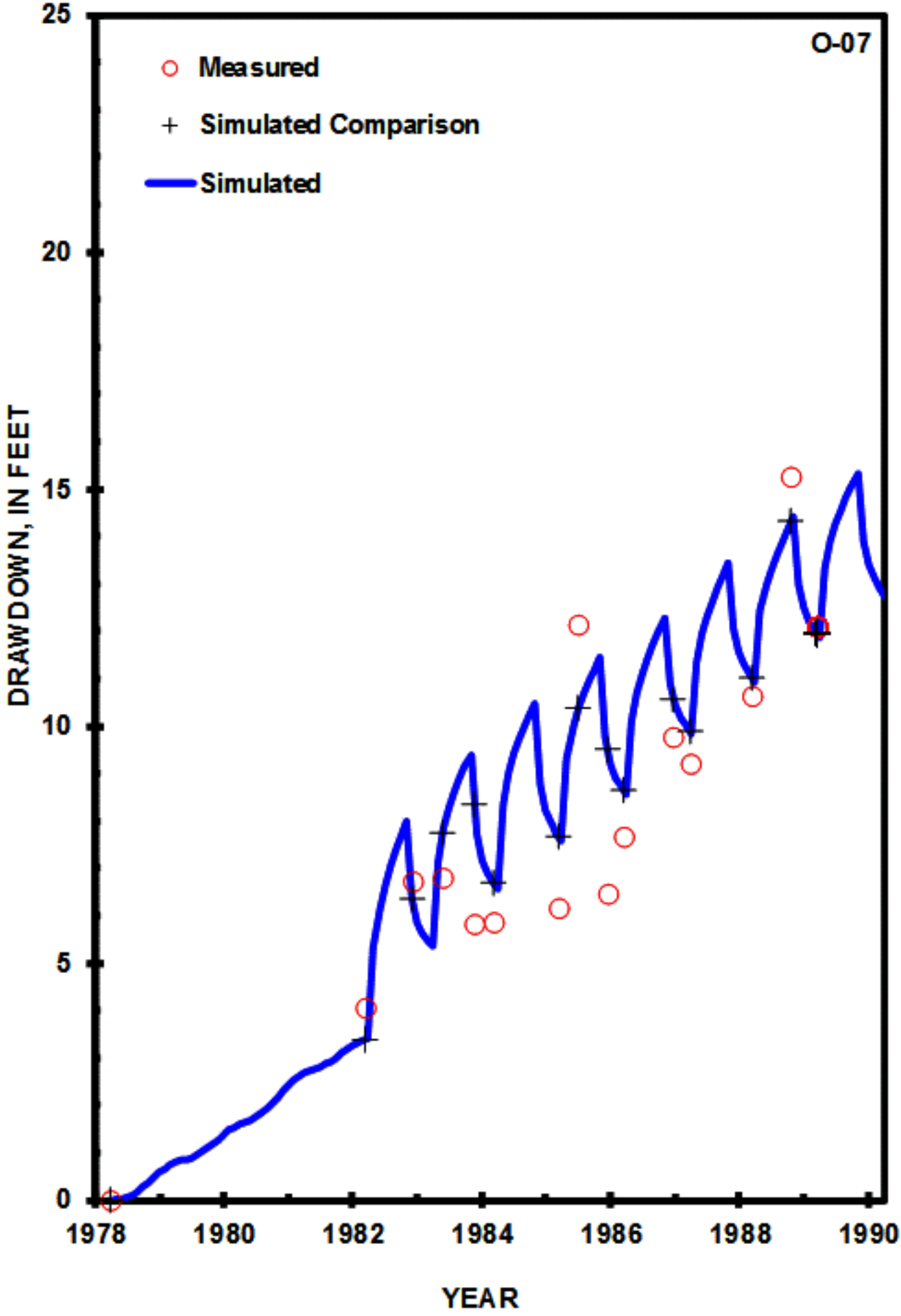
1978
1980
1982
1984
1986
1988
1990


O-07
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
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1978
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1982
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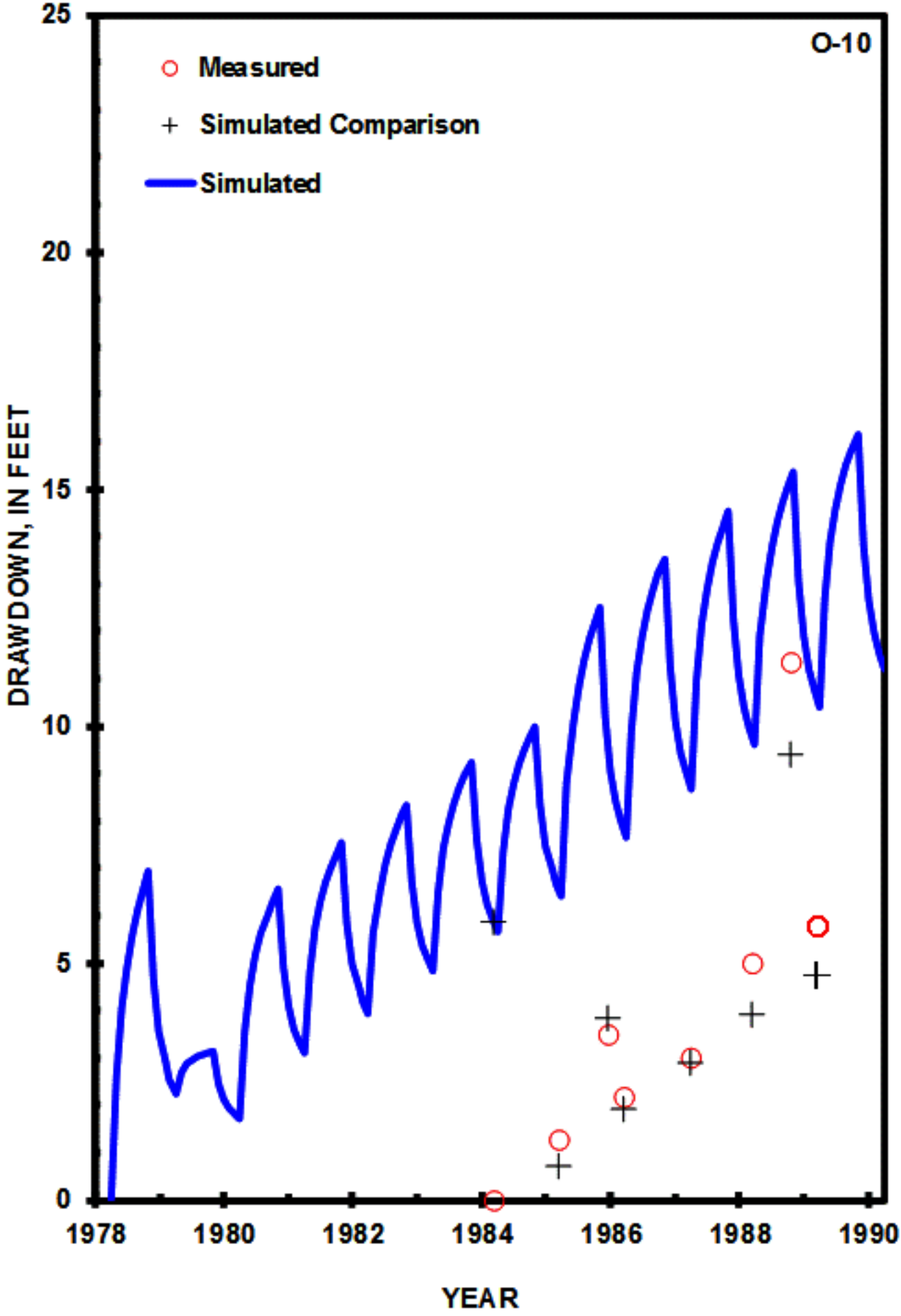
1986
1988
1990


O-10
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
YEAR
0
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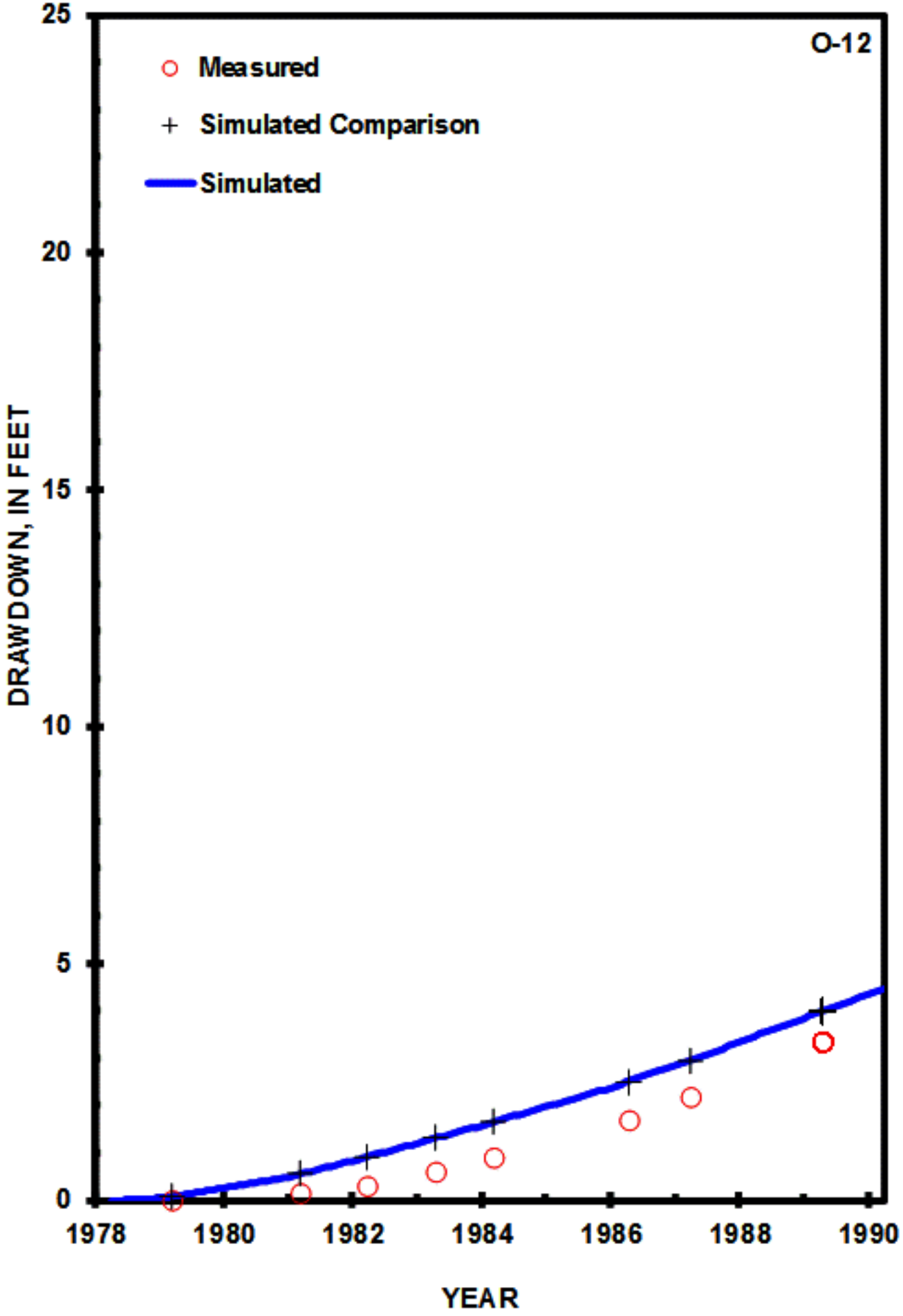
1978
1980
1982
1984
1986
1988
1990


O-12
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
25
20
15
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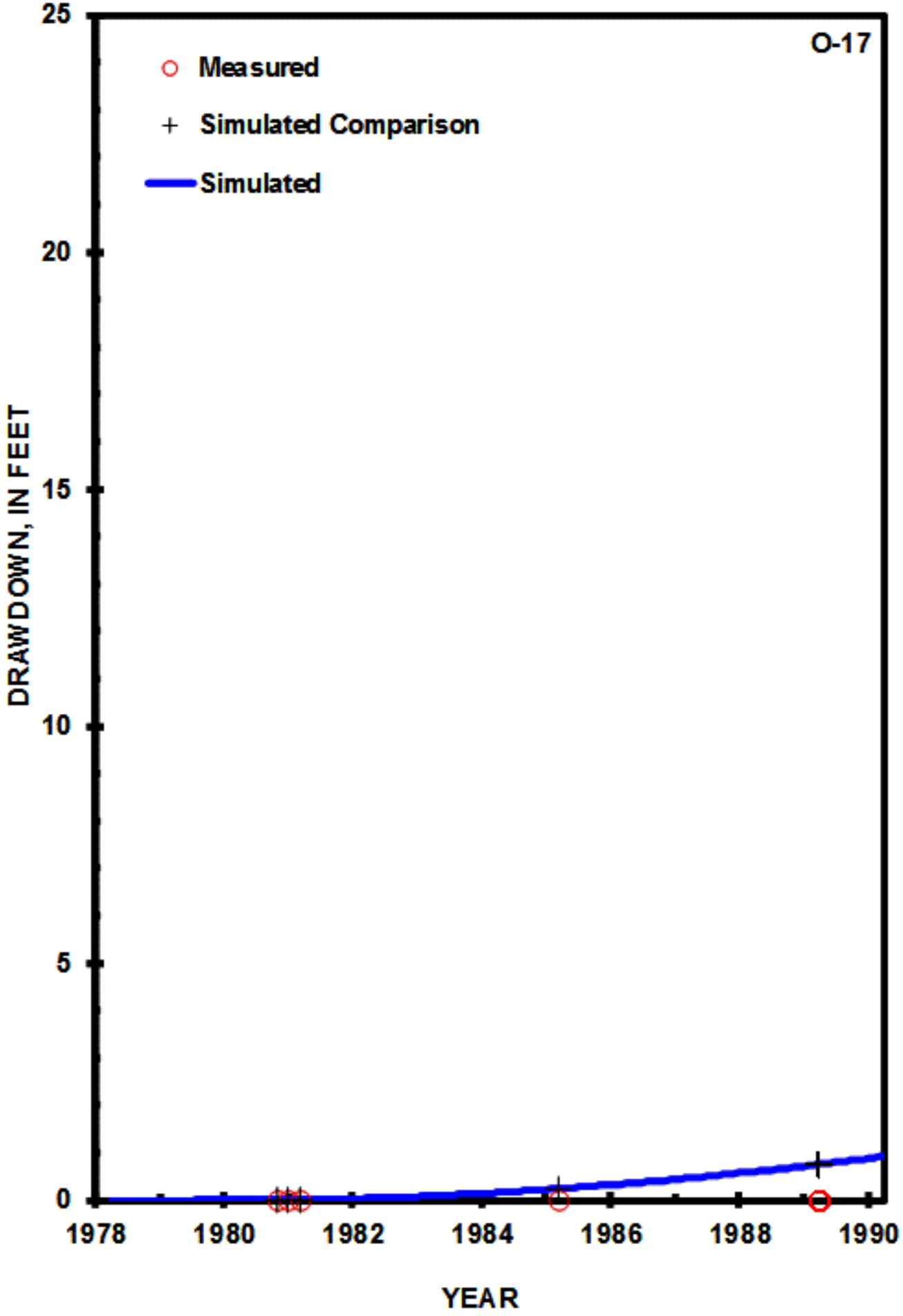
5
0
1978
1980
1982
1984
1986
1988
1990
YEAR


O-17
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
25
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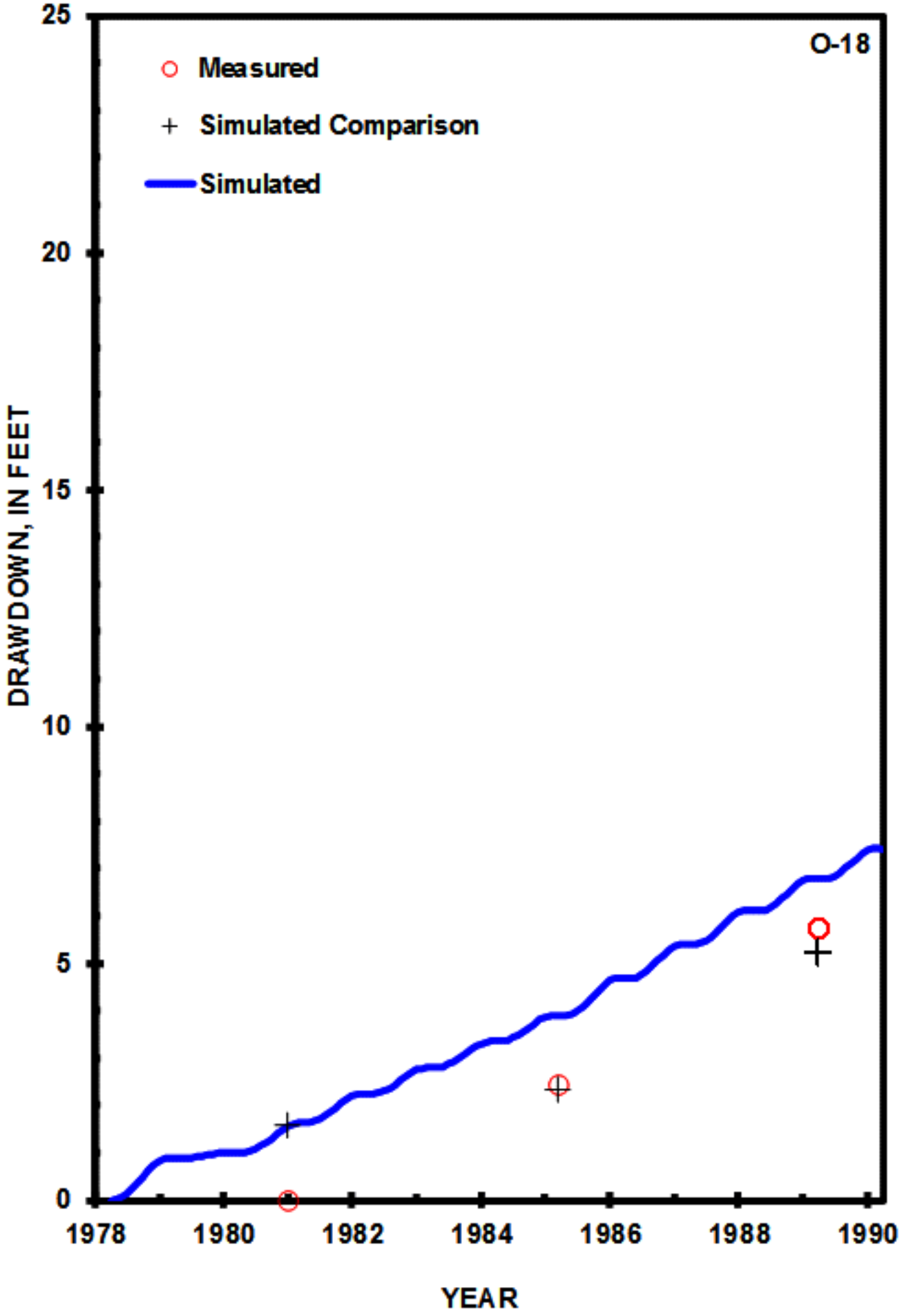
0
1978
1980
1982
1984
1986
1988
1990
YEAR


O-18
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
25
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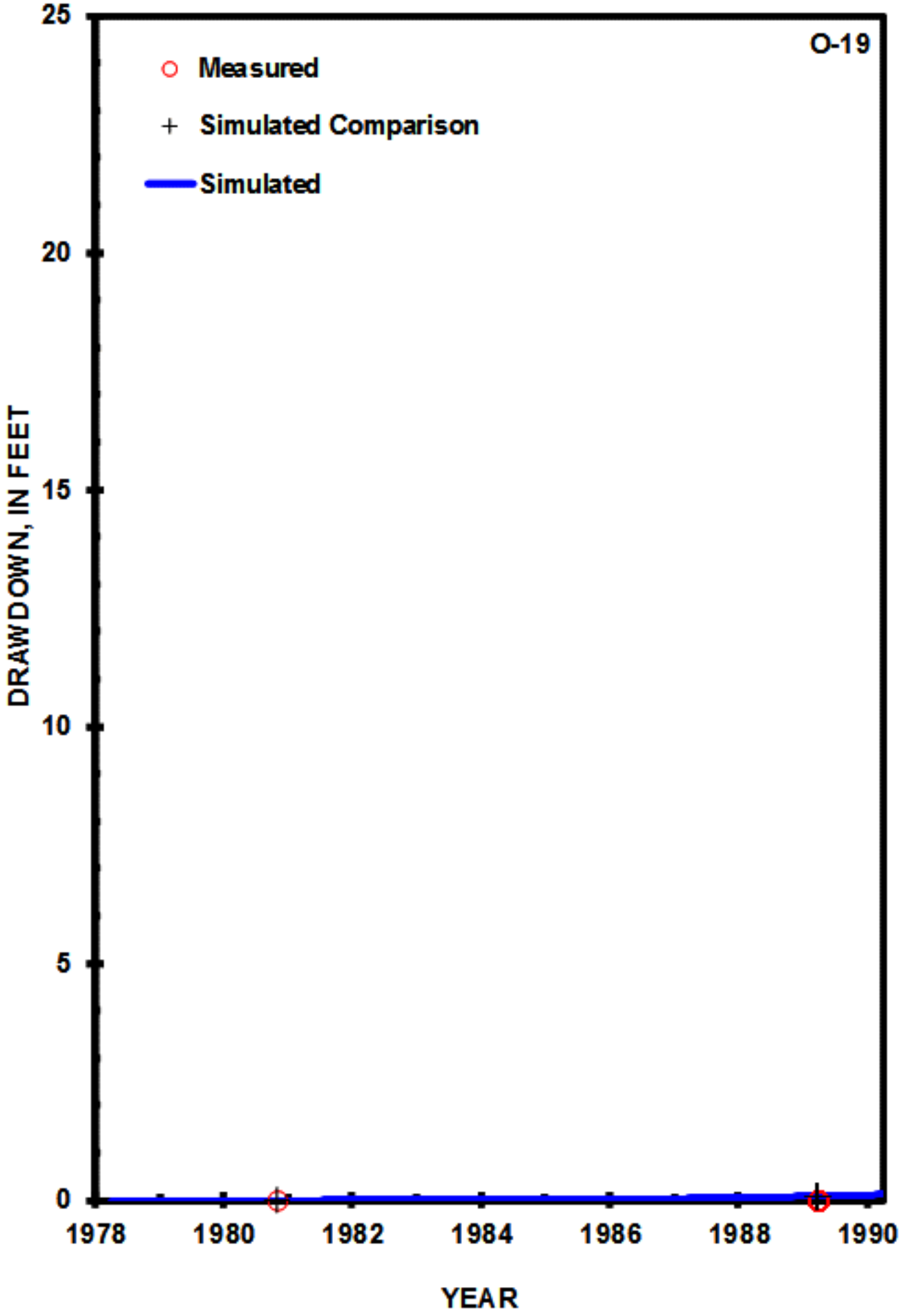
0
1978
1980
1982
1984
1986
1988
1990
YEAR


O-19
Measured
Simulated Comparison
Simulated
DRAWDOWN, IN FEET
25
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0
1978
1980
1982
1984
1986
1988
1990
YEAR