

ONLY

(DO NOT GIVE OUT)

**GROUND WATER LEVELS
UPPER BIG SANDY
DESIGNATED GROUND WATER BASIN**

2001



**COLORADO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER RESOURCES
OFFICE OF THE STATE ENGINEER**

Bill Owens
Governor

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State Engineer

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Director

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This report contains the basic ground water level data collected in the Upper Big Sandy Designated Ground Water Basin during the period from February 1991 through March 2001. Acquisition and publication of this information is a cooperative effort between the Upper Big Sandy Ground Water Management District and the Colorado Division of Water Resources. The project is part of a statewide ground water level monitoring program funded by Senate Bill 200 (1987 legislative session). This legislation directed that a portion of the fees collected for water well permit applications be used for the establishment of a program to monitor water level trends throughout the state.

With one exception, the wells in this report are listed by township, range, and section, beginning at the north end of the basin and proceeding south. The exception consists of 6 of the 8 monitoring and production wells owned by the Town of Limon. The data sheets for the 6 monitoring wells located in the vicinity of the town have all been placed together at the back of the report. The locations of these 6 wells are shown on a map or maps included with the data sheets. The data sheets for the town's Frasier Farms production well and the well identified as Big Sandy #4 are indexed by location.

The locations for all of the wells have been determined with a satellite based global positioning system (GPS), and that location information in UTM grid format is included. Footage distances from section lines shown on the data sheets were measured from U.S.G.S. 7 ½ minute topographic maps based on locations determined by GPS.

The report contains water level measurements for 30 wells monitored on a regular basis. Hydrographs are presented for wells with more than 3 annual measurements. Mr. Glenn Graham of this office took water level measurements in these wells during the month of March, 2001.

30 wells were measured for this year's report. One well, the Town of Limon Frasier Farms well, is included for the first time this year. The remaining 29 wells show an average water level decline of 0.87 of a foot from March of last year. Water levels increased in 3 of the wells, and decreased in 26 of the wells. The changes ranged from an increase of 1.17 feet to a decline of 2.4 feet.

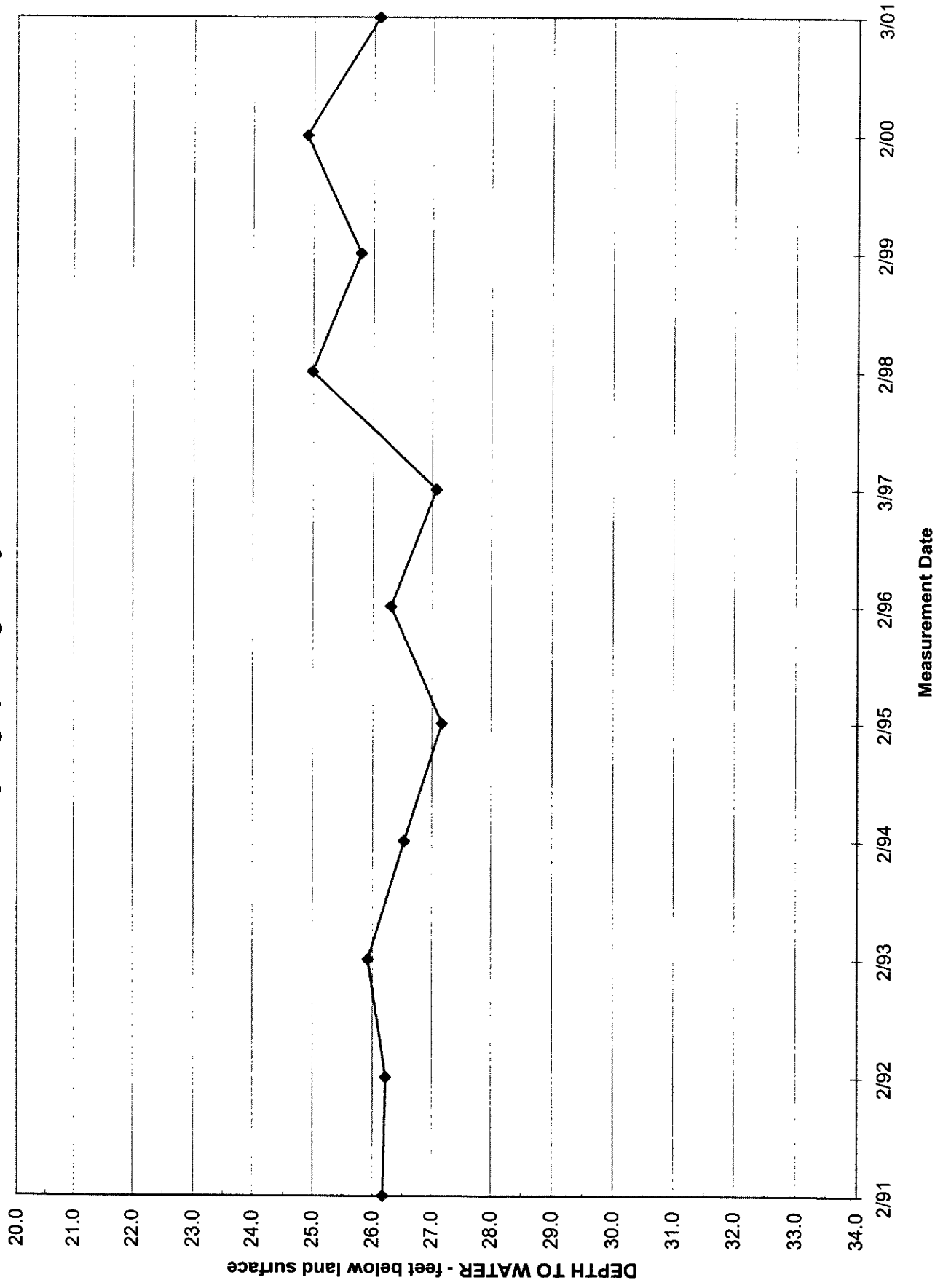
Long term water level data for the period from 1991 through 2001 for 23 wells shows that, on average, water levels are now higher by 1.72 feet than they were in 1991. One well shows a decline of 0.91 of a foot, and the remaining 22 wells show increases in water levels up to a maximum of 7.07 feet. With a few exceptions, the well hydrographs show level to declining water levels from 1991 through about 1996 or 1997. The general trend since 1997 has been one of increasing water levels.

The information in this report was compiled, edited, and prepared for publication by Glenn Graham.

Copies of this report are made available to well owners and the District free of charge. Additional copies may be obtained from the Colorado Division of Water Resources, Public Records Section for \$1.50 each. The Records Section can be contacted at 1313 Sherman Street, Room 818, Denver CO 80203, or by phone at 303/866-3581 or 303/866-3447.

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Hydrograph - Big Sandy No. 1



MONITORING WELL DATA SHEET

Well I.D.:	BIG SANDY - 1	Well Owner:	UPPER BIG SANDY GWMD
Permit #:		UTM Coordinates:	E
County:	ELBERT	Zone 13:	N
Location:	NW/NW/SE SEC. 6, T9S, R57W, 6TH P.M.,		
Aquifer:	ALLUVIUM		
Well Depth (ft):	UKN		
Surface Elev. (ft):	5,500		

Date	Hold (ft)	Cut (ft)	Depth to Water (ft)	Meas. Pt. - Ft. Above Land Surf.	Depth to Water - Ft. Below Land Surf.	Elev. of Water Level (ft)	Change From Previous Level (ft)	Change From 1st Level (ft)	Field Data Rcrd By
02/05/91	30.00	-1.40	28.60	2.43	26.17	5473.8			SAJ
02/10/92	29.00	-0.35	28.65	2.43	26.22	5473.8	-0.05	-0.05	SAJ
02/08/93	38.00	-9.65	28.35	2.43	25.92	5474.1	0.30	0.25	RC
02/15/94	29.00	-0.04	28.96	2.43	26.53	5473.5	-0.61	-0.36	SAJ
02/22/95	30.00	-0.40	29.60	2.43	27.17	5472.8	-0.64	-1.00	LAH
02/20/96	28.00	0.73	28.73	2.43	26.30	5473.7	0.87	-0.13	LAH
03/07/97	29.00	0.50	29.50	2.43	27.07	5472.9	-0.77	-0.90	GRG
02/23/98	25.00	2.42	27.42	2.43	24.99	5475.0	2.08	1.18	GRG
02/10/99	25.00	3.22	28.22	2.43	25.79	5474.2	-0.80	0.38	GRG
02/03/00	27.00	0.32	27.32	2.43	24.89	5475.1	0.90	1.28	GRG
03/06/01	28.00	0.29	28.29	2.20	26.09	5473.9	-1.20	0.08	GRG

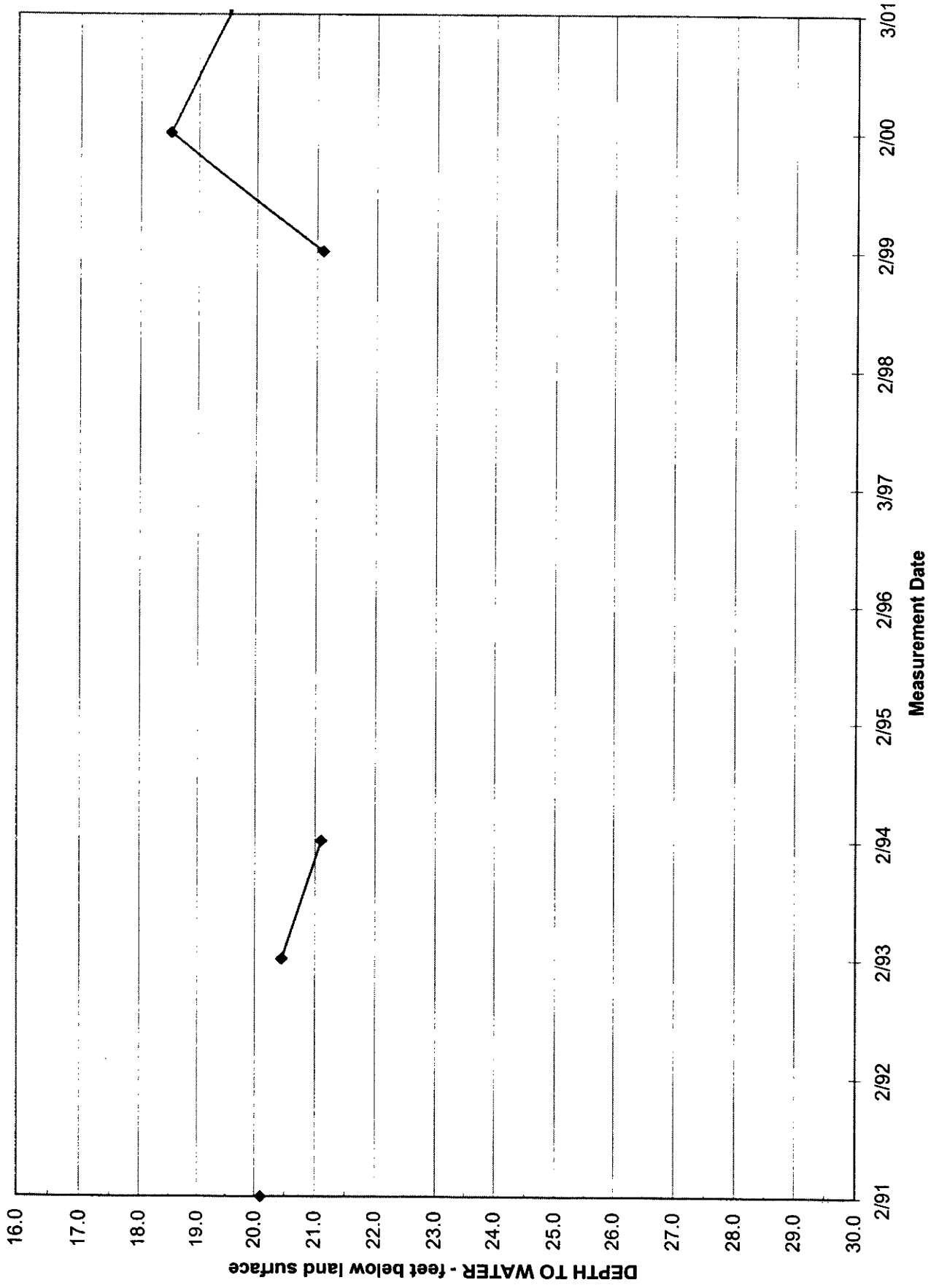
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MONITORING WELL DATA SHEET

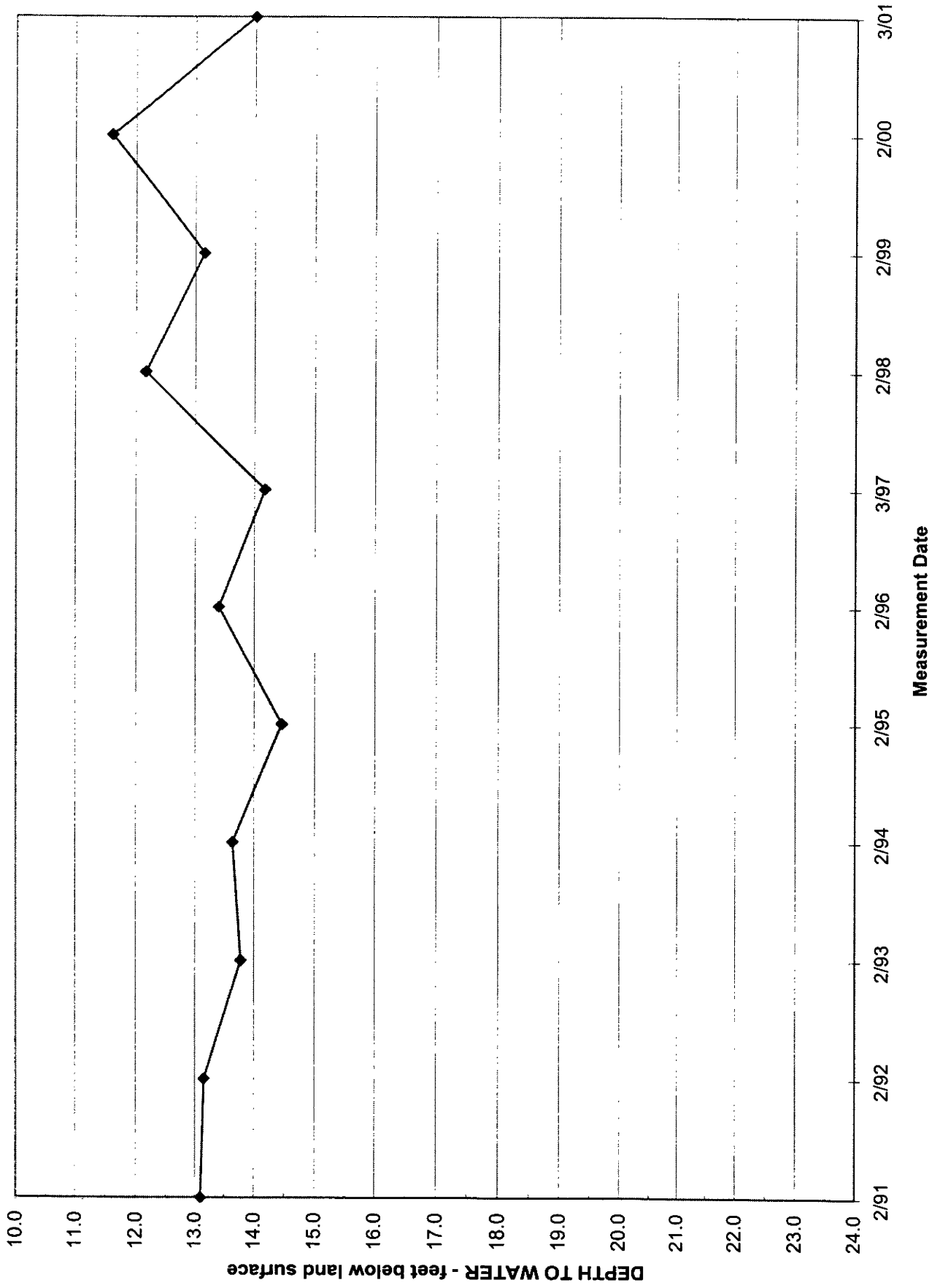
Well I.D.:	FRASIER FARMS	Well Owner:	TOWN OF LIMON
Permit #:	21896-F	UTM Coordinates:	602,805 E
County:	ELBERT	Zone 13	4,349,808 N
Location:	NE/SE SEC. 6, T9S, R57W, 6TH P.M., 1,950' FSL & 70' FEL		
Aquifer:	ALLUVIUM		
Well Depth (ft):	58		
Surface Elev. (ft):	5,490		

Date	Hold (ft)	Cut (ft)	Depth to Water (ft)	Meas. Pt. - Ft. Above Land Surf.	Depth to Water - Ft. Below Land Surf.	Elev. of Water Level (ft)	Change From Previous Level (ft)	Change From 1st Level (ft)	Field Data Rcrd By
03/09/01	12.00	0.75	12.75	1.00	11.75	5478			GRG

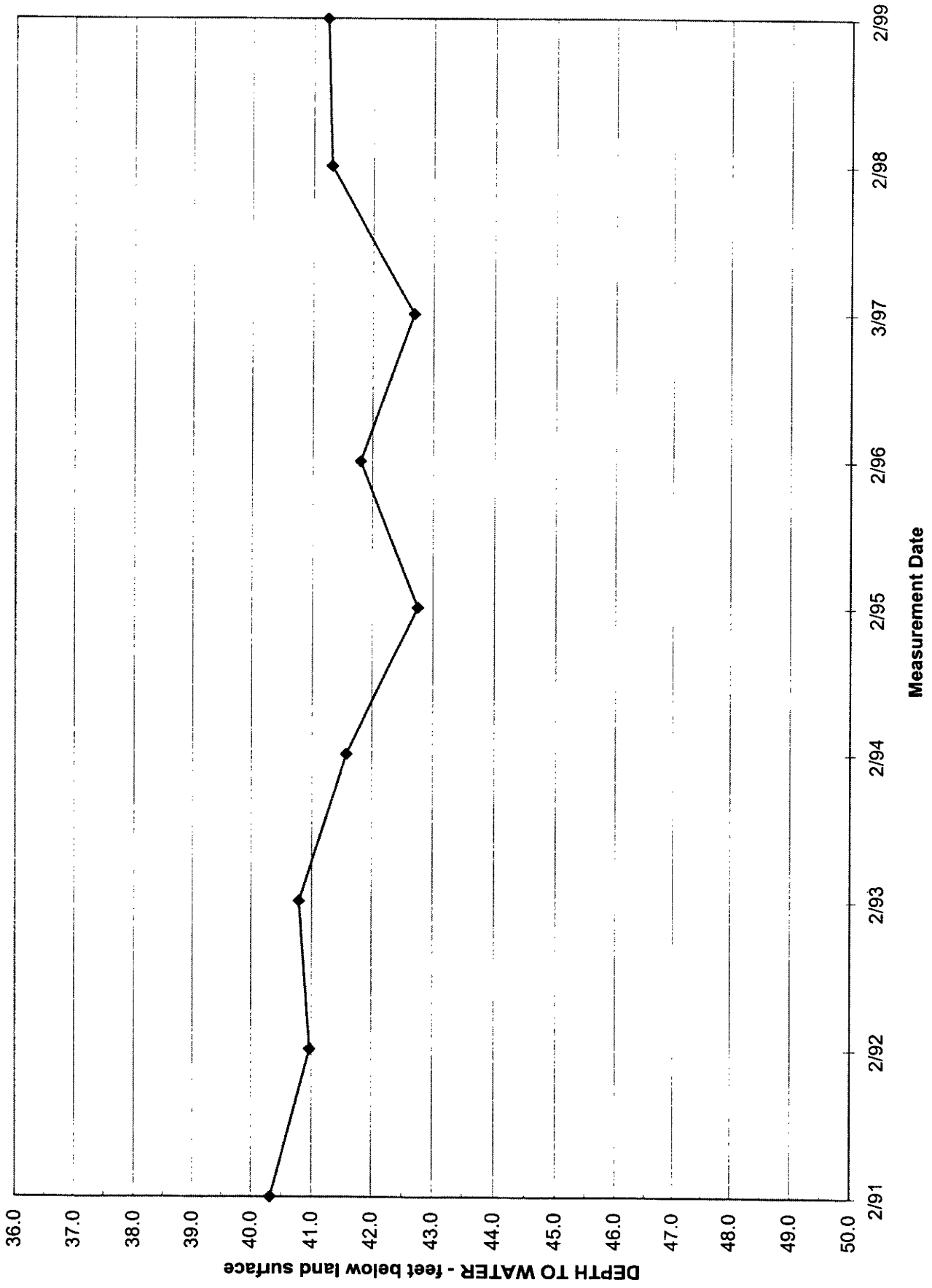
Hydrograph - Big Sandy No. 4



Hydrograph - Big Sandy No. 2

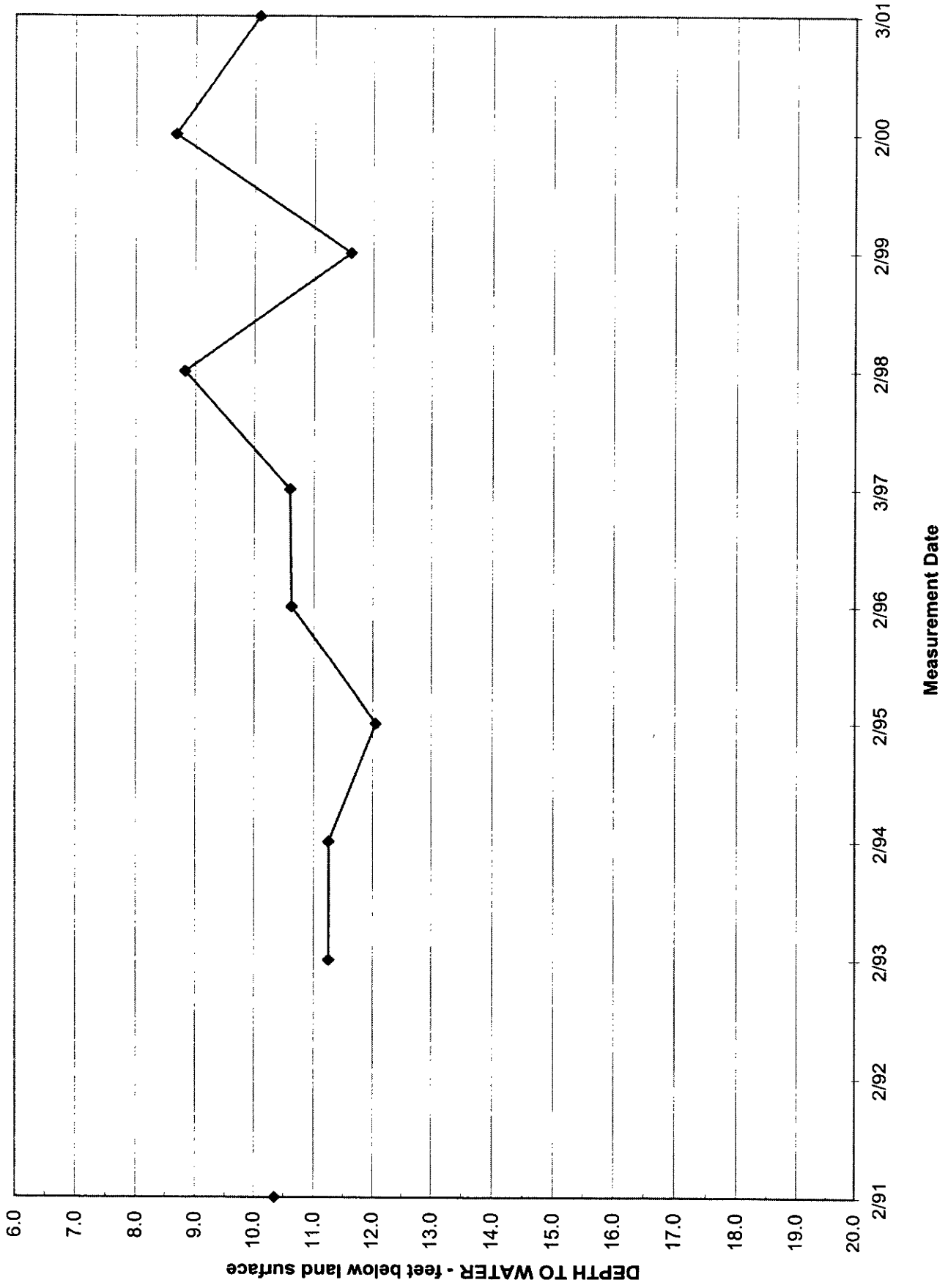


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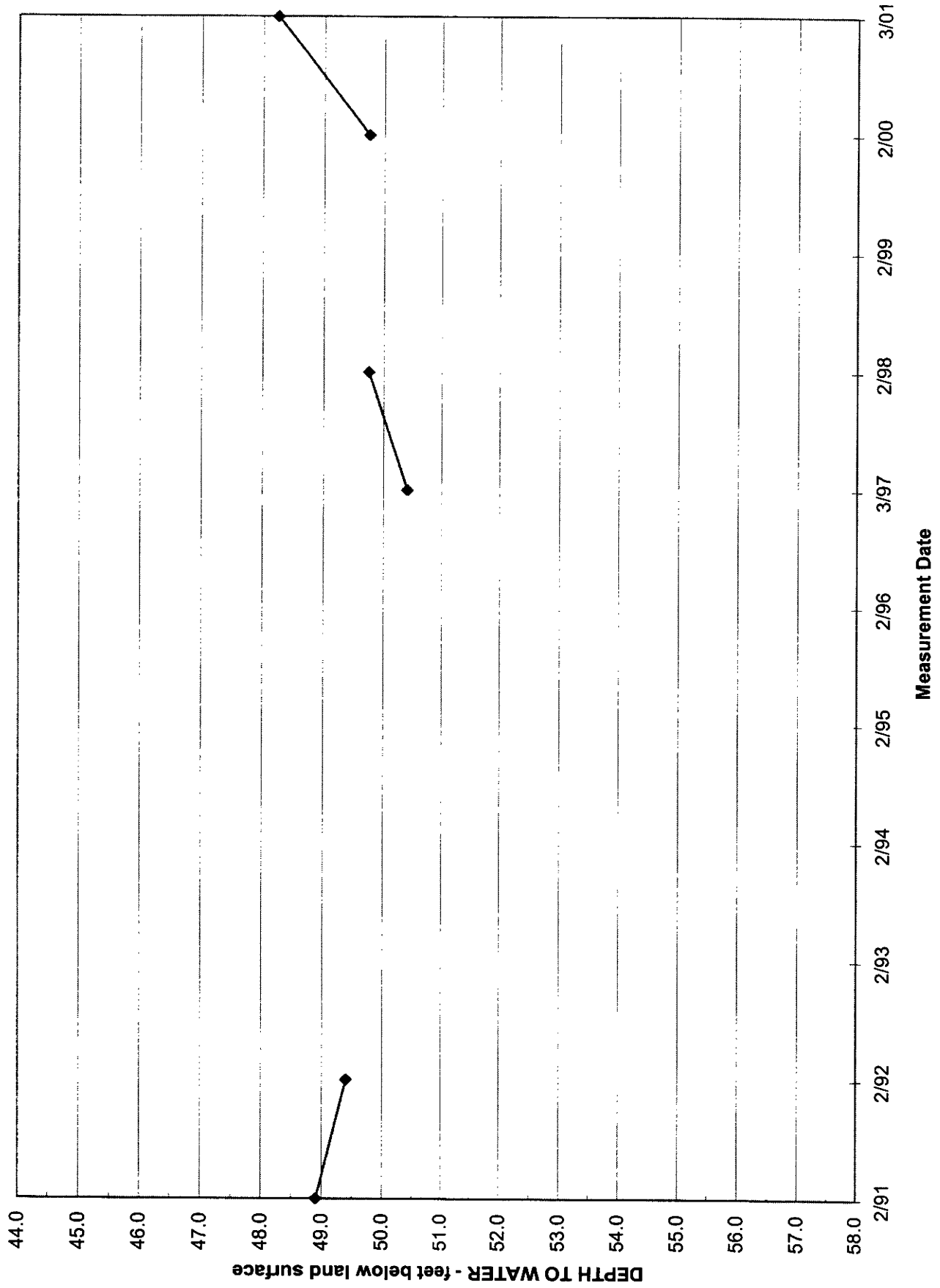


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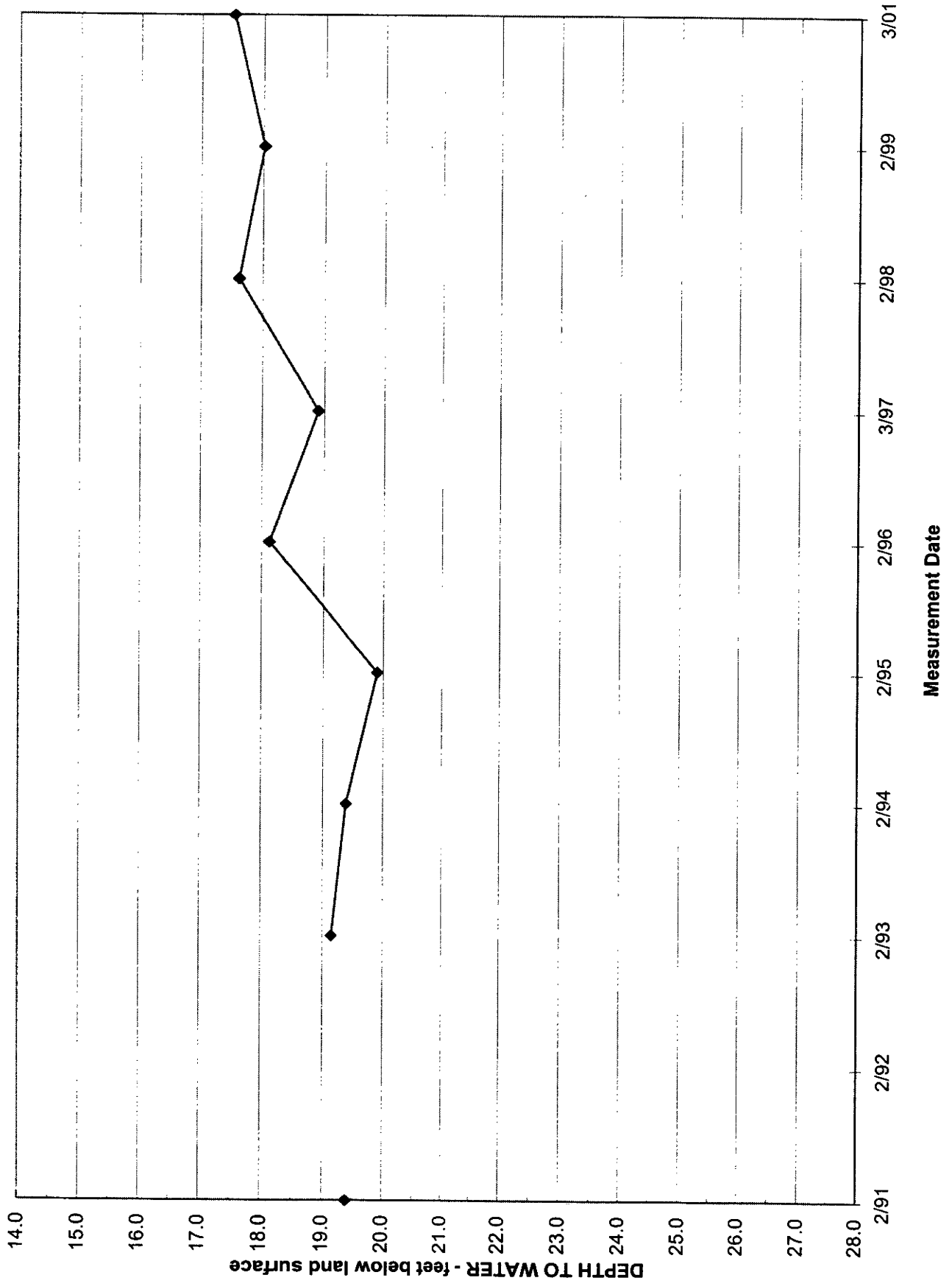
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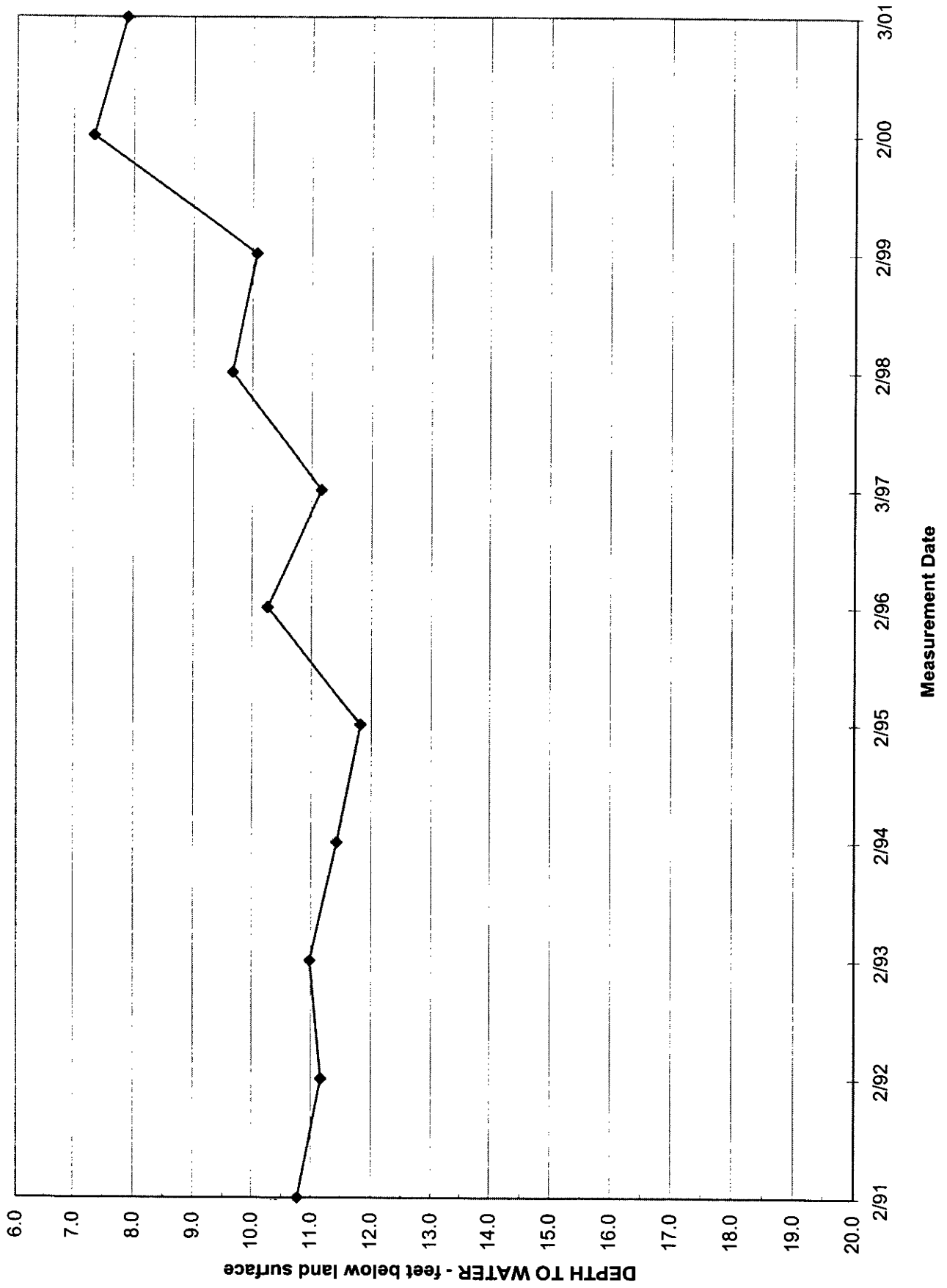
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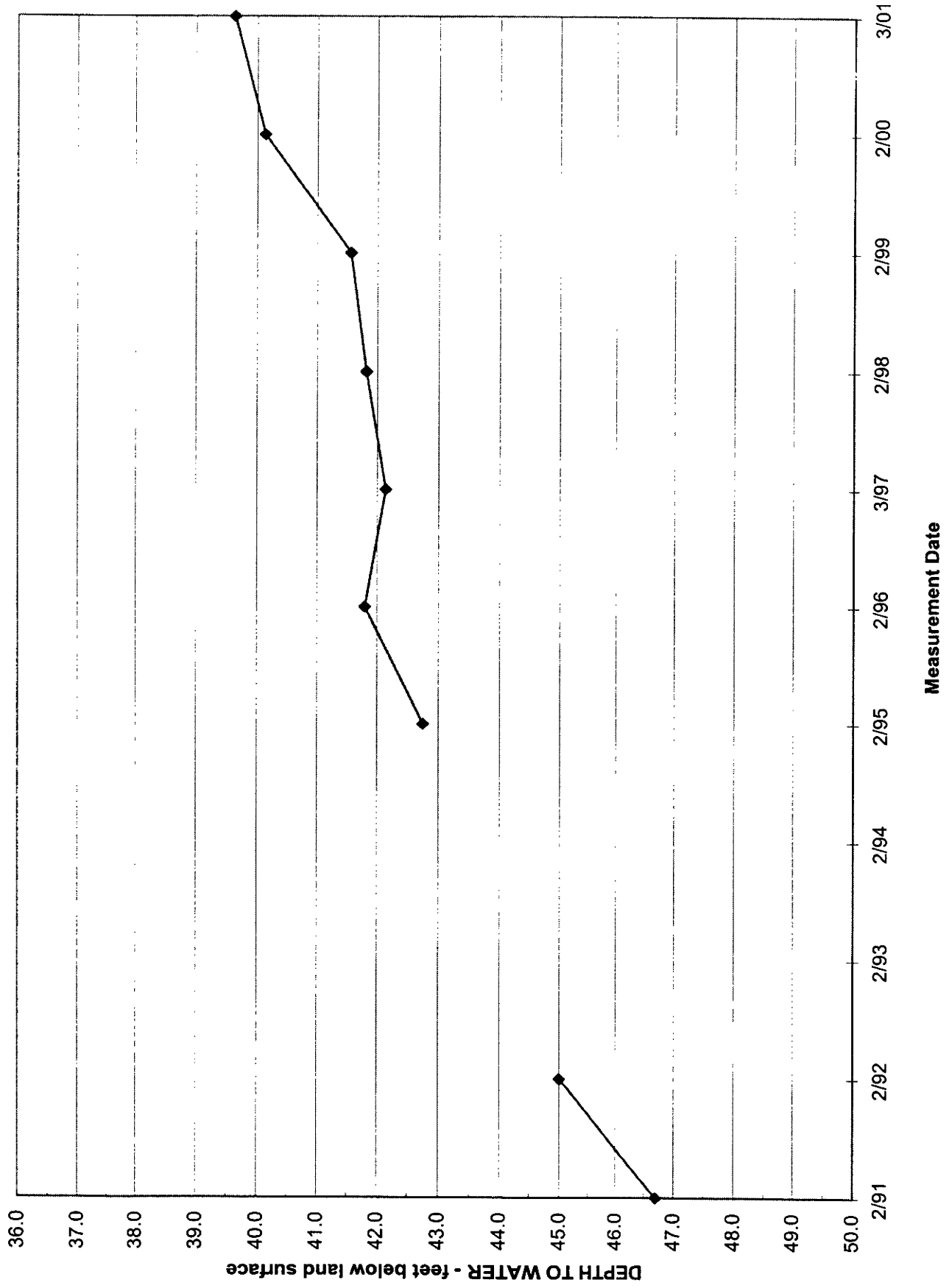
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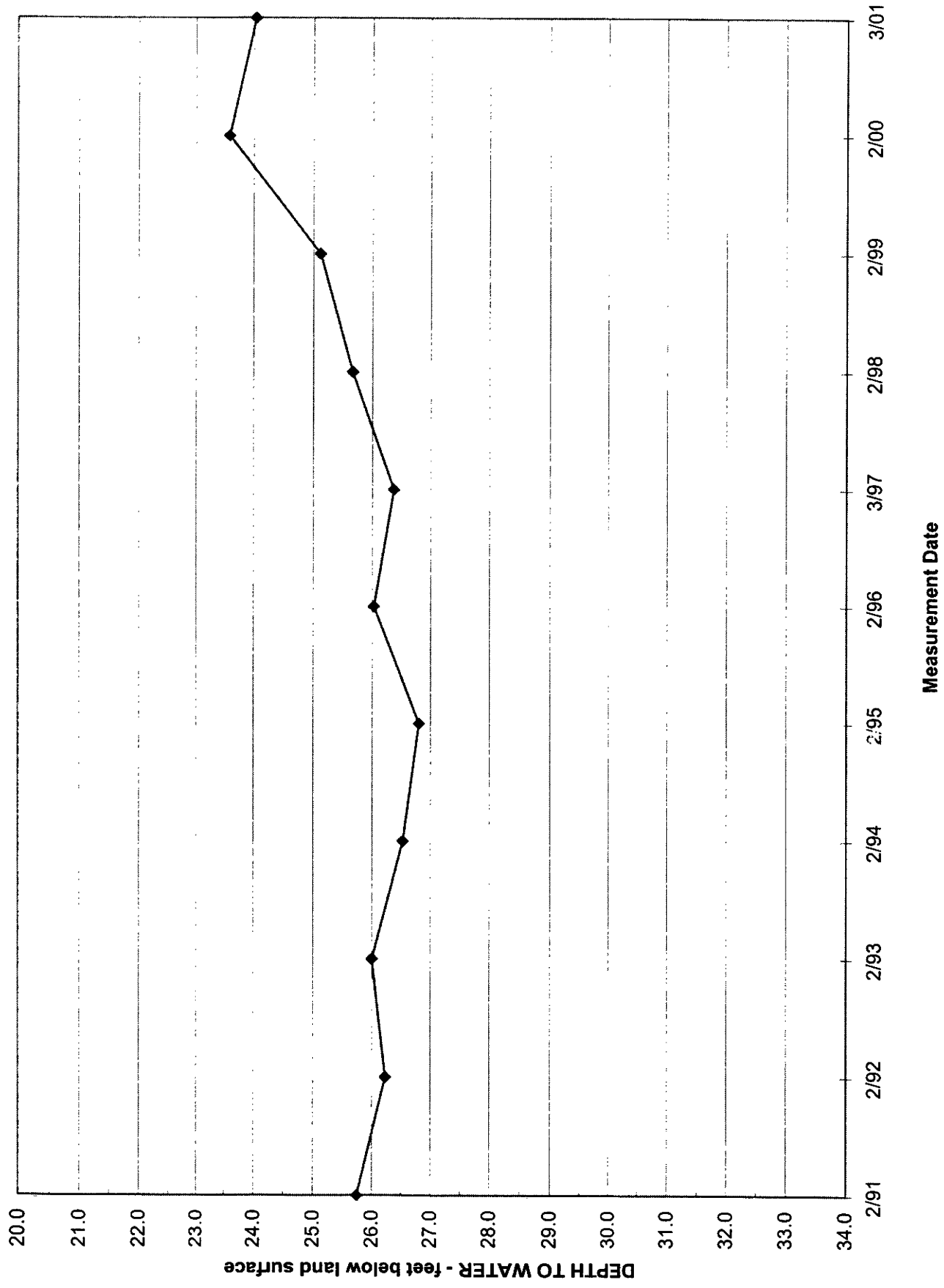
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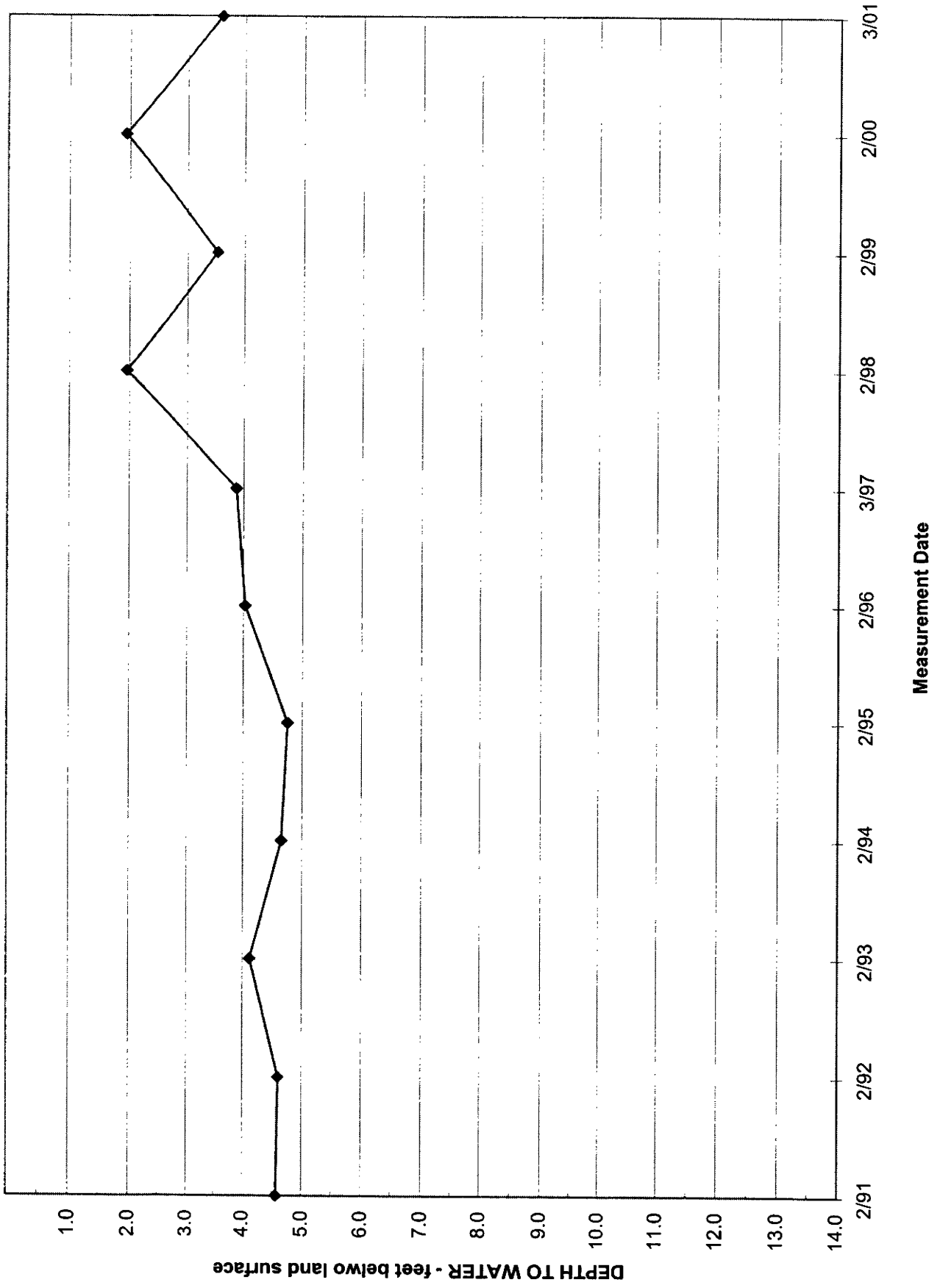
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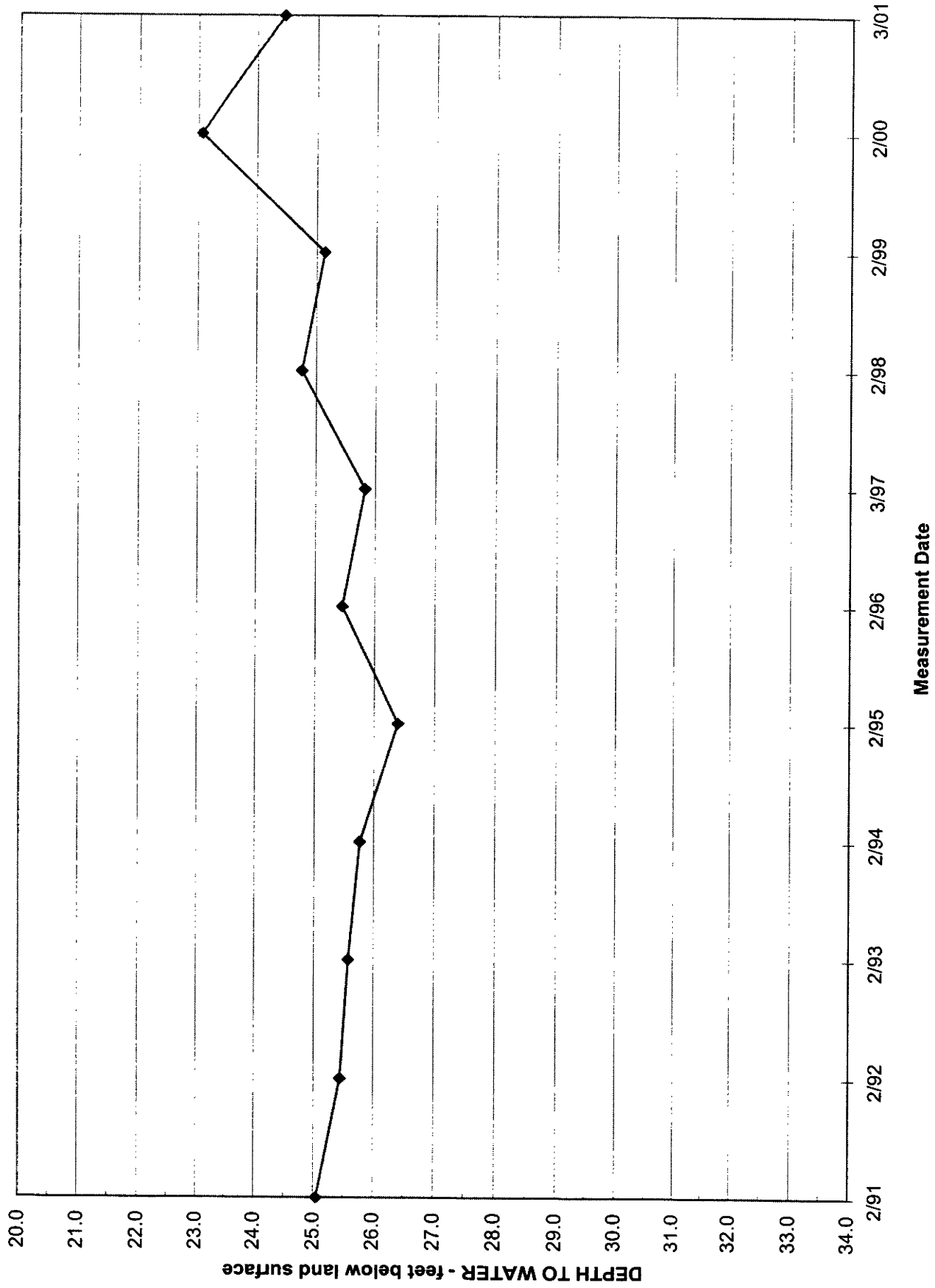
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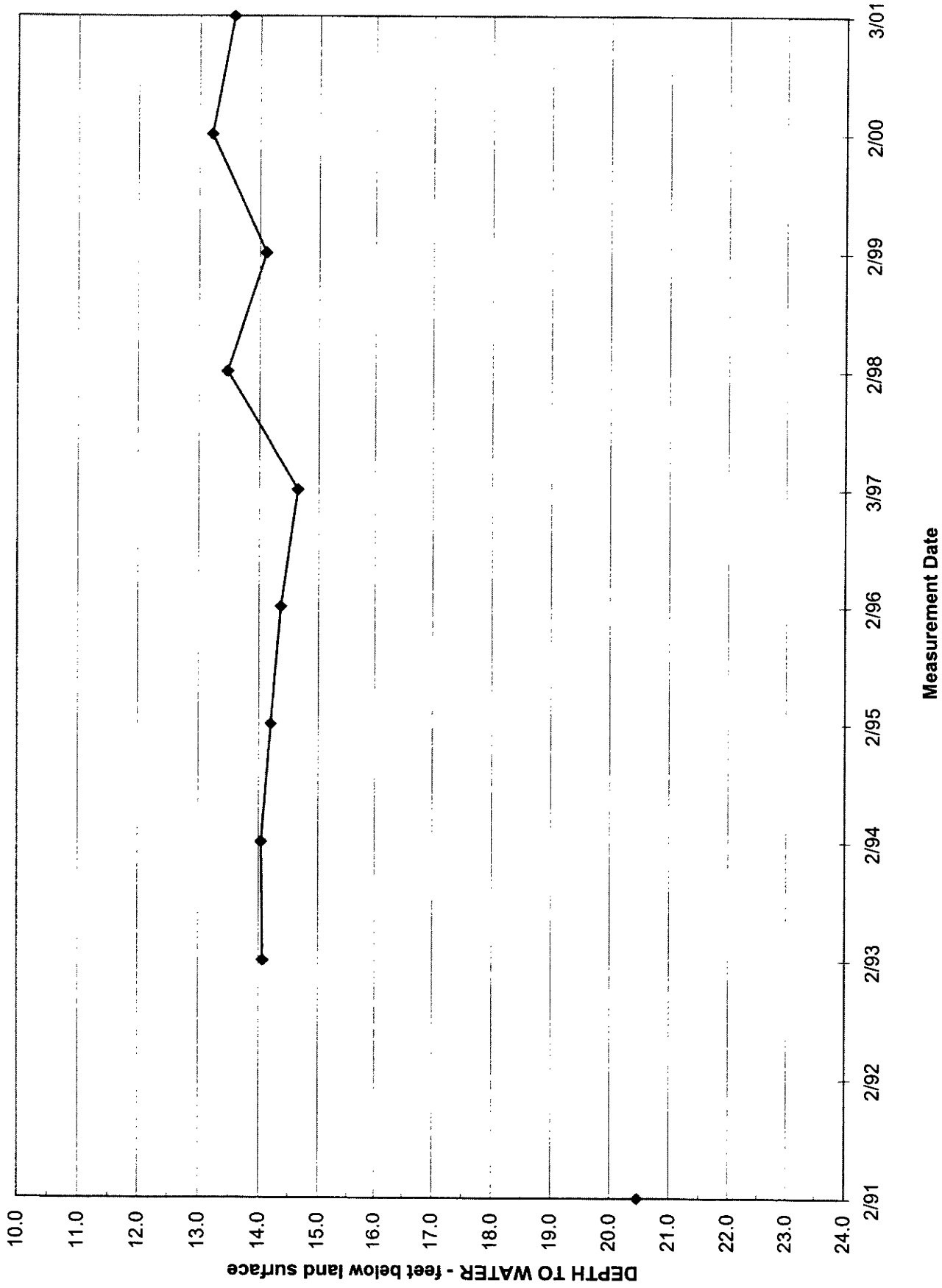
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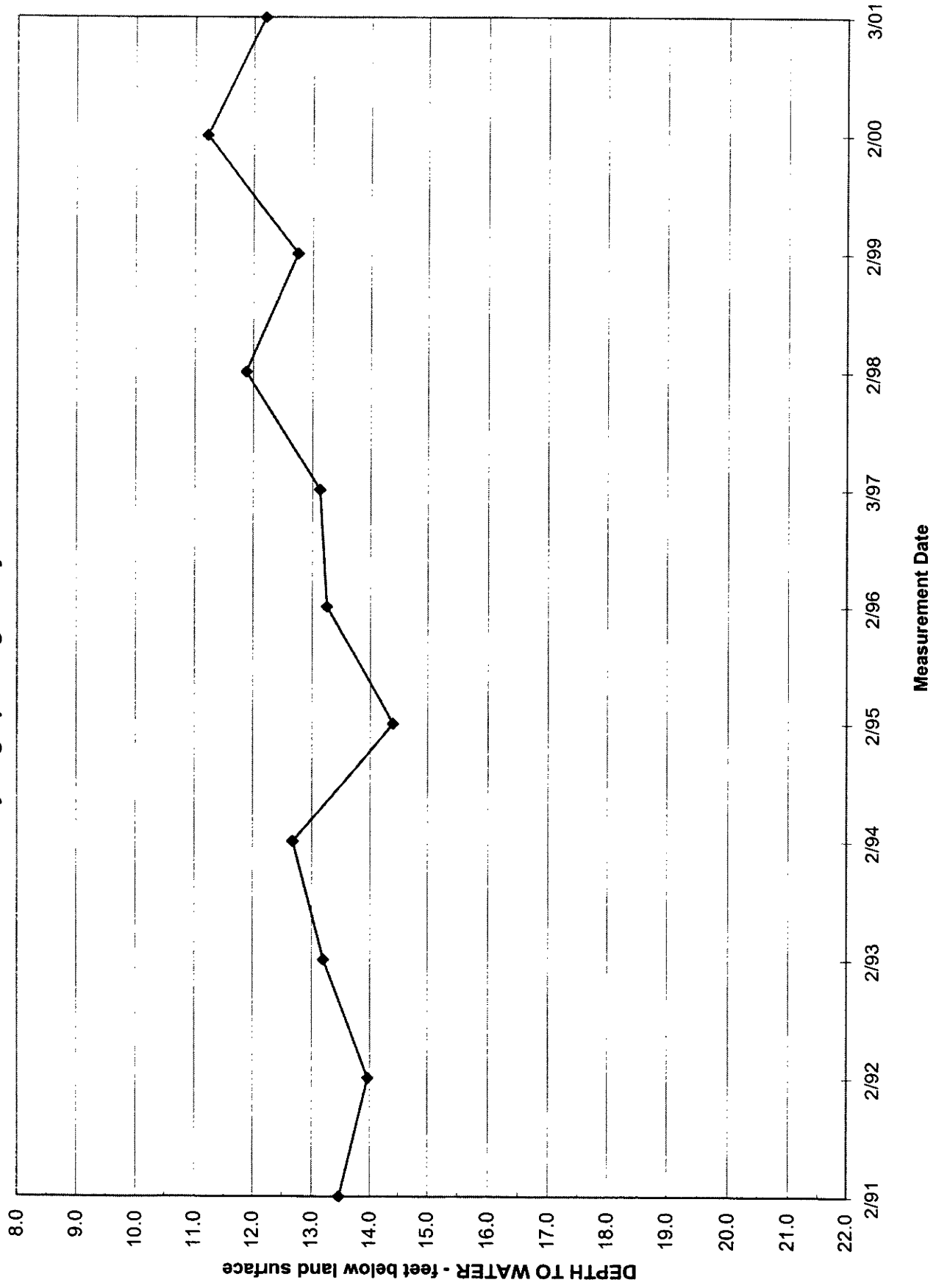
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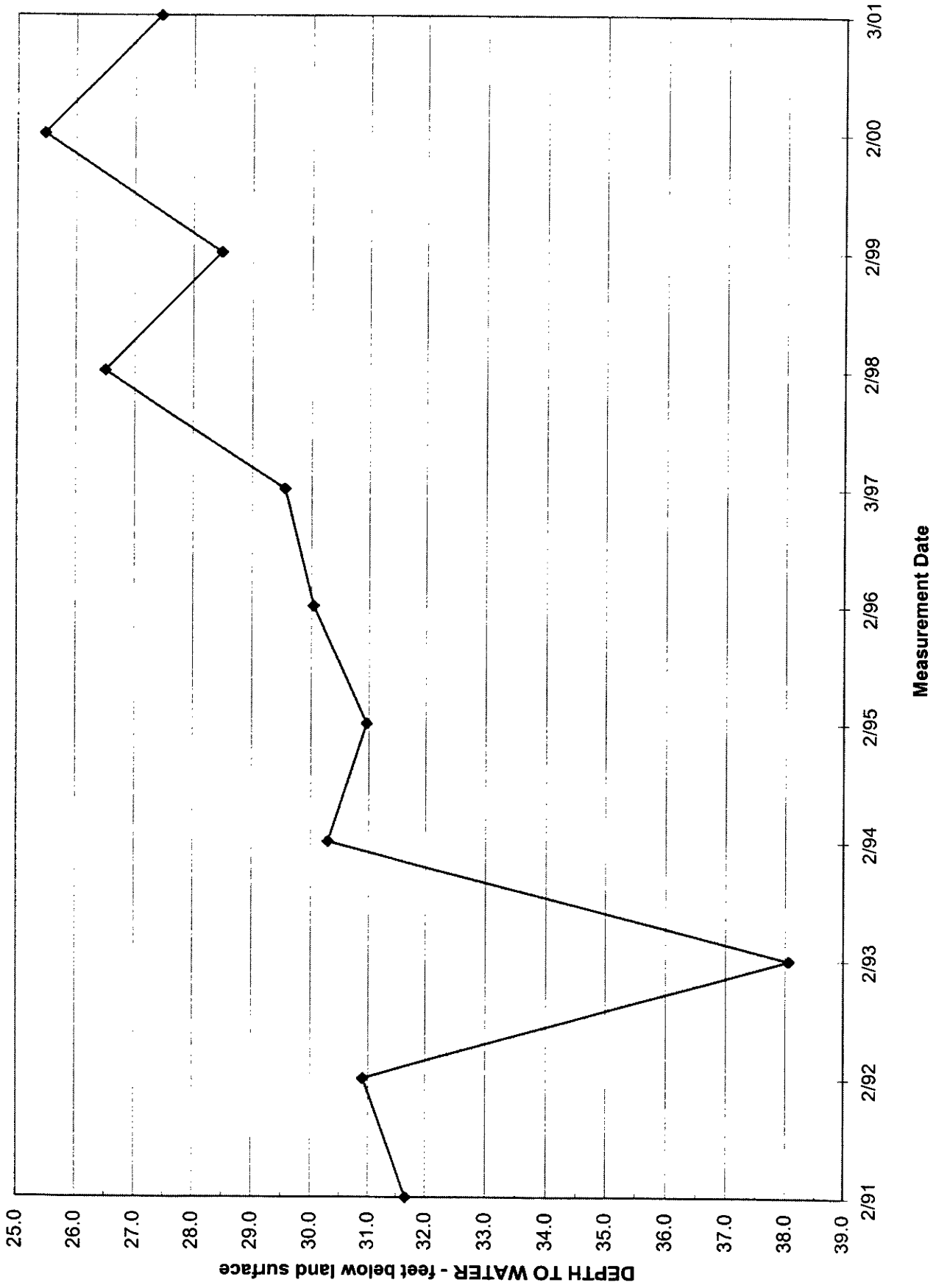
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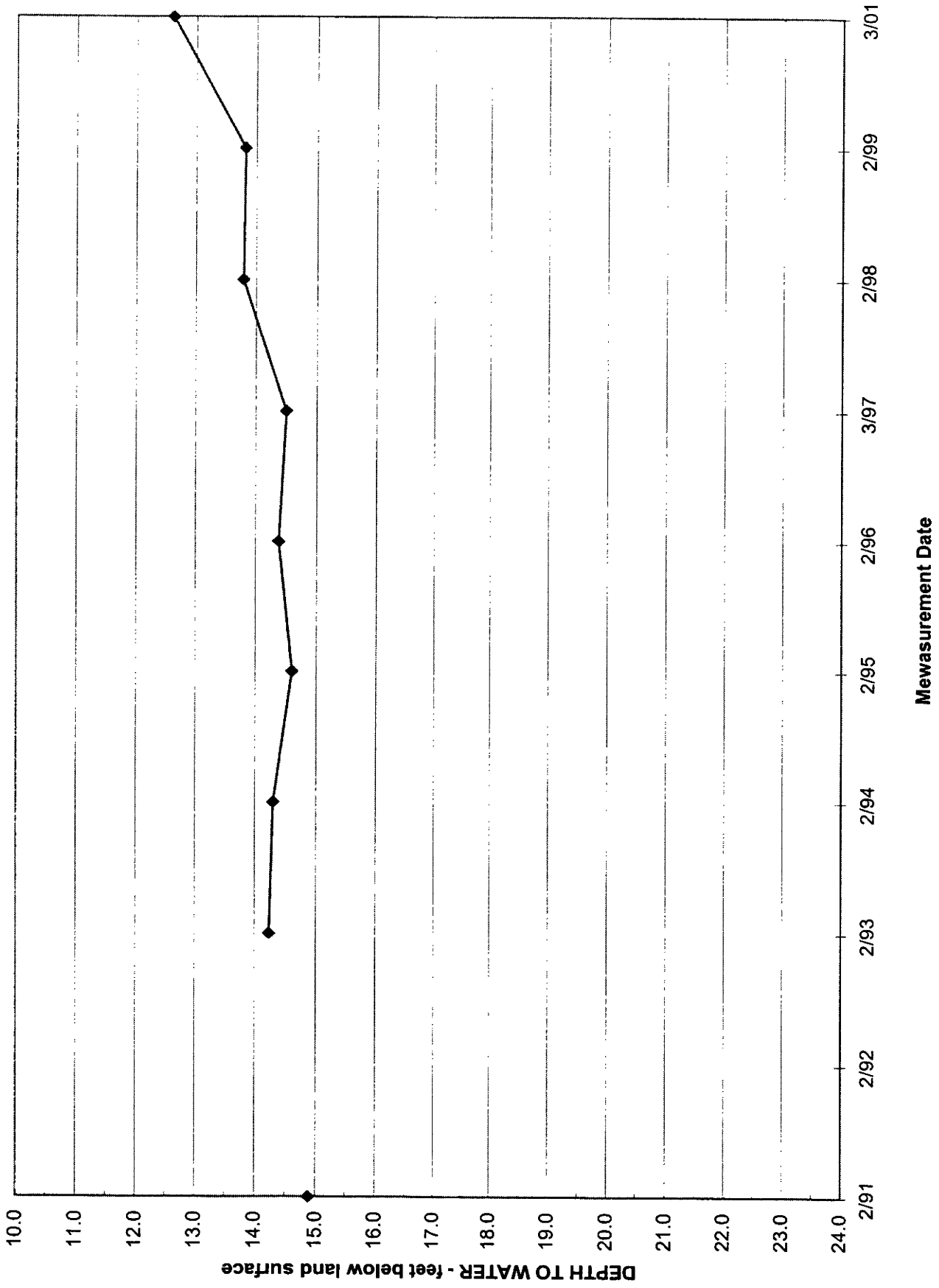
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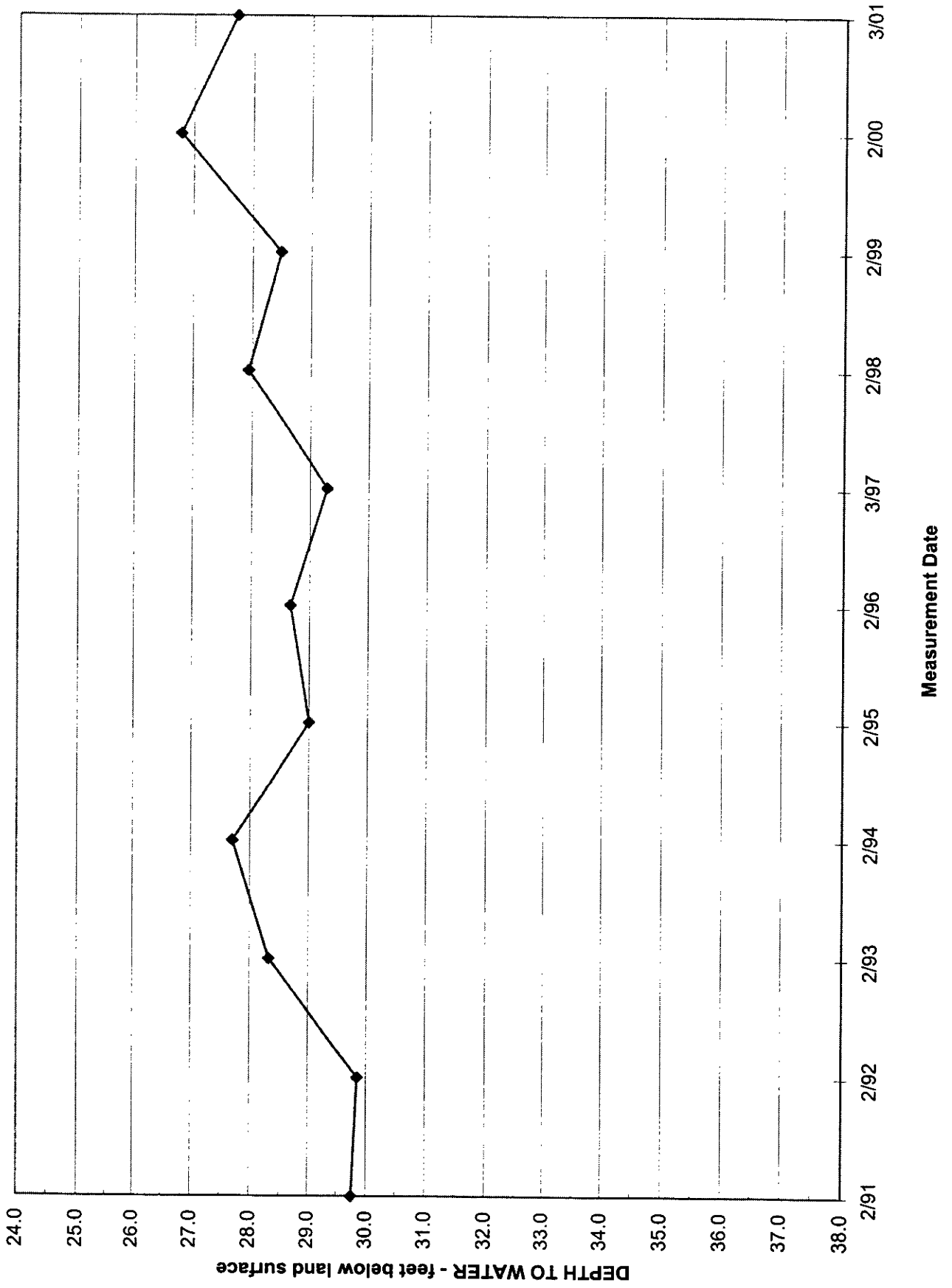
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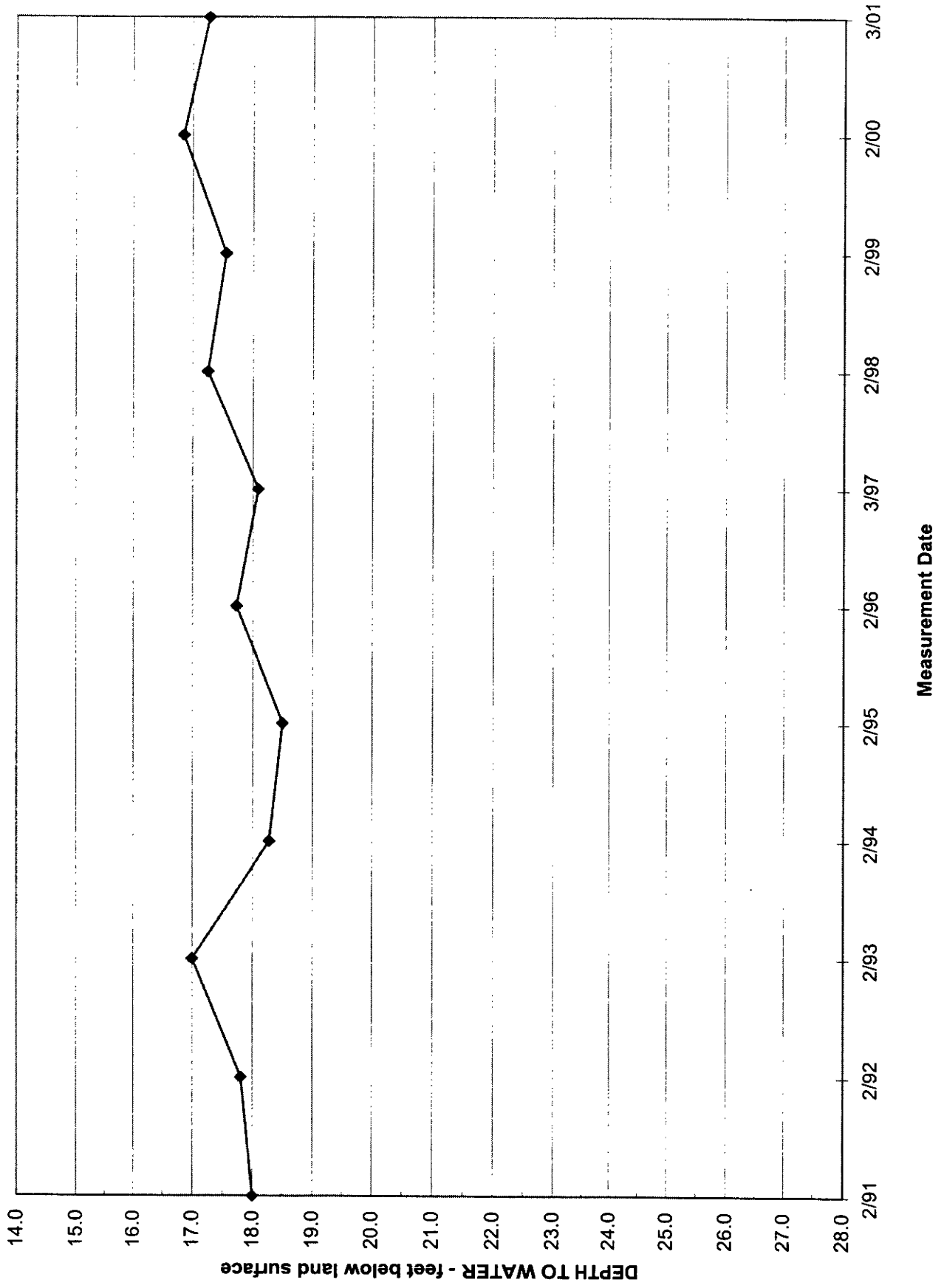
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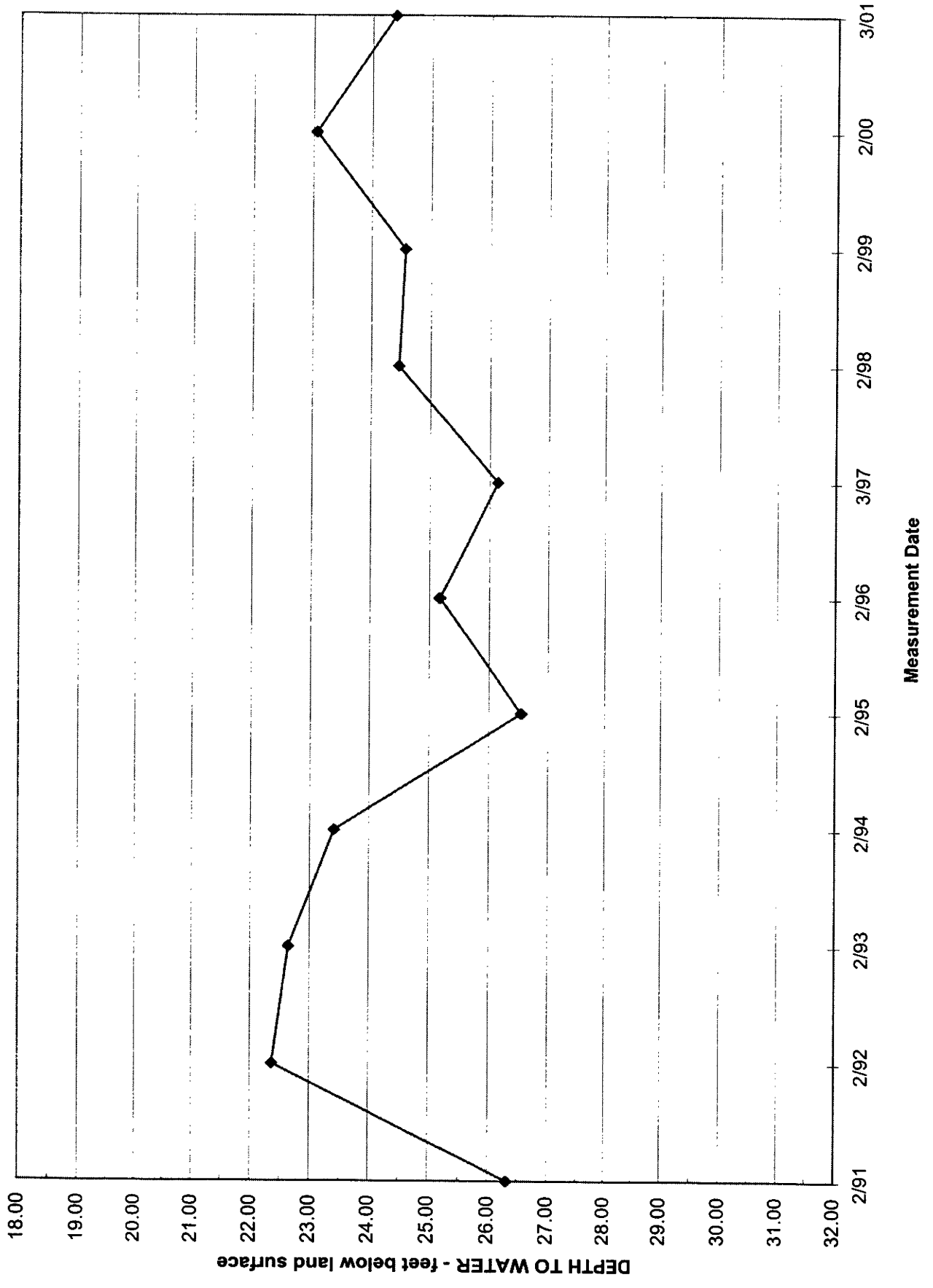
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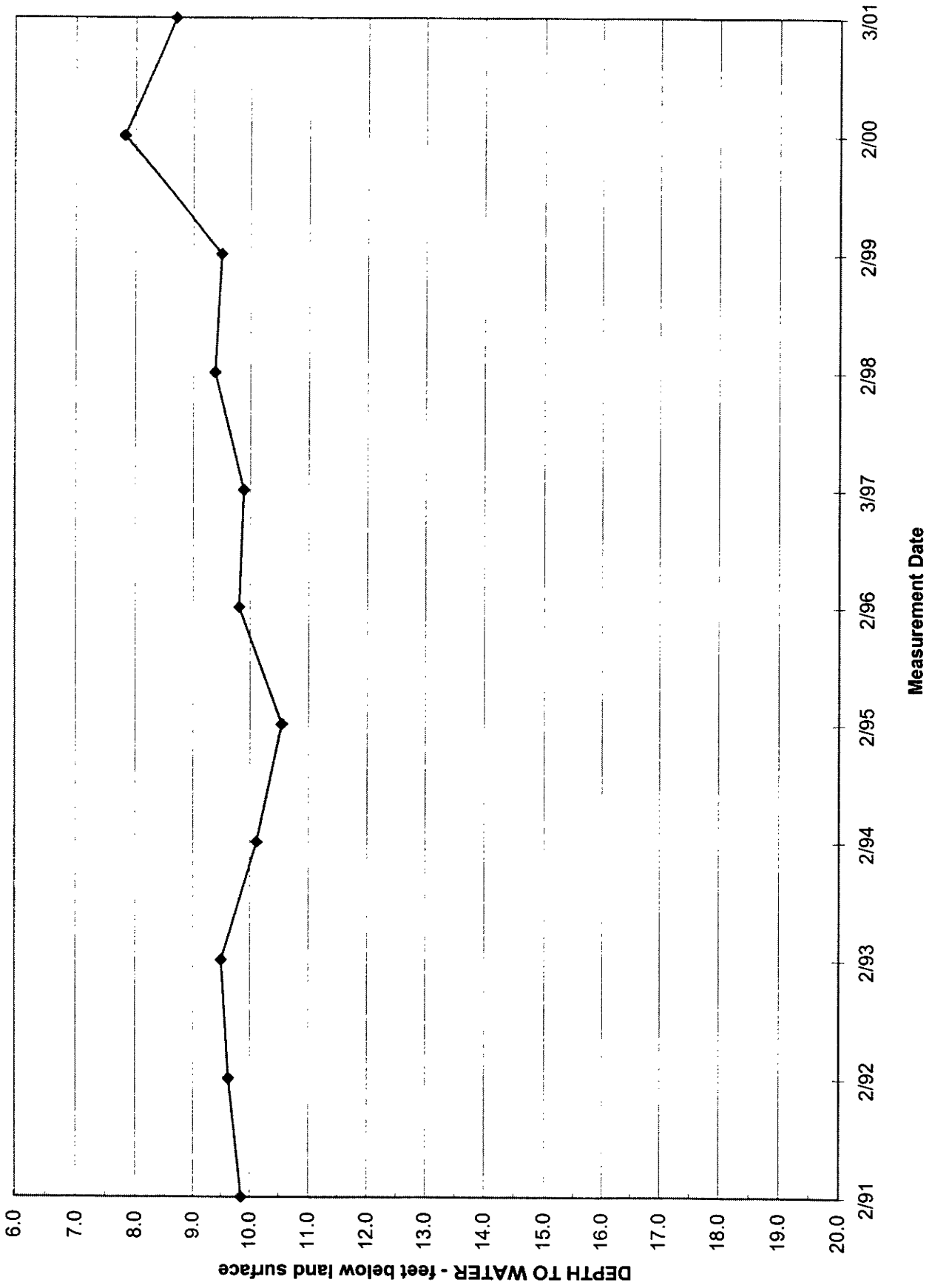
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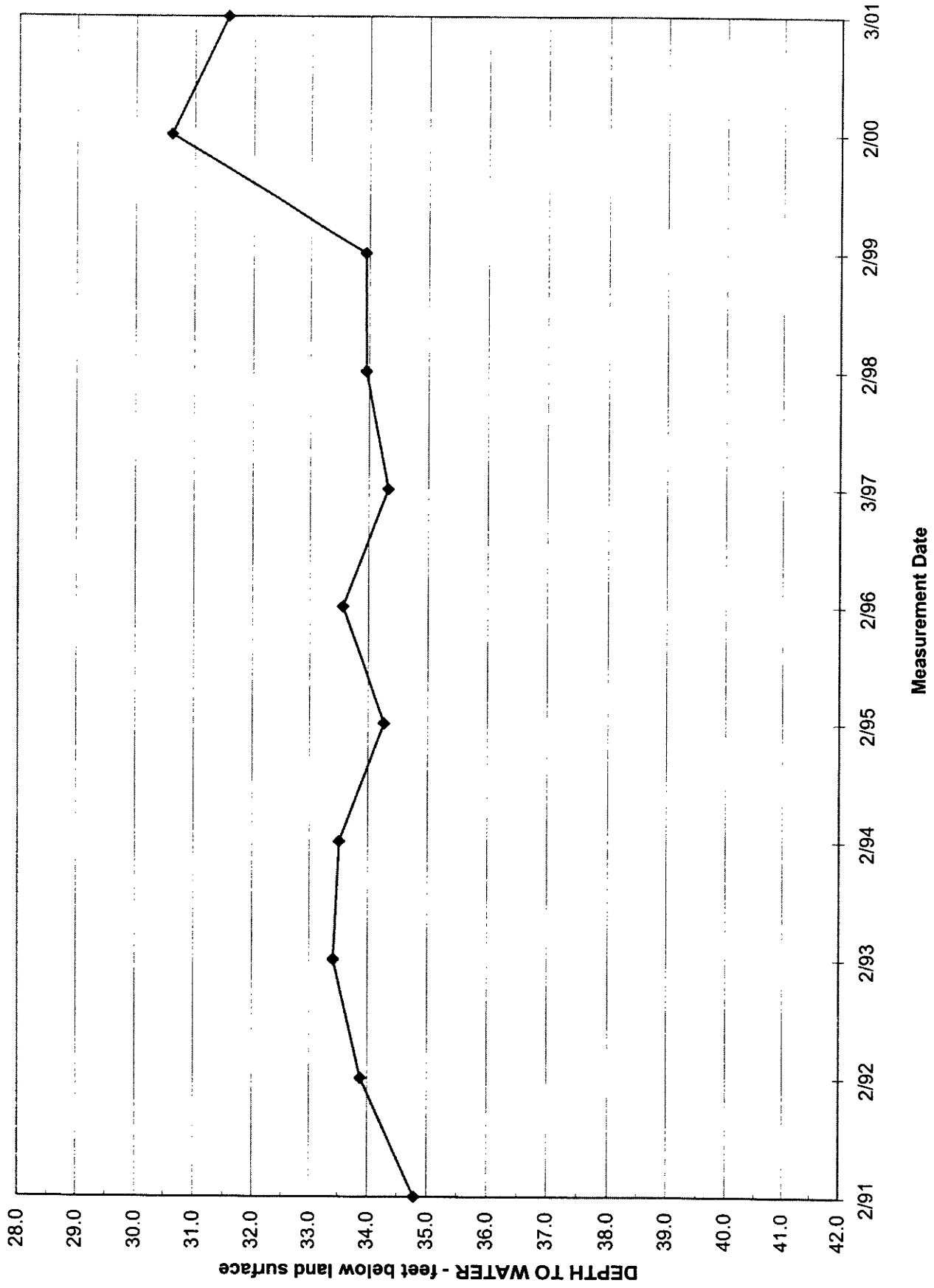
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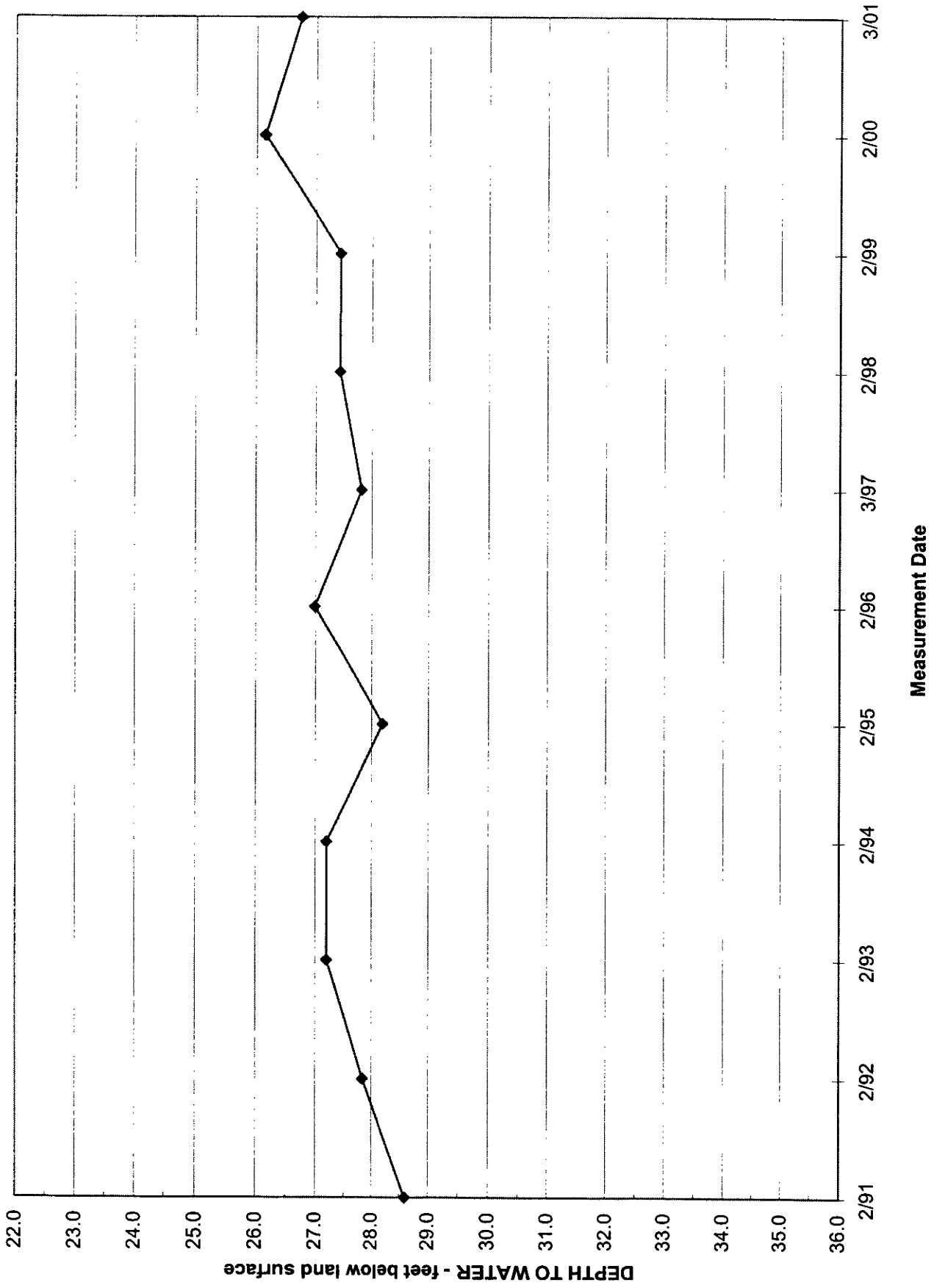
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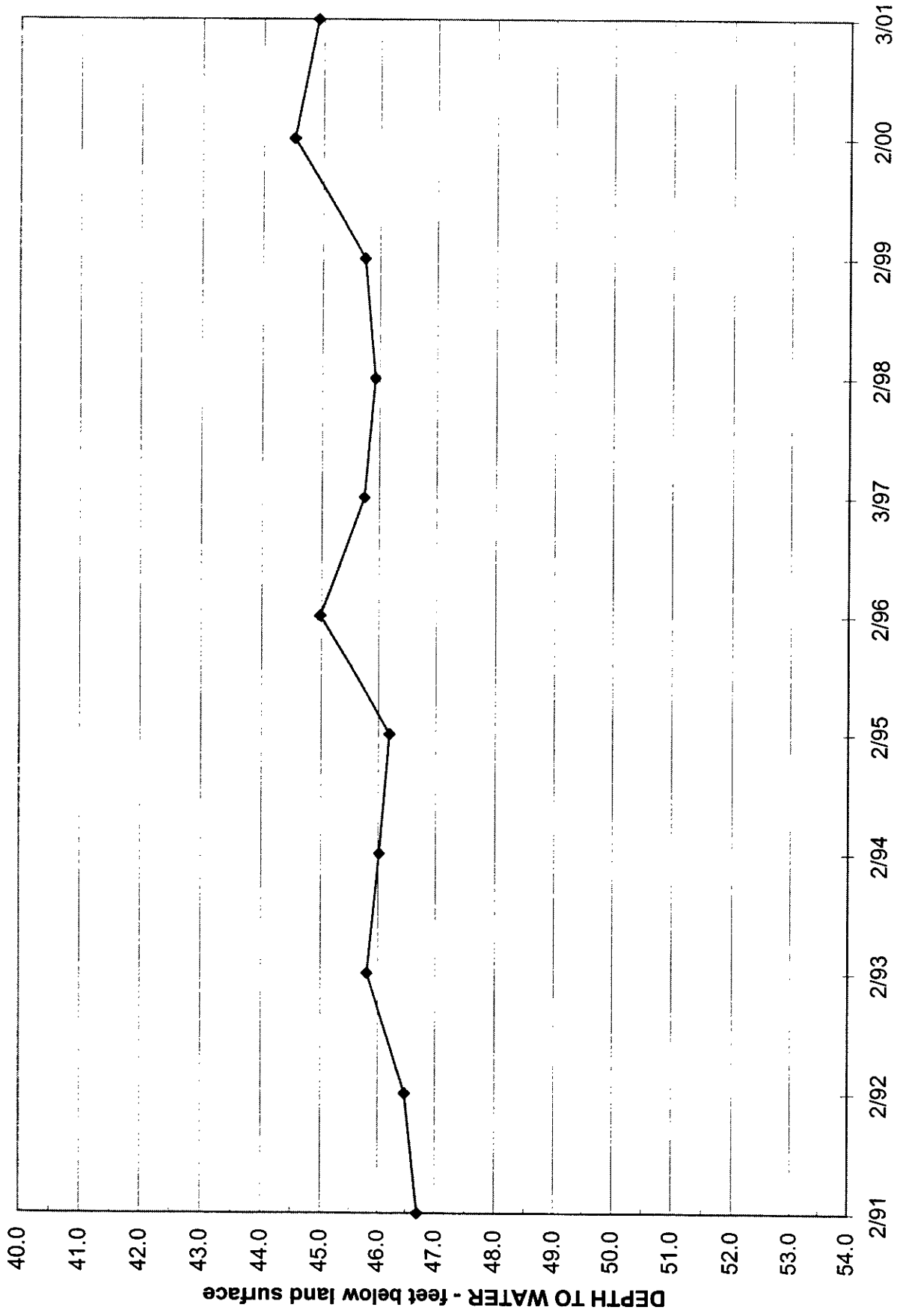
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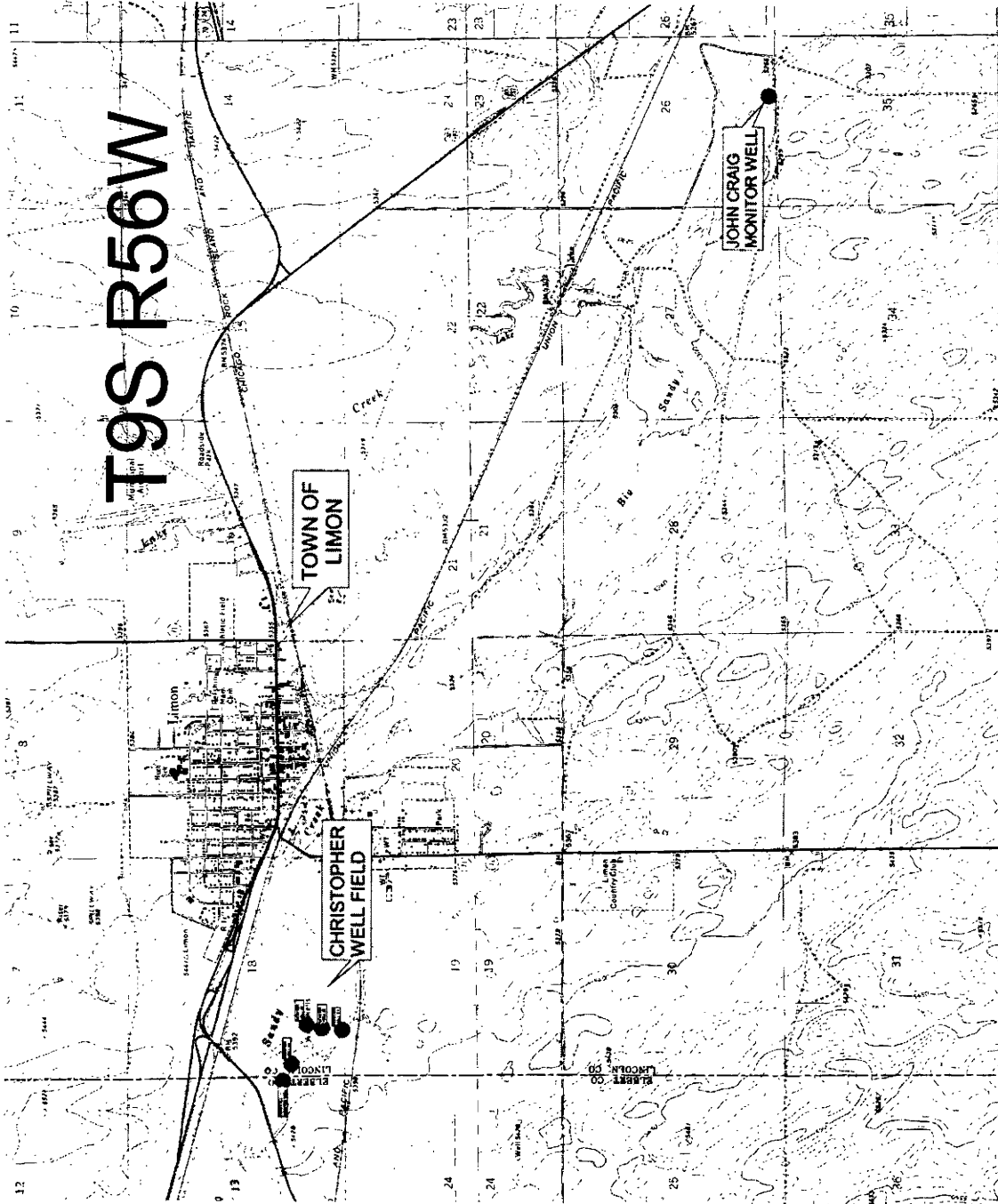
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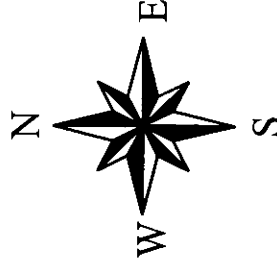
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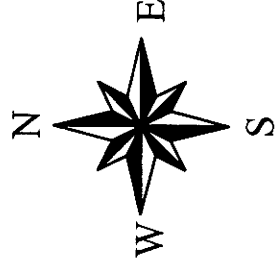
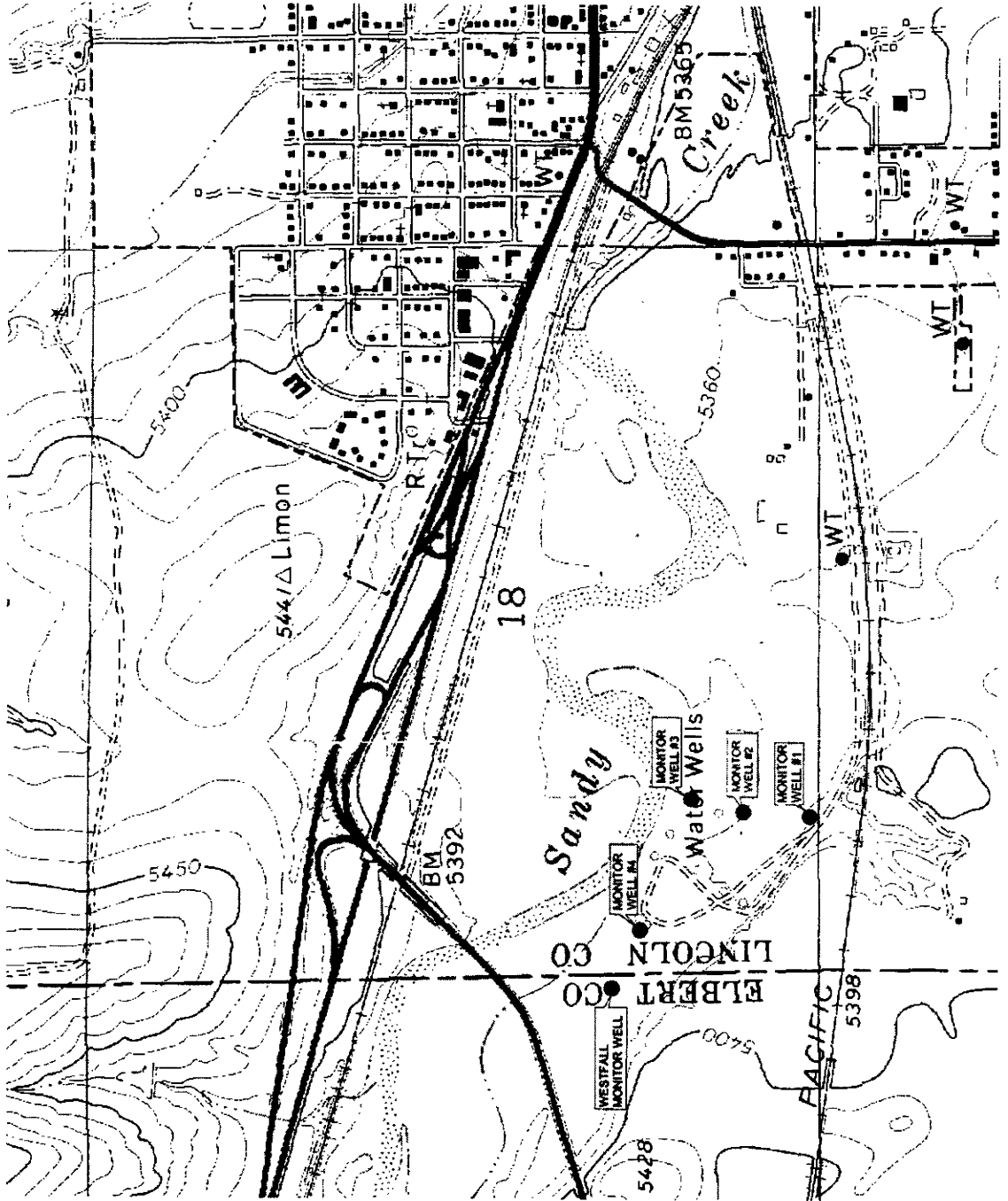


TOWN OF LIMON MONITOR WELLS



TOWN OF LIMON

CHRISTOPHER WELL FIELD MONITORING WELLS



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