

WATER WELL CONTRACTOR
 original and first copy
 this report are to be
 filed with the
 STATE ENGINEER, SALEM 10, OREGON
 within 30 days from the date
 of well completion.

WATER WELL REPORT
 STATE OF OREGON
 (Please type or print)

08530
 CLAC

State Well No. 3/100-25 K₂
 State Permit No. _____

G-3883

~~North Willamette Experiment~~

(1) OWNER: Station,
 Name Oregon State University
 Address Rt. 2 Box 254
 Annona, Oregon

(2) LOCATION OF WELL:
 County Clakamas Driller's well number
 NW 1/4 SE 1/4 Section 25 T. 3S R. 1W W.M.
 Bearing and distance from section or subdivision corner

(3) TYPE OF WORK (check):
 Well Deepening Reconditioning Abandon
 Abandonment, describe material and procedure in Item 12.

(4) PROPOSED USE (check):
 Domestic Industrial Municipal Irrigation Test Well Other
 (5) TYPE OF WELL:
 Rotary Driven
 Cable Jetted
 Dug Bored

(6) CASING INSTALLED:
 Threaded Welded
 12" Diam. from 0 ft. to 105'8" ft. Gage .330
 " Diam. from " ft. to " ft. Gage
 " Diam. from " ft. to " ft. Gage

(7) PERFORATIONS:
 Perforated? Yes No
 Type of perforator used
 Size of perforations in. by in.
 perforations from " ft. to " ft.
 perforations from " ft. to " ft.
 perforations from " ft. to " ft.
 perforations from " ft. to " ft.
 perforations from " ft. to " ft.

(8) SCREENS:
 Well screen installed Yes No
 Manufacturer's Name Johnson
 telescoping, red brass Model No.
 Diam. 12 Slot size 10 Set from 105 ft. to 108 ft.
 Diam. 12 Slot size 13 Set from 106 ft. to 114 ft.

(9) CONSTRUCTION:
 Well seal—Material used in seal bentonite & clay
 Depth of seal 30 ft. Was a packer used? no
 Diameter of well bore to bottom of seal in.
 Were any loose strata cemented off? Yes No Depth
 Was a drive shoe used? Yes No
 Was well gravel packed? Yes No Size of gravel:
 Gravel placed from " ft. to " ft.
 Did any strata contain unusable water? Yes No
 Type of water? Depth of strata
 Method of sealing strata off

(10) WATER LEVELS:
 Static level 41 ft. below land surface Date 11-29-65
 Artesian pressure lbs. per square inch Date

(11) WELL TESTS: Drawdown is amount water level is lowered below static level
 Was a pump test made? Yes No If yes, by whom? driller
 Yield: 242 gal./min. with 62 ft. drawdown after 9 hrs.

Bailer test gal./min. with ft. drawdown after hrs.
 Artesian flow g.p.m. Date
 Temperature of water Was a chemical analysis made? Yes No

(12) WELL LOG: Diameter of well below casing
 Depth drilled 226 ft. Depth of completed well 129 ft.
 Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

| MATERIAL | FROM | TO |
|--|-------|-------|
| brown clay soil | 0 | 2 |
| hard yellow clay | 2 | 12 |
| hard brown sand | 12 | 38 |
| silt, sand & small gravel | 38 | 45 |
| brown silty sand | 45 | 59 |
| brown rocky clay | 59 | 71 |
| brown dirty sand | 71 | 83 |
| sand, gravel & water | 83 | 87 |
| very fine blue sandy clay | 87 | 99 |
| brown silty sand | 99 | 102 |
| fine black sand, 2in. layer of silty clay at 104-6 | 102 | 111 |
| black sand & gravel | 111 | 118 |
| fine black sand, 2in. layer of silt at 118 | 118 | 120 |
| tight sand & gravel | 120 | 129 |
| very fine silty sandy clay | 129 | 134-6 |
| very fine black sand | 134-6 | 135 |
| grey silty clay | 135 | 142 |
| very fine grey sand | 142 | 150 |
| green-black med coarse rotten sand, decomposed to clay | 150 | 168 |
| green silty clay | 158 | 164 |

Work started 11-1 19 65 Completed 12-9-65 19
 Date well drilling machine moved off of well 12-15-65 19

(13) PUMP:
 Manufacturer's Name
 Type: H.P.

Water Well Contractor's Certification:
 This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME George Zent & Sons
 (Person, firm or corporation) (Type or print)
 Address 4305 N.E.44th. St. Vancouver, Wash.
 Drilling Machine Operator's License No. 205
 Signed] George Zent (Water Well Contractor)
 Contractor's License No. 228 Date 12-20, 19.65

NOTICE TO WATER WELL CONTRACTOR
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 of well completion.

WATER WELL REPORT

STATE OF OREGON
 (Please type or print)

State Well No. 3/1w-25 K(2)

G-3883

State Permit No. (continued)

(1) OWNER: North Willamette Experiment Sta.
Oregon State University

Name _____
 Address Rt. 2 Box 254
Aurora, Oregon

(2) LOCATION OF WELL:

County Clatsop Driller's well number _____
NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 25 T. 3S R. 1W W.M.
 Bearing and distance from section or subdivision corner _____

(3) TYPE OF WORK (check):

Well Deepening Reconditioning Abandon
 Abandonment, describe material and procedure in Item 12. _____

(4) PROPOSED USE (check):

Domestic Industrial Municipal Irrigation Test Well Other

(5) TYPE OF WELL:

Rotary Cable Dug Driven Jetted Bored

(6) CASING INSTALLED:

Threaded Welded
 " Diam. from _____ ft. to _____ ft. Gage _____
 " Diam. from _____ ft. to _____ ft. Gage _____
 " Diam. from _____ ft. to _____ ft. Gage _____

(7) PERFORATIONS:

Perforated? Yes No
 Type of perforator used _____
 Size of perforations in. by in.
 _____ perforations from _____ ft. to _____ ft.
 _____ perforations from _____ ft. to _____ ft.
 _____ perforations from _____ ft. to _____ ft.
 _____ perforations from _____ ft. to _____ ft.

(8) SCREENS:

Well screen installed Yes No
 Manufacturer's Name Johnson
telescoping red brass Model No. _____
 Diam. 12 Slot size 25 Set from 114 ft. to 118 ft.
 Diam. 12 Slot size 10 Set from 118 ft. to 121 ft.
12 17 121 129

(9) CONSTRUCTION:

Well seal—Material used in seal _____
 Depth of seal _____ ft. Was a packer used? _____
 Diameter of well bore to bottom of seal _____ in.
 Were any loose strata cemented off? Yes No Depth _____
 Was a drive shoe used? Yes No
 Was well gravel packed? Yes No Size of gravel: _____
 Gravel placed from _____ ft. to _____ ft.
 Did any strata contain unusable water? Yes No
 Type of water? _____ Depth of strata _____
 Method of sealing strata off _____

(10) WATER LEVELS:

Static level _____ ft. below land surface Date _____
 Artesian pressure _____ lbs. per square inch Date _____

(11) WELL TESTS:

Drawdown is amount water level is lowered below static level

Was a pump test made? Yes No. If yes, by whom? _____
 Yield: gal./min. with _____ ft. drawdown after _____ hrs.
 " " " " "
 " " " " "
 Baller test gal./min. with _____ ft. drawdown after _____ hrs.
 Artesian flow g.p.m. Date _____
 Temperature of water _____ Was a chemical analysis made? Yes No

(12) WELL LOG:

Diameter of well below casing _____

Depth drilled _____ ft. Depth of completed well _____ ft.
 Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.

| MATERIAL | FROM | TO |
|-----------------------------|------|-----|
| green-black decomposed sand | 164 | 169 |
| grey-black clay | 169 | 181 |
| green-black sandy clay | 181 | 193 |
| very fine yellow-brown sand | 193 | 203 |
| grey almost pure silt | 203 | 204 |
| grey sandy clay | 204 | 216 |
| brown clay | 216 | 226 |

Work started _____ 19 _____ Completed _____ 19 _____
 Date well drilling machine moved off of well _____ 19 _____

(13) PUMP:

Manufacturer's Name _____
 Type: _____ H.P. _____

Water Well Contractor's Certification:

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

NAME George Zent & Sons (Type or print)

Address 4305 N.E. 44th. St. Vancouver, Wash.

Drilling Machine Operator's License No. 205

[Signed] George Zent (Water Well Contractor)

Contractor's License No. 228 Date 12-20-65, 19_____

Test pumping data. North Willamette Experiment Sta.

10-9-1965

Clackamas

App. # G-3883

| time | pumping rate | water level |
|------------|--------------|---------------------------|
| 7:05 AM | static | 47 ft. below ground level |
| 7:10 " | 270 gpm | 95 |
| 7:15 | 270 | 100 |
| 7:20 | 250 | 100 |
| 7:25 | 250 | 102 |
| 7:30 | 250 | 103 |
| 7:35 | 250 | 103 |
| 7:45 | 250 | 103 |
| 7.55 | 250 | 103 |
| 8.00 | 250 | 104 |
| 8.10 | 235 | 102 |
| 8.20 | 250 | 104-6 |
| 8.30 | 242 | 104 |
| 8.40 | 250 | 103-6 |
| 8.50 | 242 | 103-6 |
| 9.00 | 242 | 103 |
| 9.10 | 242 | 103 |
| 9.20 | 242 | 103 |
| 9.30 | 250 | 104 |
| 9.40 | 242 | 103 |
| 9.50 | 242 | 103 |
| 10.00 | 242 | 103 |
| 10.10 | 242 | 103 |
| 10.20 | 242 | 103 |
| 10.30 | 250 | 104 |
| 10.40 | 242 | 103 |
| 10.50 | 242 | 103 |
| 11.00 | 242 | 103 |
| 11.10 | 250 | 104 |
| 11.20 | 250 | 104 |
| 11.30 | 250 | 104 |
| 11.40 | 250 | 104 |
| 11.50 | 242 | 103 |
| 12.00 noon | 242 | 103 |
| 12.10 pm | 242 | 103 |
| 12.20 | 242 | 103 |
| 12.30 | 242 | 103 |
| 1.00 | 242 | 103 |
| 1.30 | 242 | 103 |
| 2.00 | 242 | 103 |
| 2.30 | 242 | 103 |
| 3.00 | 242 | 103 |
| 3.30 | 242 | 103 |
| 4.00 | 242 | 103 |
| 4.03 | 242 | 103 |
| 4.04 | 0 | 75 |
| 4.05 | 0 | 65 |
| 4.06 | 0 | 57 |
| 4.07 | 0 | 55 |
| 4.10 | 0 | 54 |
| 4.15 | 0 | 52 |
| 4.20 | 0 | 51 |
| 4.25 | 0 | 50 |
| 4.30 | 0 | 50 |
| 4.35 | 0 | 50 |
| 4.40 | 0 | 49½ |

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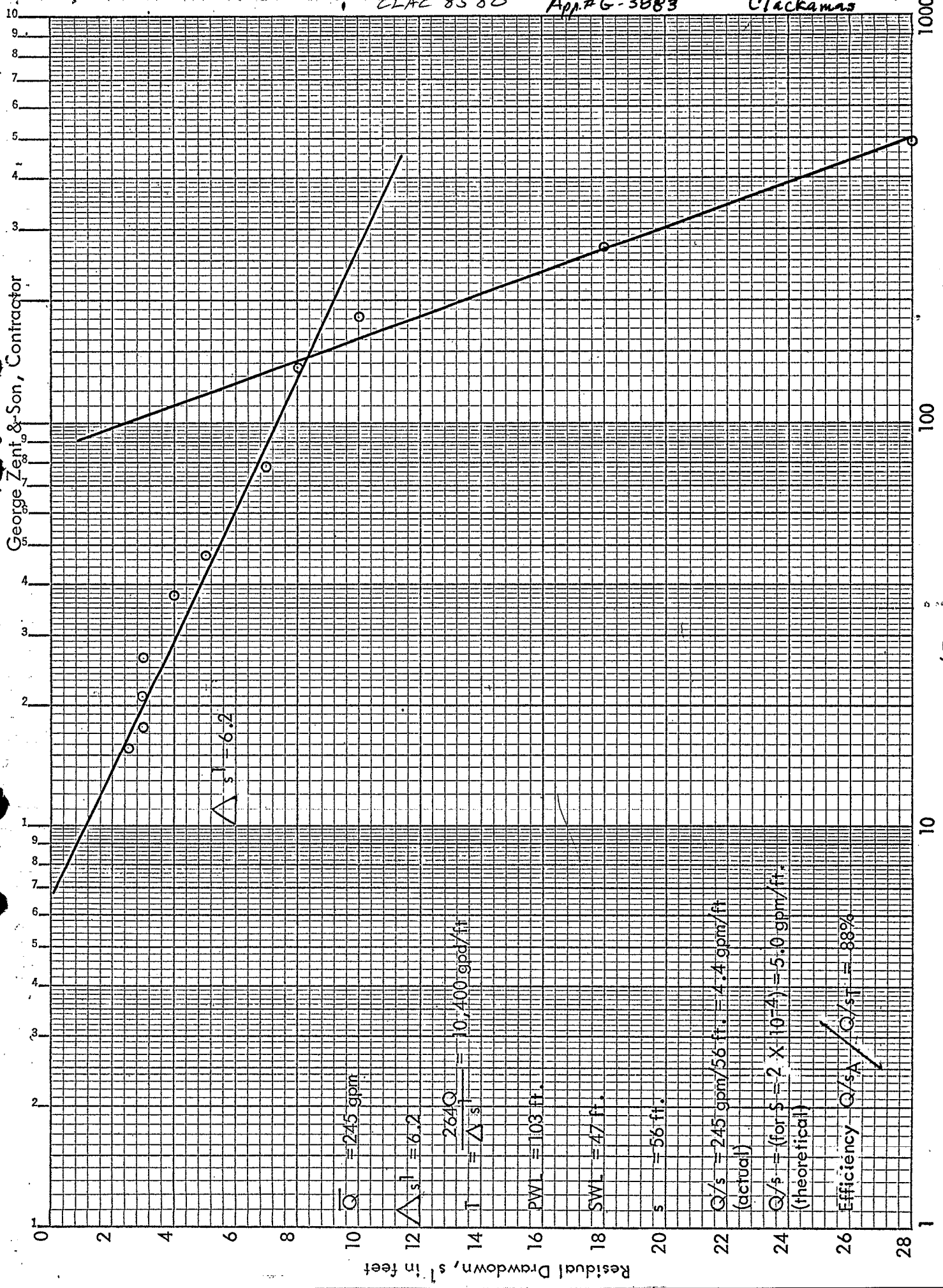
Oregon Agricultural College
Experiment Farm
Aurolo, Oregon
George Zent & Son, Contractor

3/1w-25K₂

CLAC 8580

APP#G-3883

3/1w-25K(2)
Clackamas



$\bar{Q} = 245 \text{ gpm}$

$\Delta s = 6.2$

$T = \frac{264Q}{\Delta s} = 10,400 \text{ gpd/ft}$

PWL = 103 ft.

SWL = 47 ft.

$s = 56 \text{ ft.}$

$Q/s = 245 \text{ gpm}/56 \text{ ft.} = 4.4 \text{ gpm/ft}$
(actual)

$Q/s = (\text{for } S = 2 \times 10^{-4}) = 5.0 \text{ gpm/ft.}$
(theoretical)

Efficiency $\frac{Q/s_A}{Q/s_T} = 88\%$

1

10

100

1000

Time after starting to pump / Time after stopping to pump