ON

STATE OF OREGON
WATER RESOURCES DEPARTMENT

REQUEST FOR WRITTEN APPROVAL TO USE CONSTRUCTION METHODS NOT INCLUDED IN THE RULES AND REGULATIONS PRESCRIBING GENERAL STANDARDS FOR THE CONSTRUCTION AND MAINTENANCE OF WELLS IN OREGON

Before approval can be considered the following questions must be answered.

Requests shall be submitted to the Watermaster Division, 3850 Portland Road, NE, Salem, OR 97310.

Well #8 Recondition
Start Card 66089

Date: 6/14/95 (confirming prior telcons)

Well Constructor: Schneider Drilling Co
Steve Schneider WWC 699

(1) Location of Well: SW 1/4 NW 1/4 of Section 32,
Township 38S, Range 9E, Klamath County.
Address at well site or nearest known address: Conger Avenue
Klamath Falls, OR

(2) Name and address of Landowner: City of Klamath Falls
P.O. Box 237
Klamath Falls, OR 97601

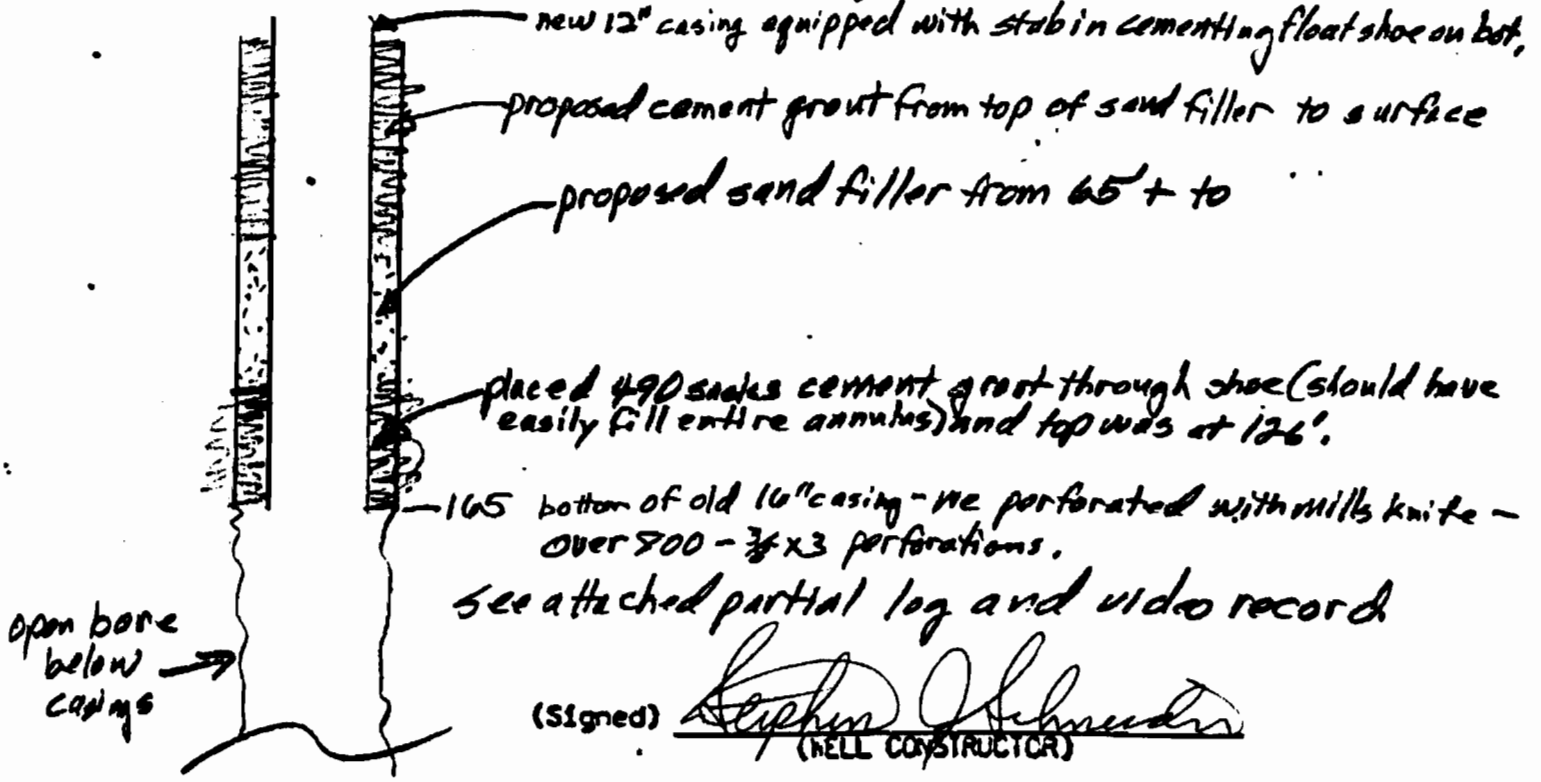
(3) The distance to the nearest well and septic drainfield: see attached map of wells - no known septic in the area

(4) The unusual conditions existing at the well site: We perforated old casing, installed new casing inside old, and experienced significant and major grout loss during sealing of the new casing.

(5) The proposed construction methods that the well constructor or landowner constructing the well believes will be adequate for his particular well:
Place sand filler up to 65' or deeper (5' below 1st rock shown on old log); from the top of the first grout placement; then grout to surface. This results in a part seal - much better than original while reducing grout loss that may plug shallow aquifers and nearby wells. Recommended also by Mark Brannan of Golder Assoc.

W-SM

(6) A diagram showing the pertinent features of the proposed well design and construction (attach additional sheet if necessary):



For Water Resources Department Use Only

Date: 6-16-95

Approved by:

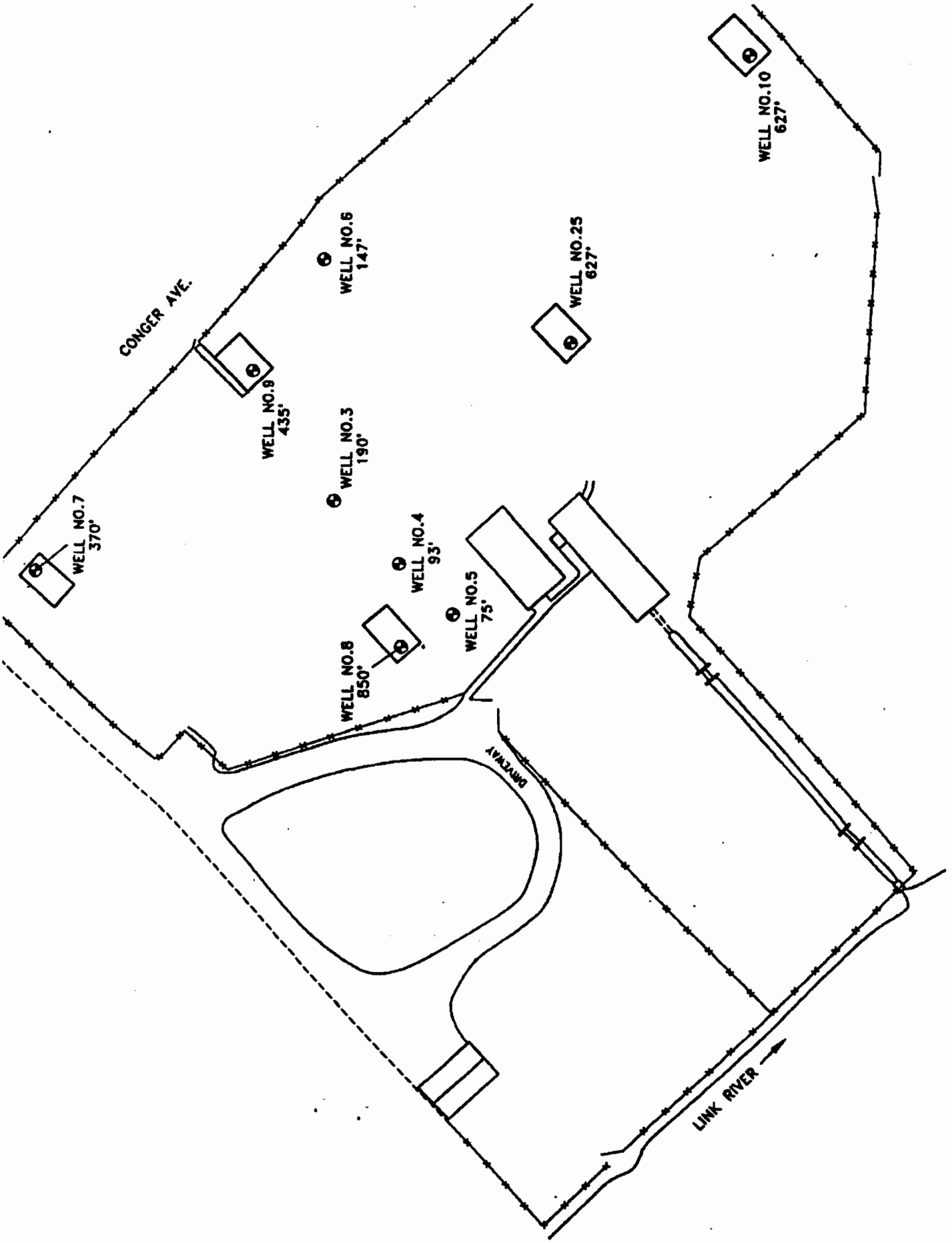
Denied by:

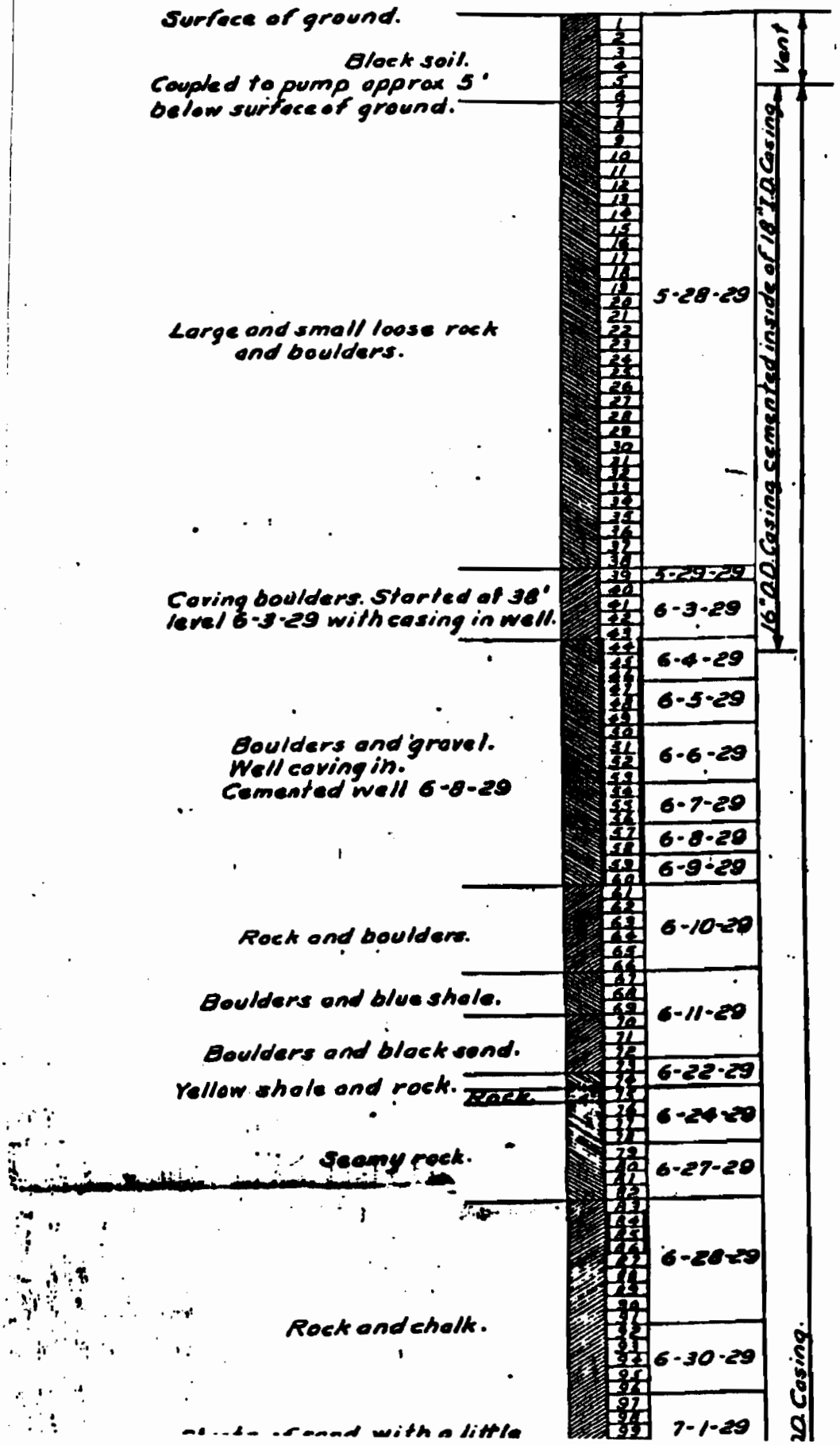
Remarks: Confirms approval via phone.

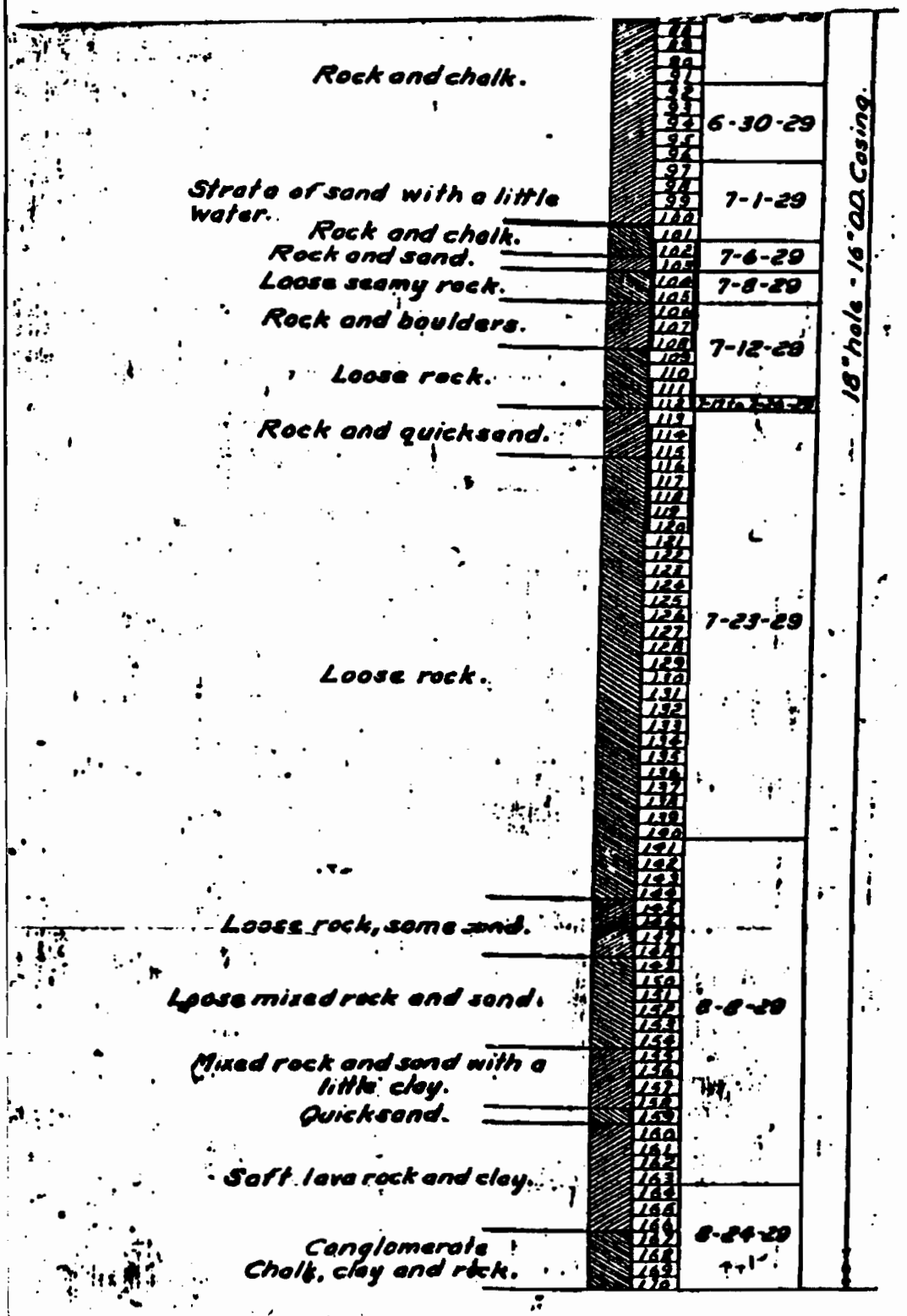
NOTE:

(1) If approval, all other phases of construction must be in compliance with State Well Construction Standards.

(2) If it should be determined at some future date that the well, due to its construction, is offering an avenue for pollution of the ground water body, it will be necessary for you to return to the site to correct any well deficiences.


CONGER AVE.
WELL NO.10
627'
WELL NO.6
147'
WELL NO.25
627'
WELL NO.9
435'
WELL NO.3
190'
WELL NO.7
370'
WELL NO.4
93'
WELL NO.5
75'
WELL NO.8
850'
DRIVEWAY
LINK RIVER
0
50
100


Surface of ground.
Black soil.
Coupled to pump approx 5' below surface of ground.
Large and small loose rock and boulders.
Caving boulders. Started at 38' level 6-3-29 with casing in well.
Boulders and gravel. Well caving in. Cemented well 6-8-29
Rock and boulders.
Boulders and blue shale.
Boulders and black sand.
Yellow shale and rock.
Rock.
Seamy rock.
Rock and chalk.
5-28-29
5-29-29
6-3-29
6-4-29
6-5-29
6-6-29
6-7-29
6-8-29
6-9-29
6-10-29
6-11-29
6-22-29
6-24-29
6-27-29
6-28-29
6-30-29
7-1-29
Vent
16" O.D. Casing cemented inside of 18" O.D. Casing
10 Casing.



Heavy vertical lines indicate sections of well that caved in badly during drilling operations and were cemented to keep from farther caving in.

welenco

VIDEO SURVEY REPORT

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Customer GOLDER ASSOCIATES, INC.	Job No. 22509 Run No. ONE
Address 4104 148th AVE. NE	Well No. 8 Date 12-22-1994
City REDMOND State WA. Zip 98052	Location CONGER WELL FIELD IN THE CITY OF
Request By MARK CUNNANE Cust. P.O. 943-1695.001	KLAMATH FALLS, OREGON
Copy To	
Reason for Survey GENERAL INSPECTION	Zero Datum TOP OF 16" CASING
	Survey By WILLIAM CHRISTY Truck No. T-04

DEPTH	REMARKS
ZERO	TOP OF 16" CASING, CENTRALIZERS SET AT 12.75", WELL FLOWING
1'	WATER FLOWING THRU EXIT PIPE
5'	25', 31', 50', 67', 85', 103', 122', 143' 16" CASING JOINTS
22'	25', 27' FLAKES OF RUSTED CASING?
158'	SPLIT IN CASING DOWN TO THE BOTTOM AT 165', INSTALL 10' SECTION OF
	8" PVC CASING OVER SPLIT TO KEEP CABLE OUT OF SPLIT
165'	END OF 16" CASING
158'	RESTART TAPE, CENTRALIZERS SET AT 6"
186'	KEYHOLE, 229' BREAKOUT, 245' BREAKOUT
251'	FRACTURED AND BROKEN ROCK, 278' FRACTURES, 297' BREAKOUT
307'	BREAKOUT, 335' BREAKOUT, 340' LARGE BOREHOLE INCREASE VOLTAGE TO BULB
373'	FORMATION CHANGE, TO A YELLOW COLOR, 383' ROUND BOREHOLE
464'	FRACTURED ROCK, 494' FRACTURED, 567' BREAKOUT
617'	LARGE BREAKOUT, BULB BURNED OUT DUE TO HIGH VOLTAGE, LARGE BOREHOLE
742'	VERTICAL FRACTURE, 770' ROUND BOREHOLE
794'	ROCKS FILLING BOTTOM OF WELL, TOTAL DEPTH OF SURVEY

NOTE: DRILLERS LOG HAS : 18" BOREHOLE TO 168', 16" CASING ENDING AT 168'
16" BOREHOLE FROM 168' TO 510', 12" BOREHOLE FROM 510' TO 748',
10" BOREHOLE FROM 748' TO 814', 7" BOREHOLE FROM 814' TO BOTTOM

CASING CONDITION: SEE NOTE:

ID at Surface 15.5" Reduces to _____ at _____ : _____ at _____ : _____ at _____

Diameter Reference: ☐ Caliper Survey ☐ Estimate from TV/Photo Survey ☒ Well Records

Corrosion/Incrustation Build-up ☐ Light ☐ Moderate ☒ Heavy ☐ Increases with Depth

Recommendation: ☐ Clean ☐ Swage ☐ Liner(s)