

WFX - 250
7/16

C O N T I N E N T A L O I L C O M P A N Y

P. O. Box 460
Hobbs, New Mexico
January 10, 1967

✓ New Mexico Oil Conservation Commission (3)
P. O. Box 2088
Santa Fe, New Mexico

37 JAN 15 1967

Attention of Mr. A. L. Porter, Jr., Secretary Director

CONTINENTAL OIL COMPANY REQUEST
FOR ADMINISTRATIVE APPROVAL TO
EXPAND THE MCA UNIT SECONDARY
RECOVERY PROJECT BY ADDING SIX-
TEEN WATER INJECTION WELLS IN
SECTIONS 19 AND 30, TOWNSHIP 17
SOUTH, RANGE 32 EAST, LEA COUNTY,
NEW MEXICO

Gentlemen:

The New Mexico Oil Conservation Order R-2403, dated December 31, 1962, approved the Continental Oil Company-operated MCA Unit secondary recovery project beginning with the injection of water into six (6) Maljamar (Grayburg-San Andres) Pool wells, and set forth procedures for obtaining administrative approval for expansion of the secondary recovery project.

An additional thirteen (13) wells in an area described as the south half of the south half of Section 16, and all of Sections 21 and 28, Township 17 South, Range 32 East, Lea County, New Mexico, were converted to water injection under New Mexico Oil Conservation Commission Administrative Order WFX-19, dated April 15, 1965.

The New Mexico Oil Conservation Commission Administrative Order WFX-234, dated April 24, 1966, authorized the expansion in the MCA Unit secondary recovery project to include sixteen additional water injection wells in Sections 20 and 29, Township 17 South, Range 32 East, Lea County, New Mexico. These sixteen (16) wells are in the process of being converted to water injection. (It was planned to commence water injection into these wells by November 1, 1966, but a delay in obtaining electrical equipment made this impossible.)

Continental Oil Company, as operator of the MCA Unit, respectfully requests administrative approval under the provisions

of Order No. R-2403 and Rule 701-B, to further expand the MCA Unit secondary recovery project to include sixteen additional water injection wells in Sections 19 and 30, Township 17 South Range 32 East, Lea County, New Mexico. Under this proposed expansion, it is planned to convert the following MCA Unit wells to water injection:

<u>Well No.</u>	<u>Location</u>
18	Unit D, Sec. 19-17S-32E
20	Unit B, Sec. 19-17S-32E
52	Unit H, Sec. 19-17S-32E
54	Unit F, Sec. 19-17S-32E
56	Unit L, Sec. 19-17S-32E
59	Unit J, Sec. 19-17S-32E
100	Unit P, Sec. 19-17S-32E
102	Unit N, Sec. 19-17S-32E
104	Unit D, Sec. 30-17S-32E
107	Unit B, Sec. 30-17S-32E
159	Unit H, Sec. 30-17S-32E
162	Unit F, Sec. 30-17S-32E
164	Unit L, Sec. 30-17S-32E
166	Unit J, Sec. 30-17S-32E
215	Unit P, Sec. 30-17S-32E
217	Unit N, Sec. 30-17S-32E

In conjunction with the expansion, it is proposed to discontinue gas injection into the following MCA Unit wells:

<u>Well No.</u>	<u>Location</u>
58	Unit J-K, Sec. 19-17S-32E
61	Unit L, Sec. 20-17S-32E
99	Unit P, Sec. 19-17S-32E
106	Unit C, Sec. 30-17S-32E
161	Unit J, Sec. 30-17S-32E
168	Unit I, Sec. 30-17S-32E

In support of this request and as required by Rule 701-B, the following exhibits are attached:

1. A plat showing the location of the proposed injection wells and of all wells within a radius of two miles from the injection wells, the formations from which said wells are producing or have produced, and lease ownership within said two mile radius.
2. Logs of six of the proposed injection wells which are available.
3. A diagrammatic sketch of each proposed injection well, including casing setting depths, cement tops, producing interval, and proposed tubing and packer setting depths.
4. A table summarizing the water injection well data shown on the diagrammatic sketches.

The casing pattern of these wells is influenced by the fact that in this particular area there are no fresh water sands.

At present, a total of approximately 14,600 BWPD is being injected into the 17 injection wells in the MCA Unit Central Waterflood area in the south half of south half of Section 16 and all of Sections 21 and 28, Township 17 South, Range 32 East. When the expansion authorized by administrative order No. WFX-234 in Sections 20 and 29, Township 17 South, Range 32 East is completed, total water injection will be approximately 29,000 BWPD. Anticipated total water injection rates into the proposed sixteen (16) injection wells in Sections 19 and 30, Township 17 South, Range 32 East is 12,000 BWPD, for a total of 41,000 BWPD in the six and one-quarter section area. Exact volumes to be injected in each well will be dependent upon net producing interval open and injection pressures encountered.

New Mexico Oil Conservation Commission
Page 4

Water for the proposed expansion will be obtained from the MCA Unit Water Leases now furnishing water for the present secondary recovery project.

A copy of this letter with attached data is being forwarded by certified mail to the State Engineer's Office, Box 1079, Santa Fe, New Mexico, and to the offset operators.

Your consideration and approval of the proposed expansion is respectfully requested.

Yours very truly,


L. P. THOMPSON

LPT-JS
Attach
By Certified Mail:

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

Kersey and Company
P. O. Box 316
Artesia, New Mexico

Cities Service Oil Company
P. O. Box 69
Hobbs, New Mexico

Hudson & Hudson
1510 First National Bldg.
Ft. Worth, Texas

By Regular Mail

NMOCC-Hobbs JWK GW RGP

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico

U. S. Geological Survey (3)
P. O. Box 1857
Roswell, New Mexico

Working Interest Owners per attached list (W/O Enc.)

MALJAMAR COOPERATIVE AGREEMENT

WORKING INTEREST OWNERS

Cities Service Oil Company
Attn: Mr. J. E. Embry
Bartlesville, Oklahoma

Mr. R. F. Sawyer
Sinclair Oil and Gas Company
P. O. Box 1470
Midland, Texas

Mr. H. F. Defenbaugh
Sinclair Oil & Gas Company
P. O. Box 521
Tulsa, Oklahoma

Mr. W. F. Burns
Sinclair Oil and Gas Company
P. O. Box 1920
Hobbs, New Mexico

Virginia Sears & Mary Jo
Vandiver, Co-executrices
700 Hermosa Drive
Artesia, New Mexico

Mr. Jack B. Shaw
for: Emily Katherine Flint Boyd
Rosemary Flint
Virginia Woods Shaw
P. O. Box 517
Artesia, New Mexico

Charlotte W. Runyan
Hope, New Mexico

Fair Oil Company
for Fair N&N Trust
R. W. Fair
P. O. Box 689
Tyler, Texas

Mr. J. P. Pierce
3621 Westcliff Road South
Ft. Worth, Texas

Cockburn Trusts
P. O. Box 241
Dallas, Texas

Mr. Leon C. Smith
2506 Bridwell Street
Wichita Falls, Texas

Mary Katherine Fowles
3041 Kadema Drive
Sacramento 25, California

Mrs. Jewell Smith
4764 Caples St.
El Paso, Texas 79903

MCA UNIT
WATER INJECTION WELL DATA

Well No. MCA UNIT	Total Depth and/or PBD	Surface Casing			Production Casing			Producing Interval	Remarks
		OD	Depth	Sacks Cement	Cement Top	OD	Depth	Sacks Cement	Cement Top
No. 18	4033'/4004'	8 1/4"	830'	50	Surface	7"	3409'	150	1900'
No. 20	4015'	8 5/8"	696'	50	Surface	7"	3590'	150	2000'
No. 52	3999'	8 5/8"	750'	50	Surface	7"	3505'	150	2000'
No. 54	3995'	8 5/8"	745'	50	Surface	7"	3453'	150	1900'
No. 56	3984'	8 5/8"	670'	50	Surface	7"	3401'	150	1900'
No. 59	3995'/3986'	8 5/8"	754'	50	Surface	7"	3477'	150	2000'
No. 100	3968'	8 5/8"	721'	50	Surface	7"	3525'	150	2000'
No. 102	3953'	8 5/8"	721'	50	Surface	7"	3453'	150	1900'
No. 104	3940'	8 5/8"	807'	50	Surface	7"	3445'	100	2500'
No. 107	3976'	8 5/8"	878'	50	Surface	7"	3414'	100	2500'
No. 159	3995'	8 5/8"	912'	50	Surface	7"	3405'	150	1900'
No. 162	3978'	8 5/8"	885'	50	Surface	7"	3407'	100	2500'
No. 164	3985'	8 5/8"	919'	50	Surface	7"	3511'	100	2600'
No. 166	3978'	8 5/8"	865'	50	Surface	7"	3412'	100	2500'
No. 215	4013'	8 5/8"	845'	50	Surface	7"	3707'	100	2700'
No. 217	3990'	8 5/8"	995'	50	Surface	7"	3581'	100	2600'

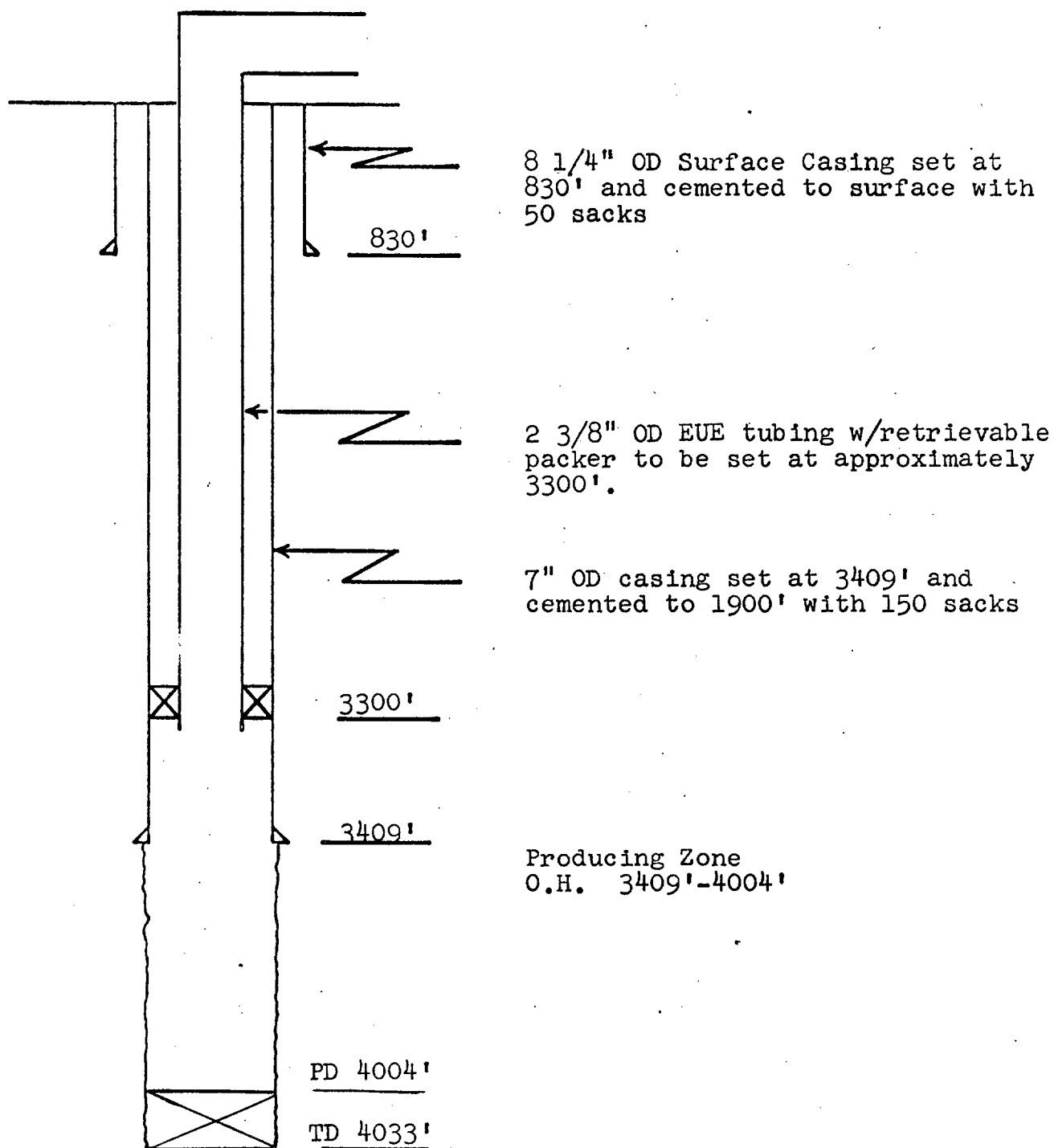
* No. 54 - 5 1/2" OD liner set in OH-3743'-3808' w/12 sacks Calseal - perf. 3743'-3808'

** No. 56 - 5 1/2" OD liner set 3369'-3556' w/15 sacks cement

NOTE - NO INTERMEDIATE CASING WAS SET IN ANY OF THESE WELLS.

JAG-CL
Hobbs District

WATER INJECTION WELL DATA
MCA UNIT NO. 18
660' FNL & 660' FWL - Unit D - 19-17S-32E
Elev: DF - 3941'



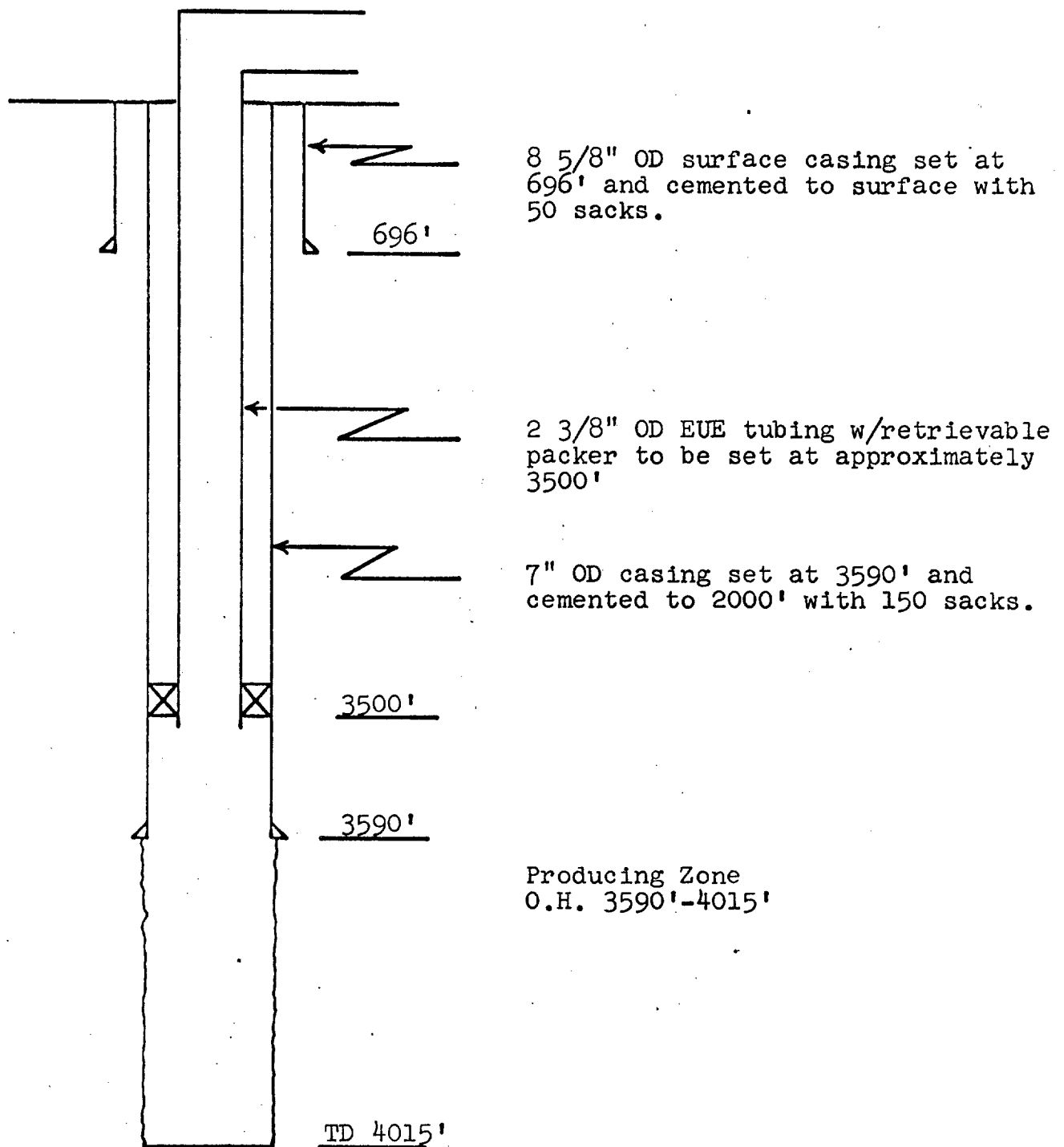
PROPOSED PROCEDURE

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3300'

FUTURE WORK

1. Clean out to TD or PD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 20
660' FNL & 1980' FEL - Unit B - 19-17S-32E
Elev: GL 3925'



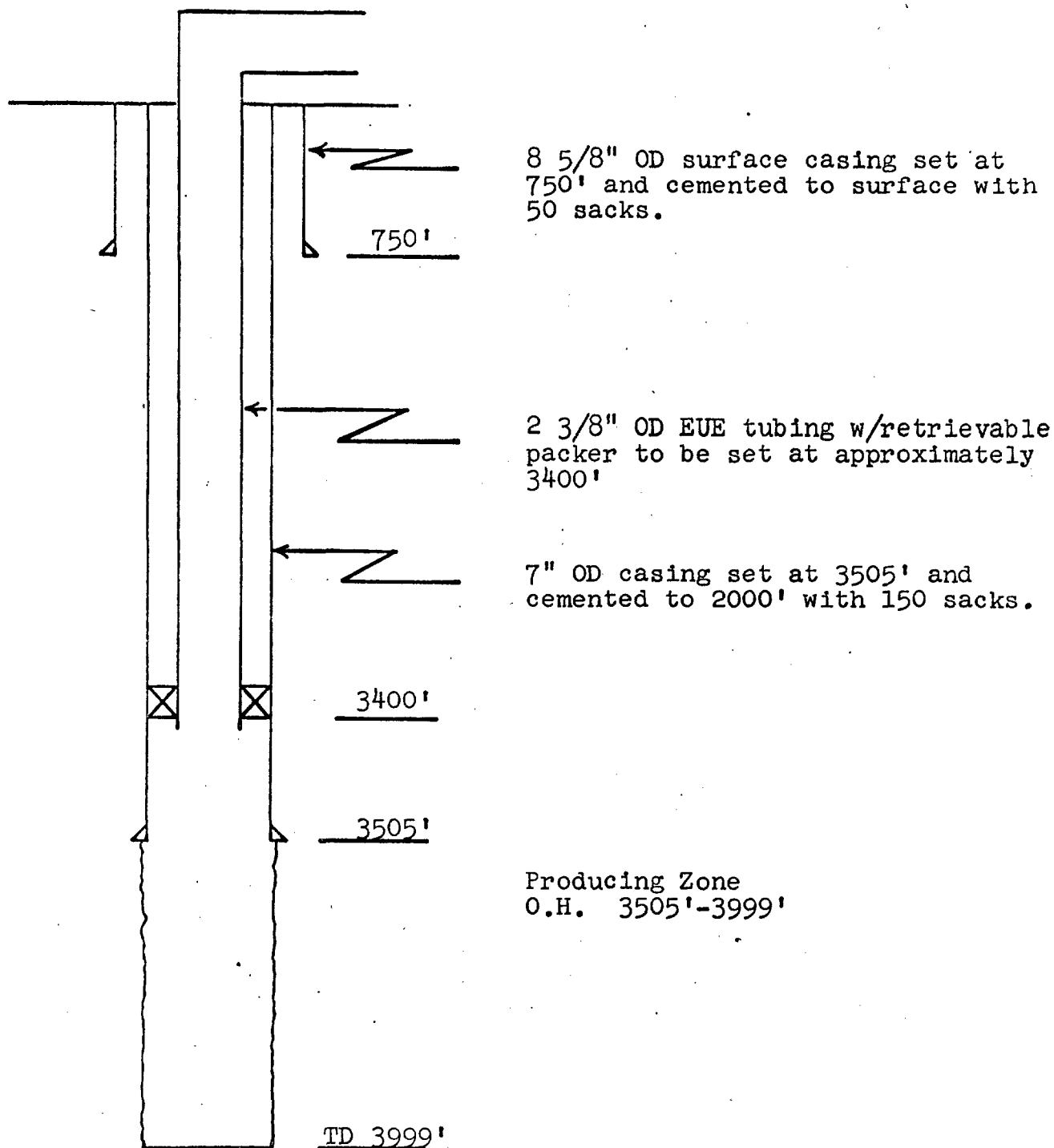
PROPOSED PROCEDURE

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3500'.

FUTURE WORK

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 52
1980' FNL & 660' FEL - Unit H - 19-17S-32E
Elev: DF 3955'



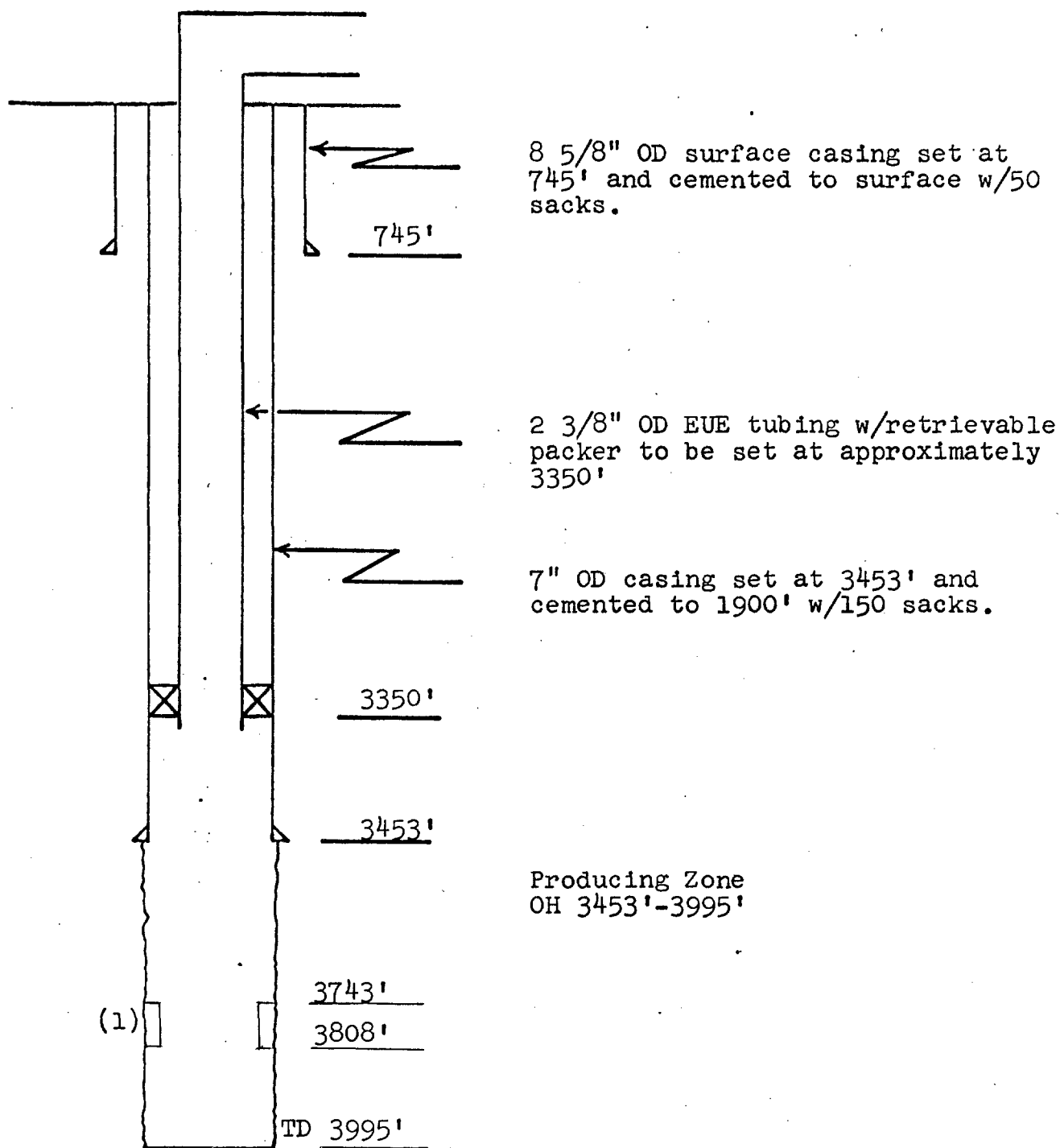
PROPOSED PROCEDURE

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3400'

FUTURE WORK

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 54
1980' FNL & 1980' FWL - Unit F - 19-17S-32E
Elev: DF 3955'



- (1) 5 1/2" OD liner from 3743'-3808' cemented w/12 sacks
Calseal - liner was perforated 3743'-3808'.

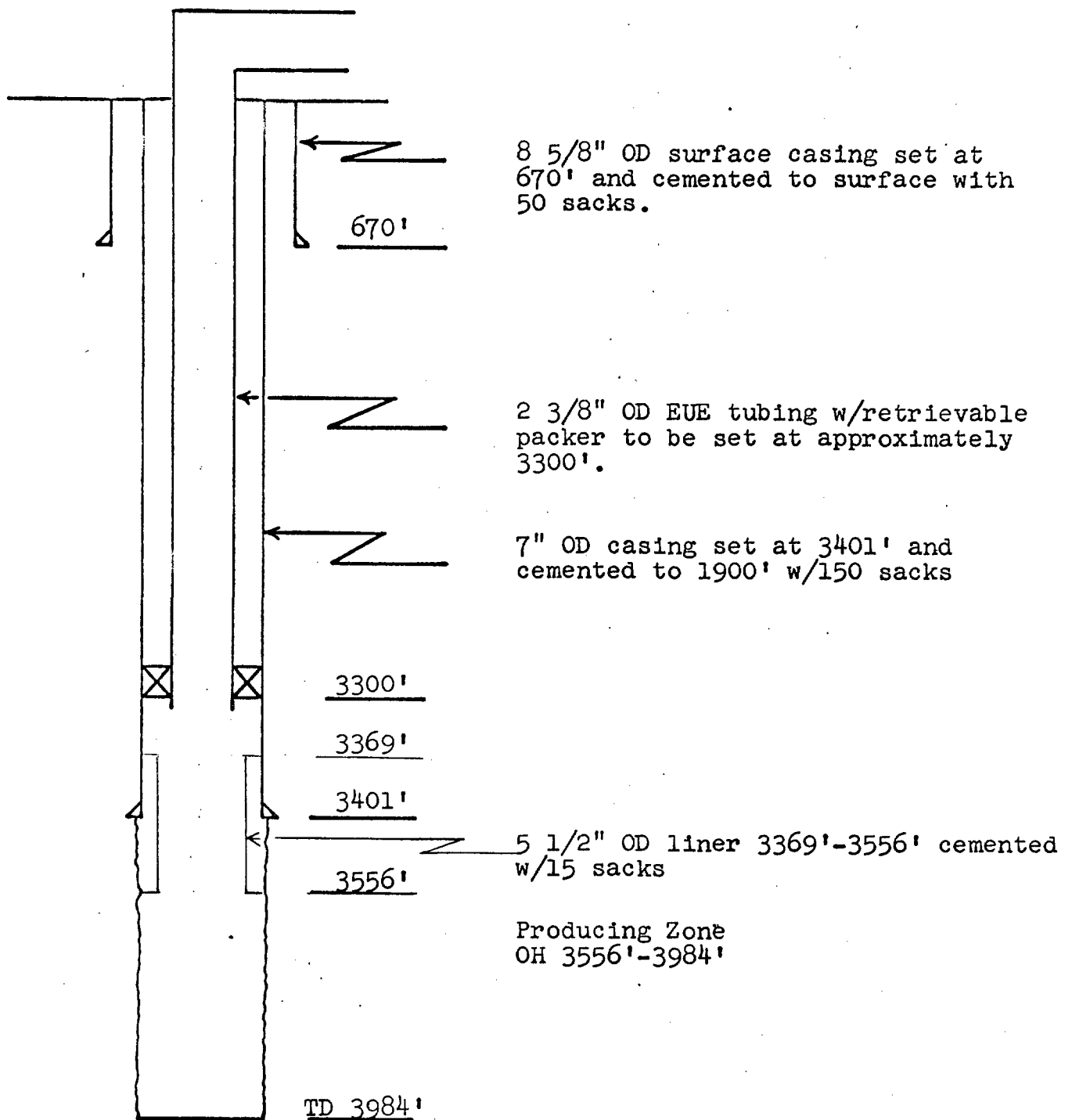
PROPOSED PROCEDURE

1. Tag bottom and tally out.
2. Run tubing w/packer to be set at 3350'

FUTURE WORK

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 56
1980' FSL & 660' FWL - Unit L - 19-17S-32E
Elev: NR



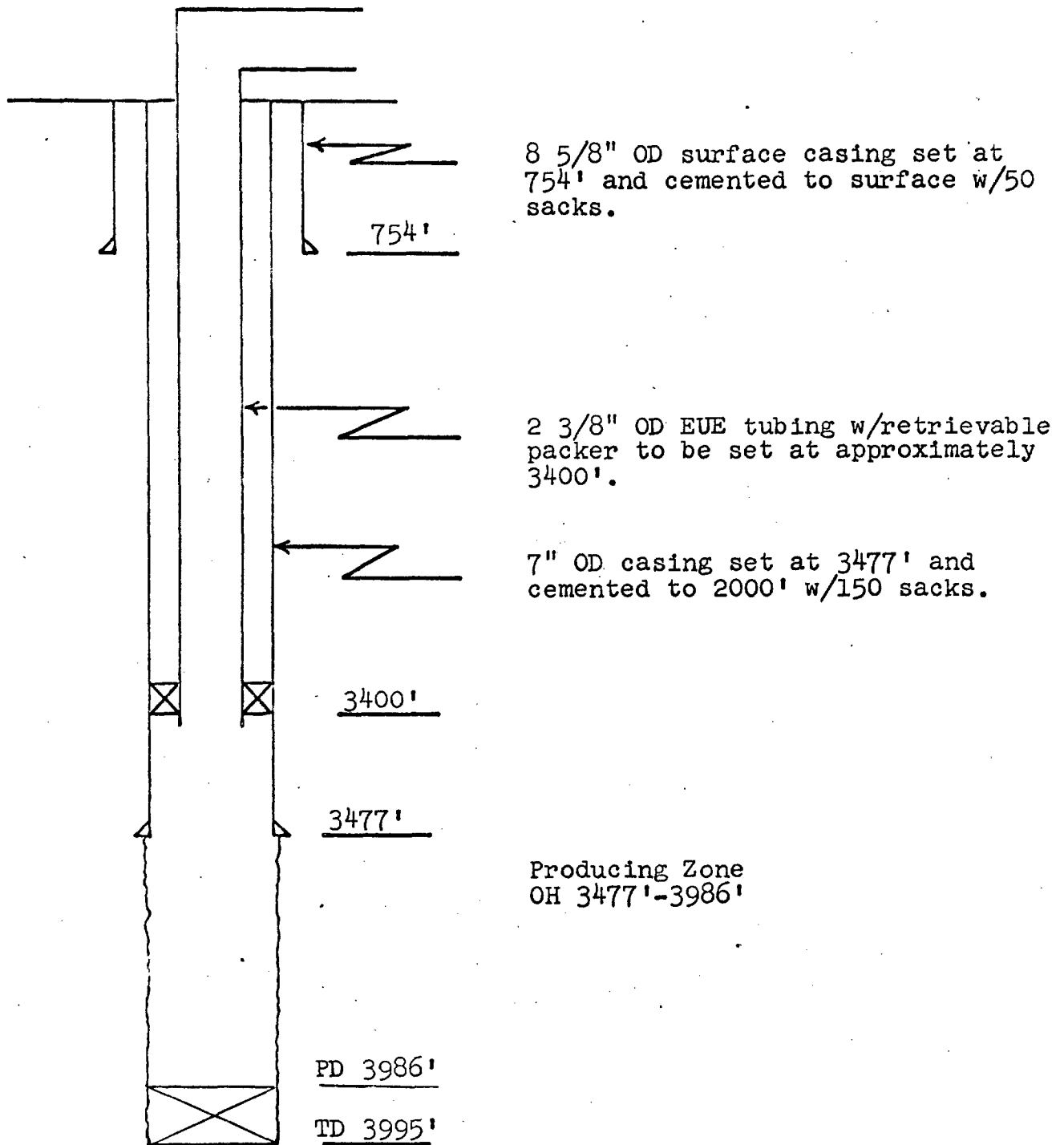
PROPOSED PROCEDURE

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3300'.

FUTURE WORK

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 59
1980' FSL & 1980' FEL - Unit J - 19-17S-32E
Elev: DF 3938'



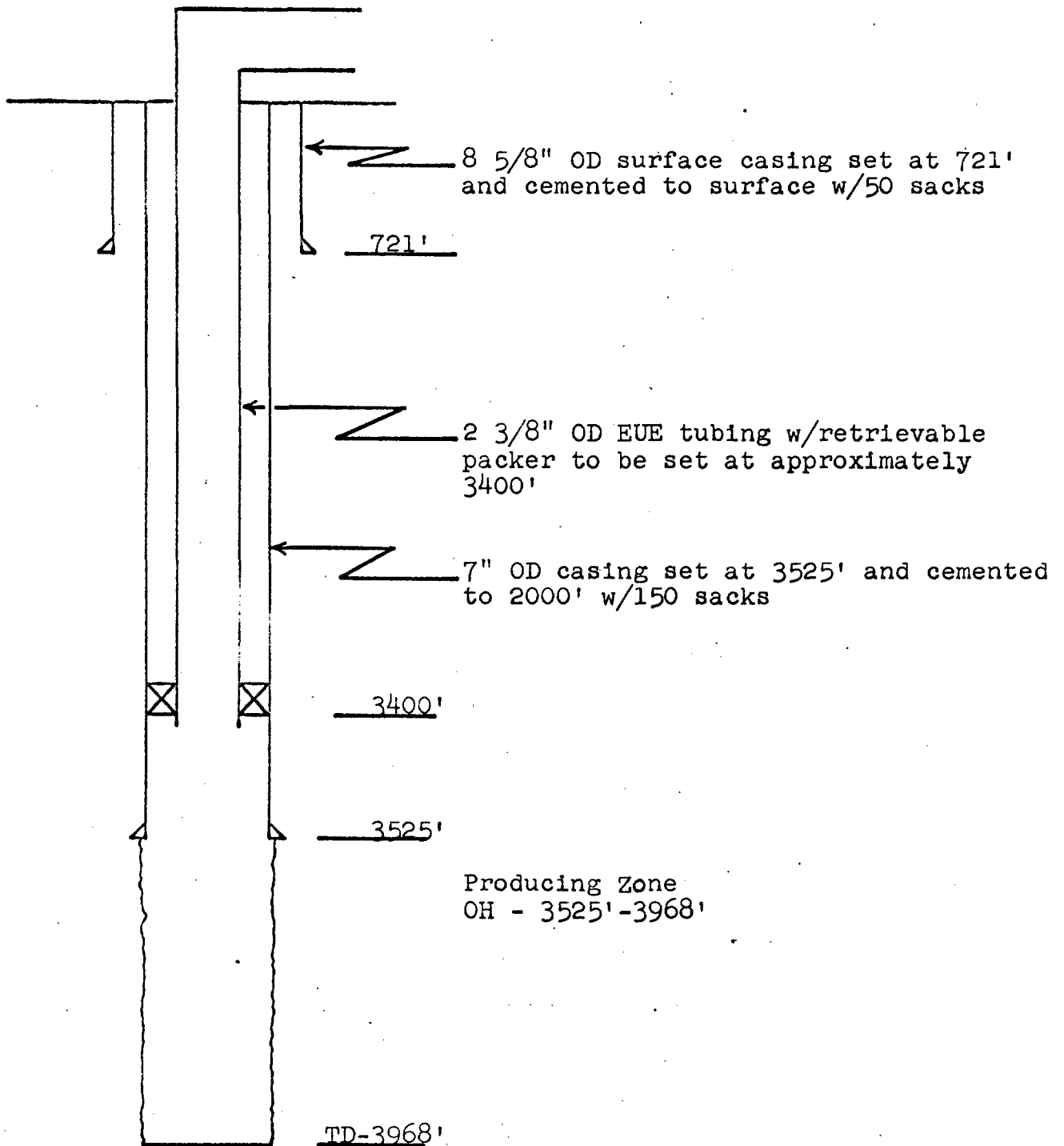
PROPOSED PROCEDURE

1. Tag bottom and tally out
2. Run tubing with packer to be set at 3400'

FUTURE WORK

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 100
660' FSL & 660' FEL - Unit-P - 19-17S-32E
ELEV. - DF - 3923



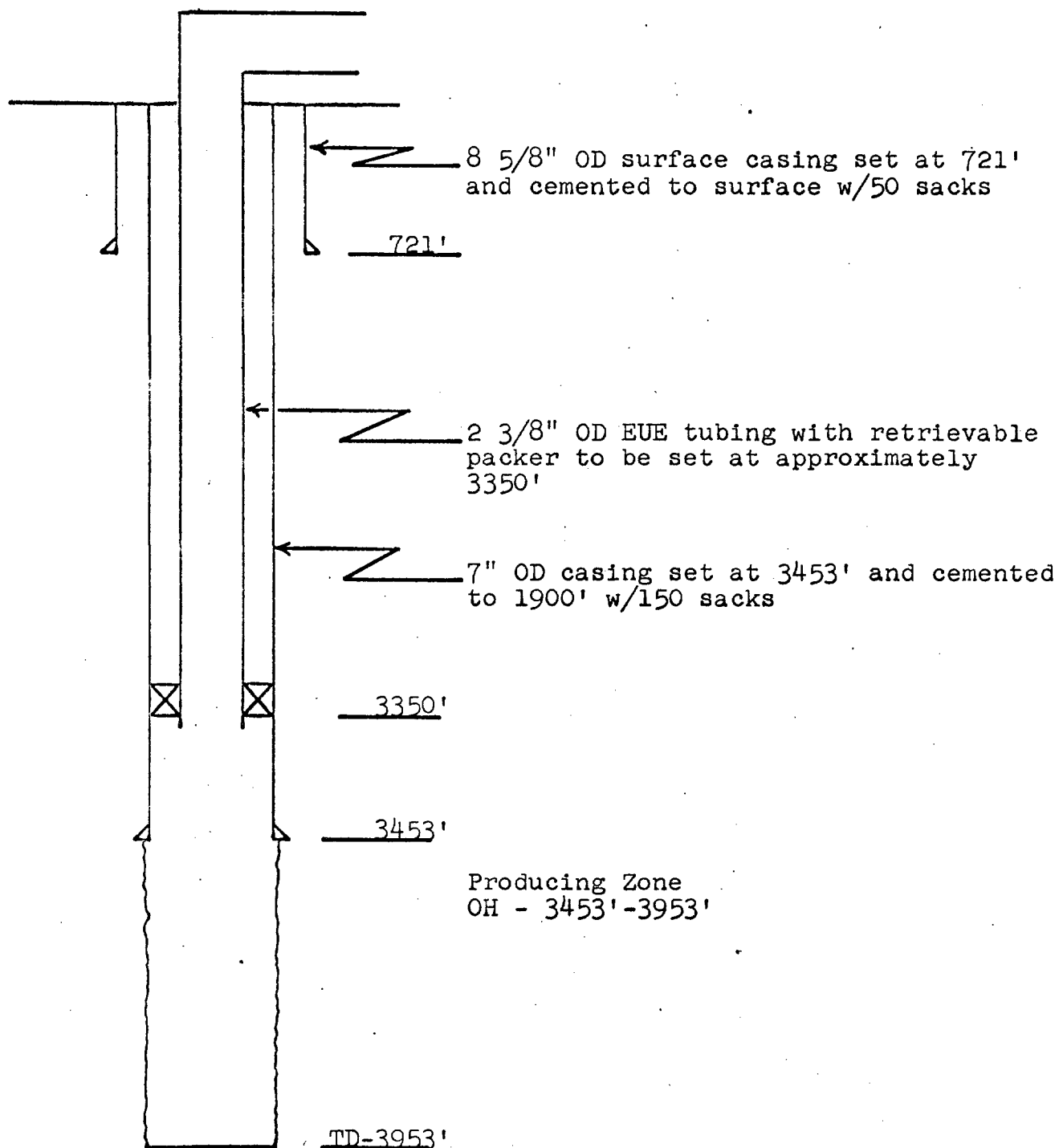
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing w/packer to be set at 3400'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 102
660' FSL & 1980' FWL - Unit-N - 19-17S-32E
ELEV. - DF - 3925'



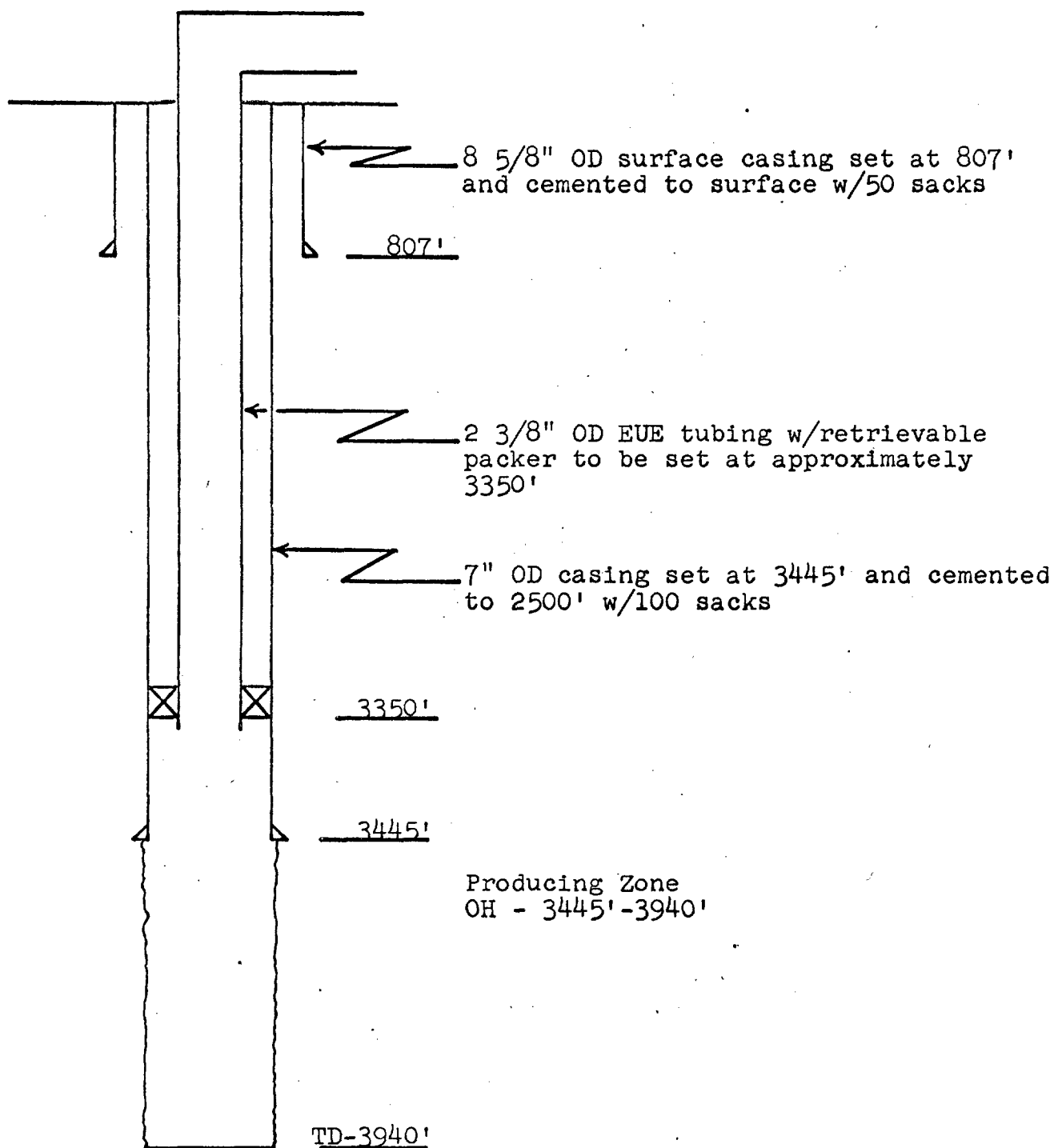
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing w/packer to be set at 3350'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 104
660' FNL & 660' FWL - Unit-D - 30-17S-32E
ELEV. - DF - 3900'



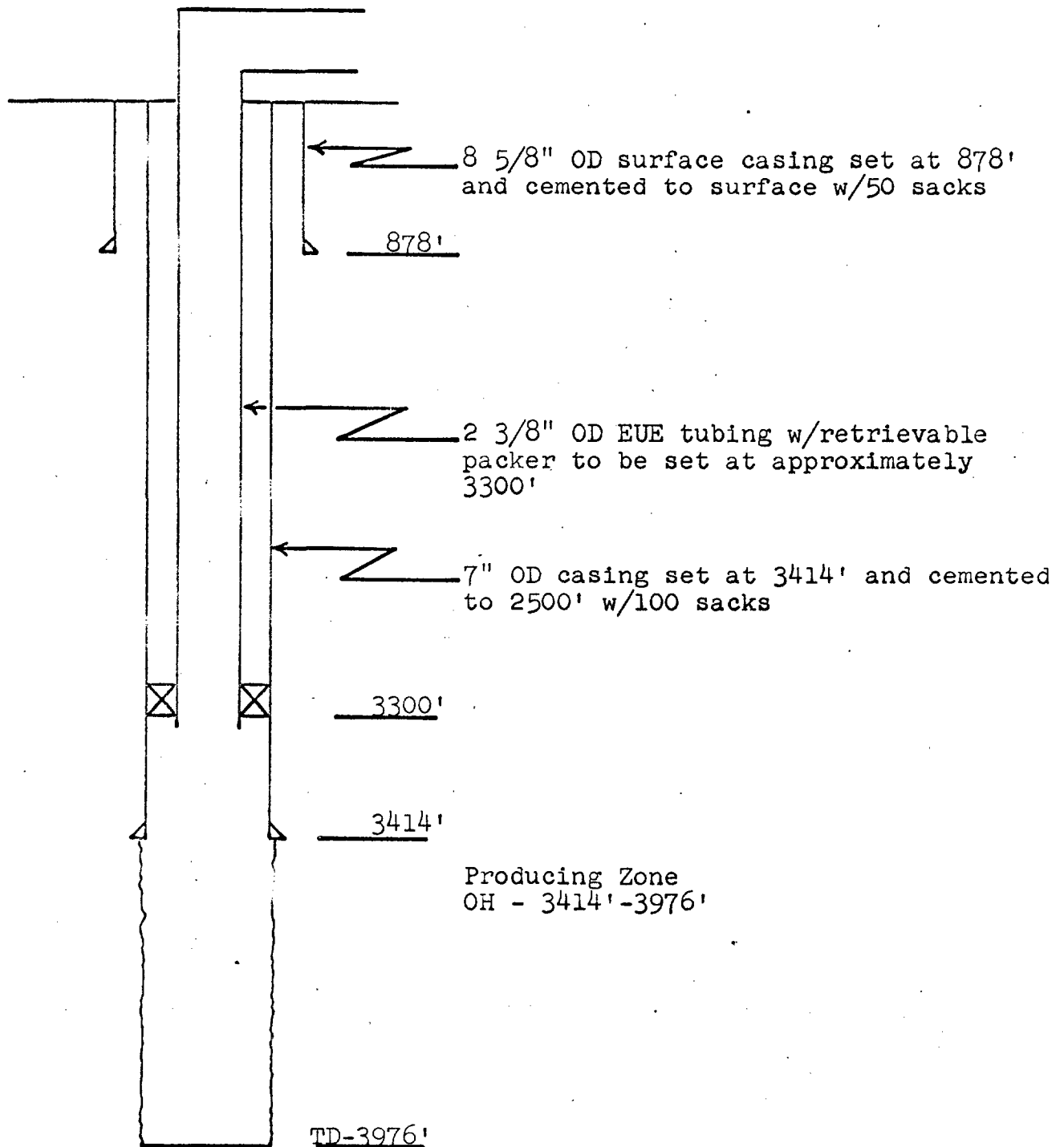
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3350'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 107
660' FNL & 1980' FEL - Unit-B - 30-17S-32E
ELEV. - NR



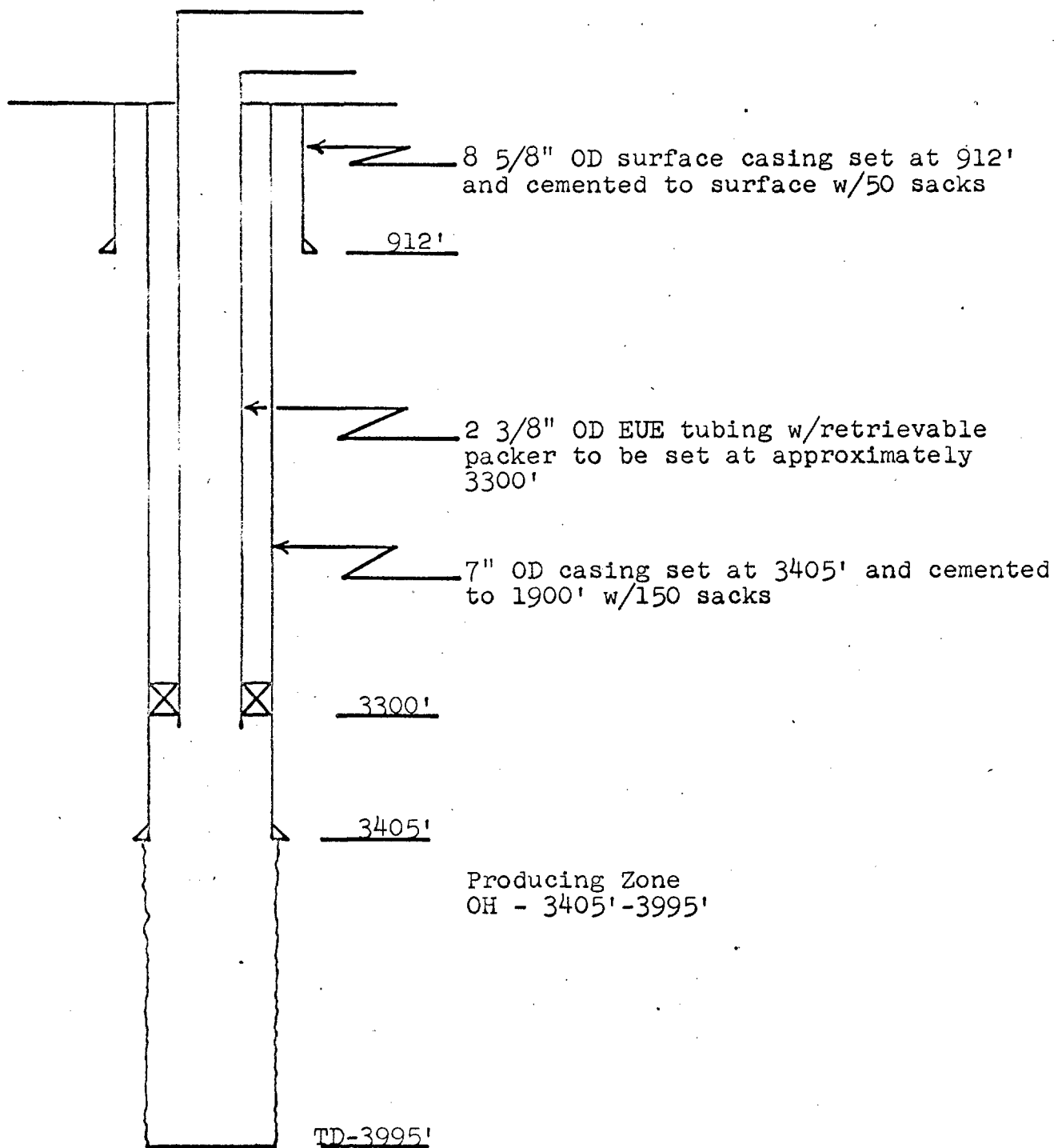
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3300'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 159
1980' FNL & 660' FEL - Unit-H - 30-17S-32E
ELEV. - GL - 3919'



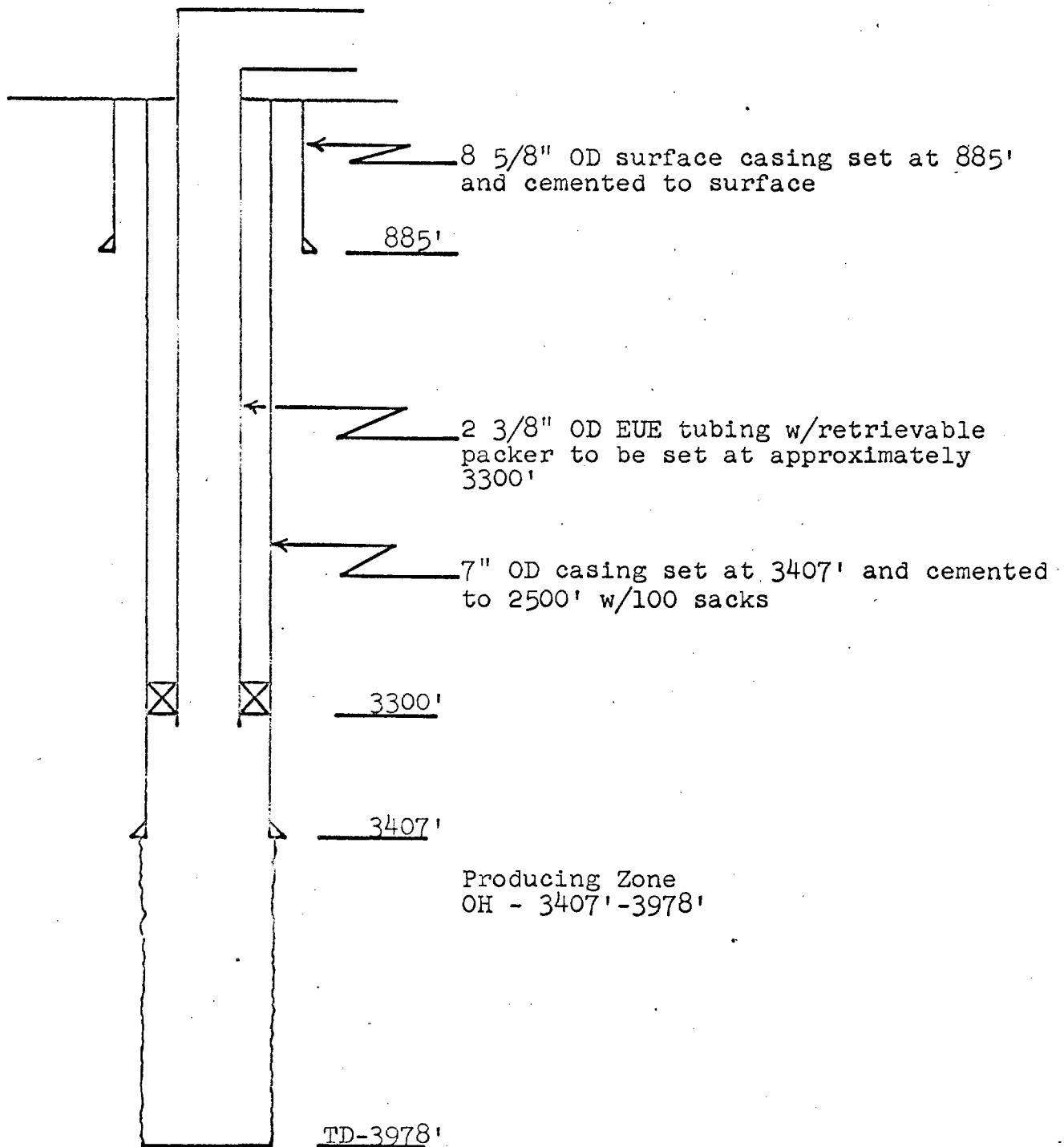
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing w/packer to be set at 3300'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 162
1980' FNL & 1980' FWL - Unit-F - 30-17S-32E
ELEV. - DF - 3899'



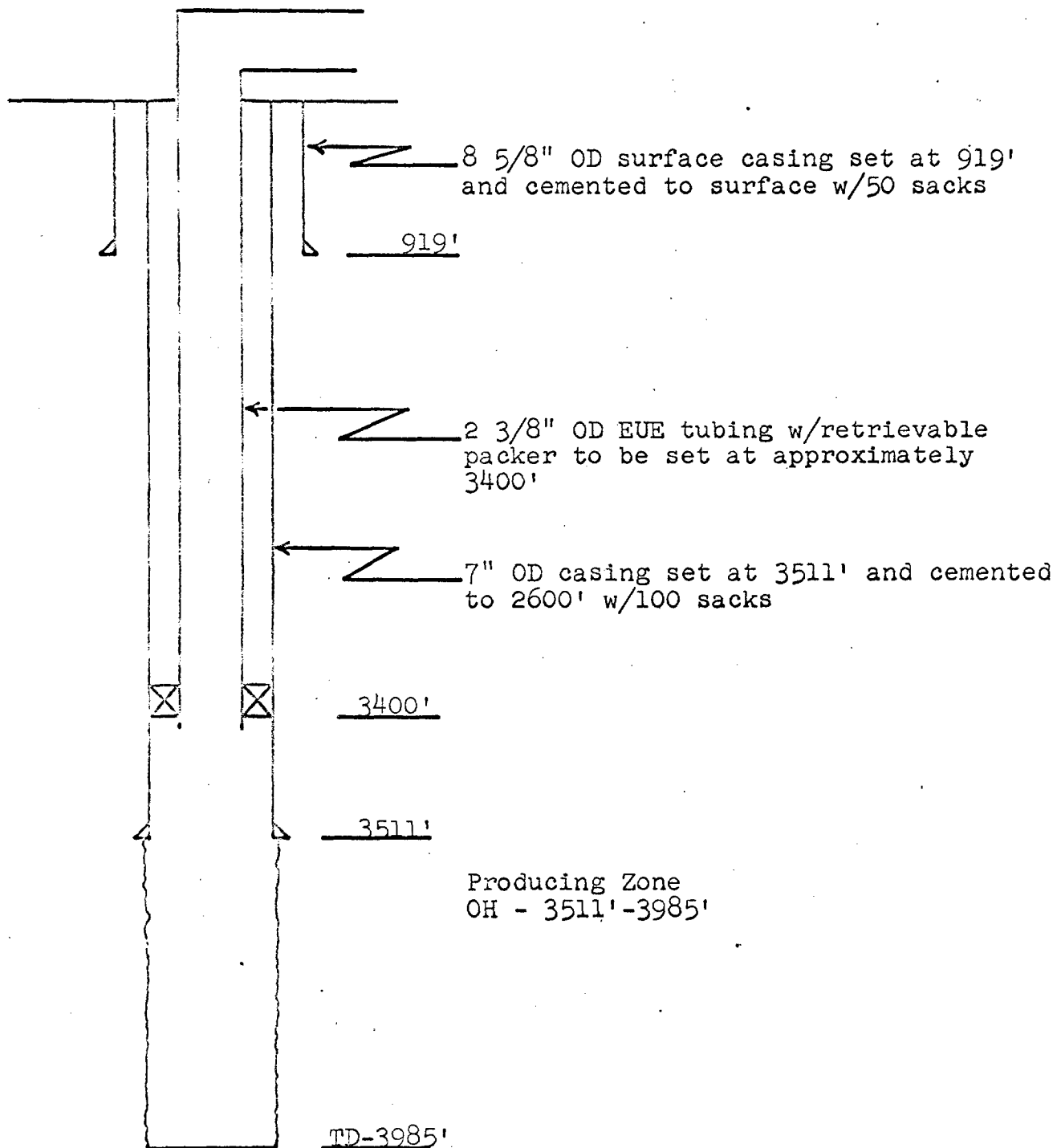
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing w/packer to be set at 3300'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 164
1980' FSL & 660' FWL - Unit-L - 30-17S-32E
Elev. - DF - 3883'



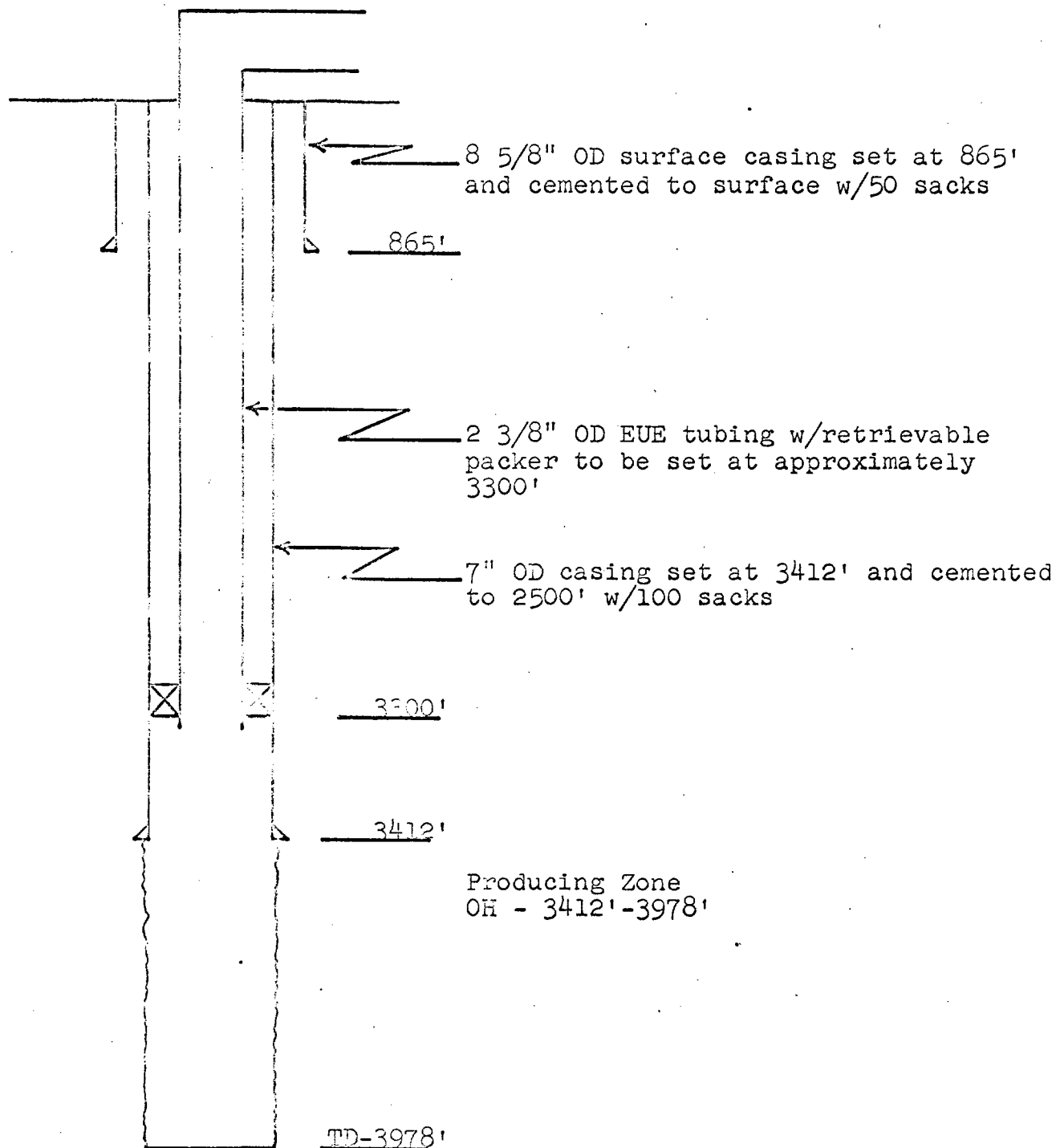
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3400'.

Future Work

1. Clean out to TD if required

WATER INJECTION WELL DATA
MCA UNIT NO. 166
1980' FSL & 1980' FEL - Unit-J - 30-17S-32E
ELEV. - DF - 3903'



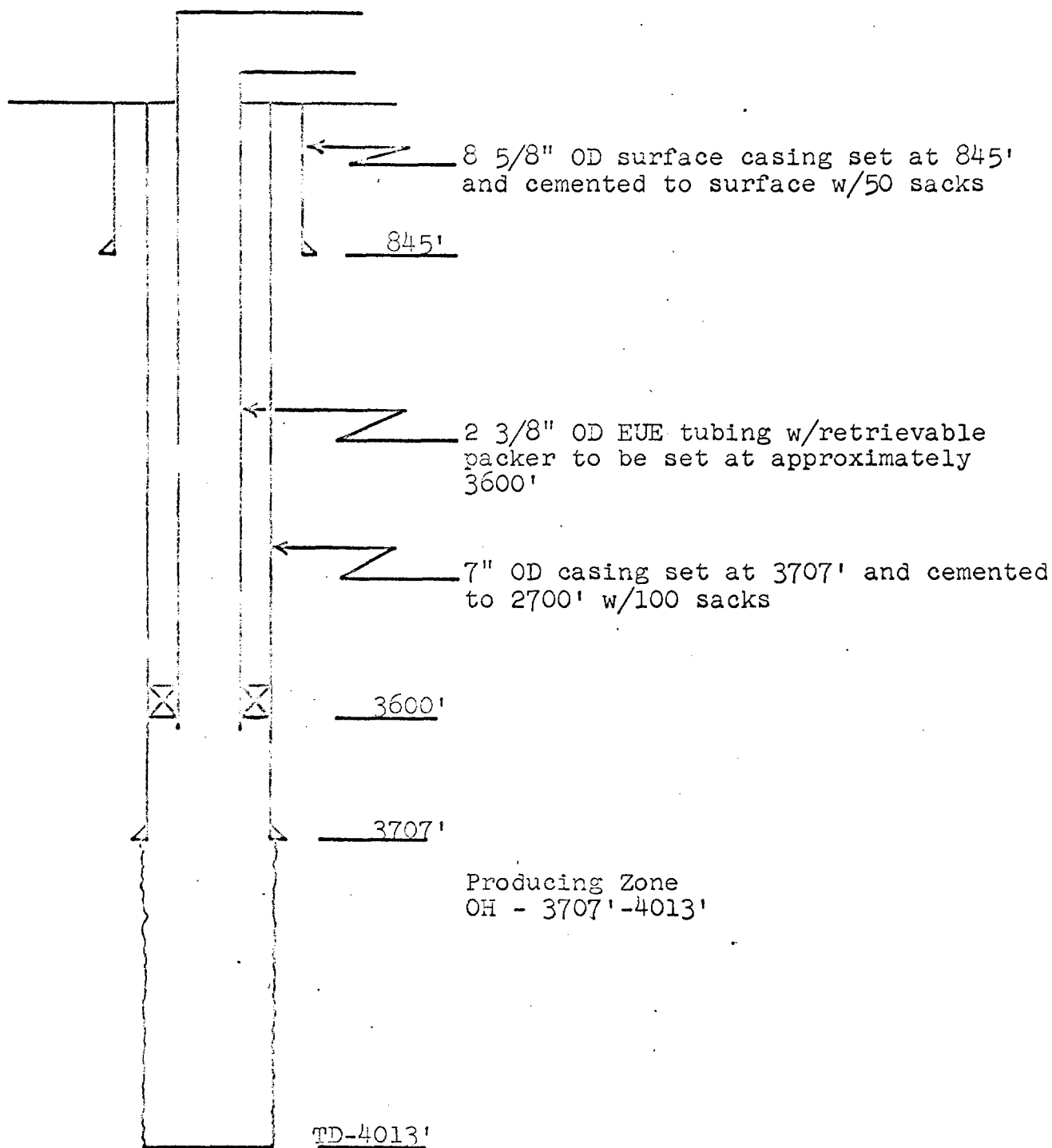
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3300'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 215
660' FSL & 660' FEL - Unit-P - 30-17S-32E
ELEV. - DF - 3896'



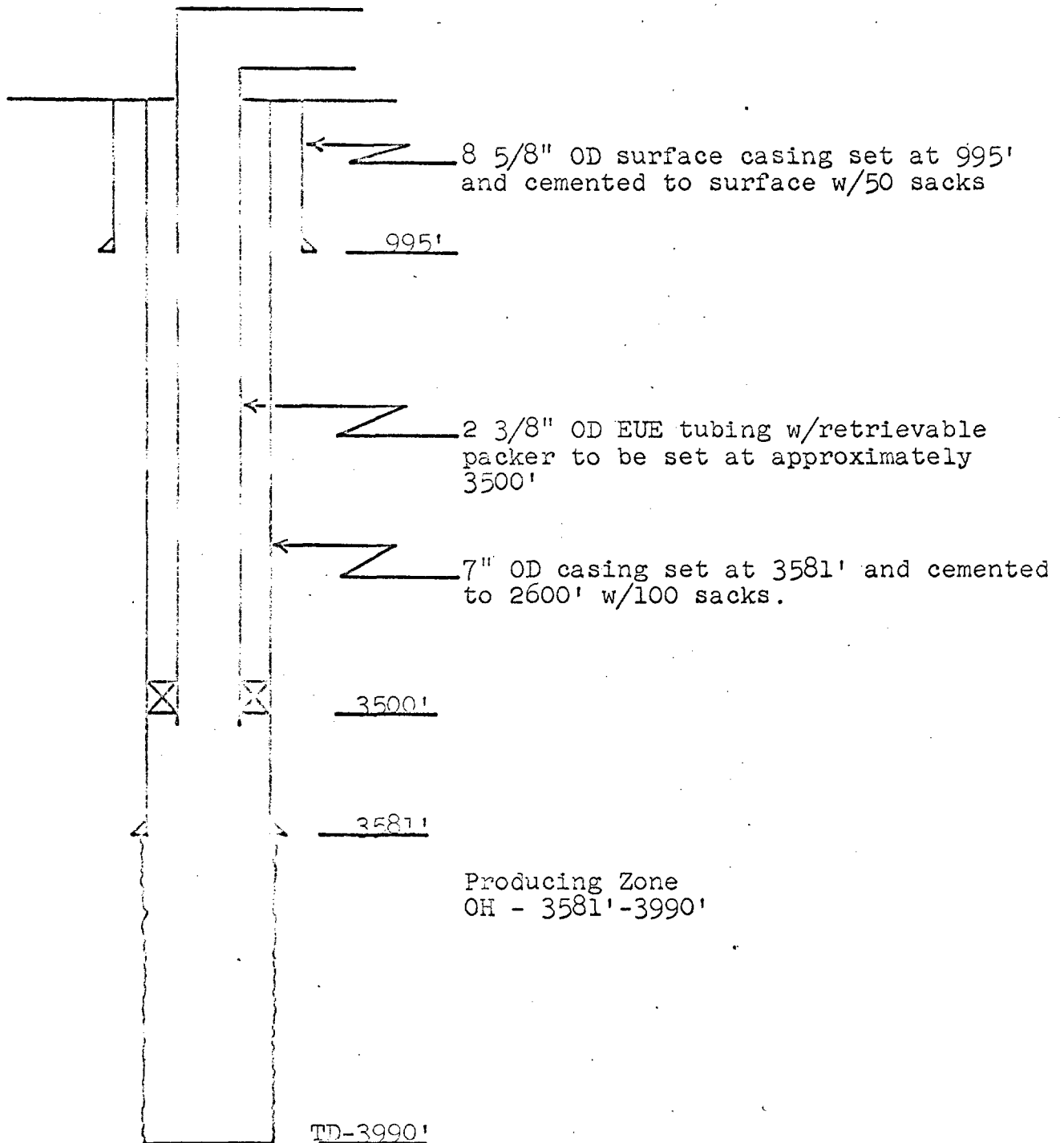
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3600'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 217
660' FSL & 1980' FWL - Unit-N - 30-17S-32E
ELEV. - DF - 3883'



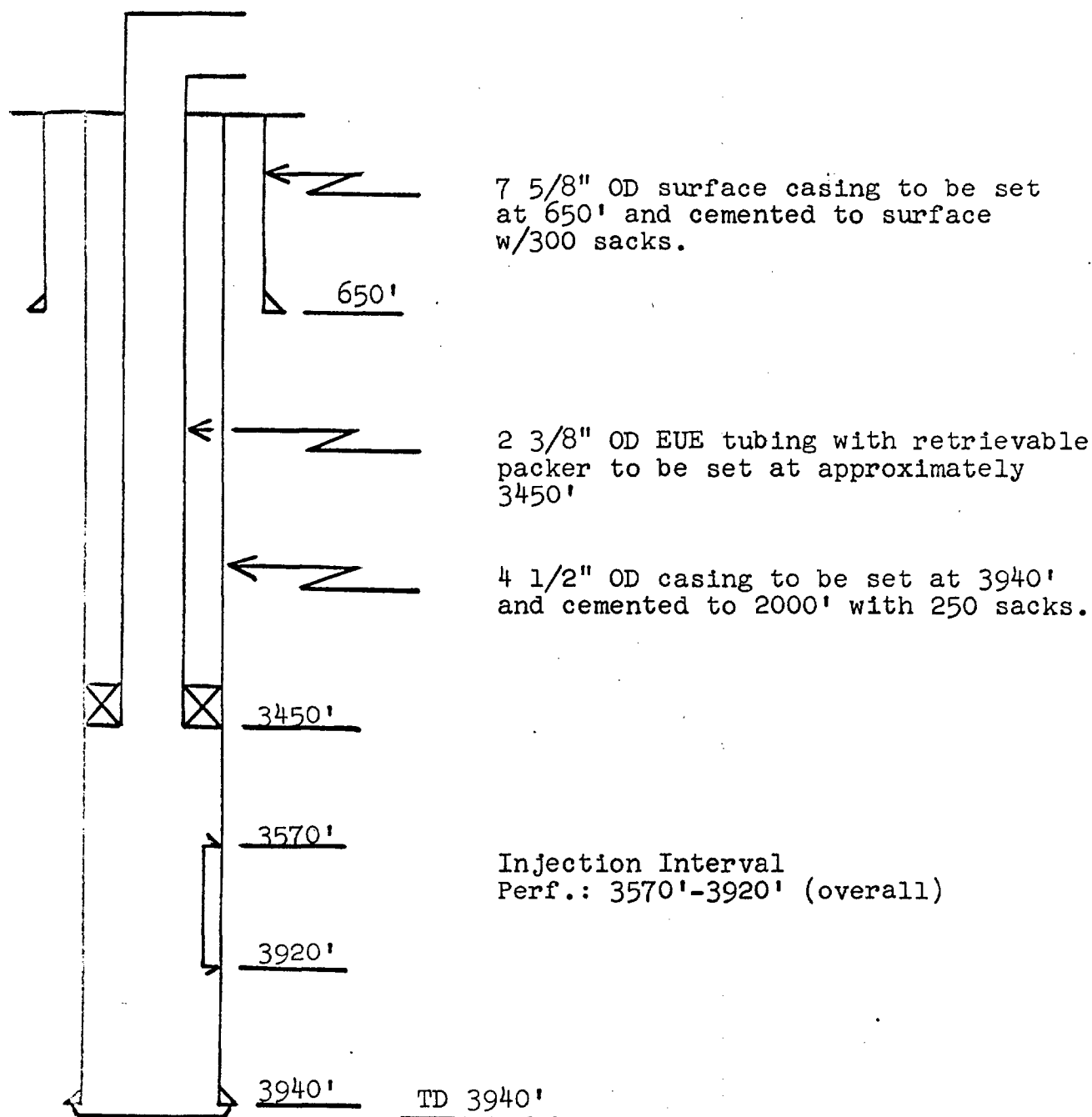
Proposed Procedure

1. Tag bottom and tally out.
2. Run tubing with packer to be set at 3500'.

Future Work

1. Clean out to TD if required.

WATER INJECTION WELL DATA
MCA UNIT NO. 242
2615' FNL & 25' FWL - Unit E - Sec. 19 - 17S-32E



PROPOSED PROCEDURE

1. Drill to TD - run open hole logs.
2. Set casing perforate and treat according to logs.
3. Run tubing w/packer to be set at 3450' and place well on injection.



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

January 20, 1967

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, New Mexico

Dear Mr. Porter:


Reference is made to the application of Continental Oil Company for administrative approval to expand the MCA Unit Secondary Recovery Project by adding 16 water injection wells in Sections 19 and 30, T. 17 S., R. 32 E., Lea County, New Mexico.

From a study of the application and the diagrammatic sketches of the individual wells, it appears that no threat of contamination to the fresh waters which may exist in the area will occur, provided the packers on the tubing are set well below the top of the cement surrounding the production casing. Therefore, this office offers no objection to the granting of the application provided the packers on the end of the tubing are set well below the top of the cement surrounding the production string.

FEI/ma
cc-Continental Oil Co.
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: 
Frank E. Irby
Chief
Water Rights Div.



CONTINENTAL OIL COMPANY

P. O. BOX 460
HOBBS, NEW MEXICO 88240

PRODUCTION DEPARTMENT
HOBBS DISTRICT
L. P. THOMPSON
District Manager
G. C. JAMIESON
Assistant District Manager

1001 NORTH TURNER
TELEPHONE: EX 3-4141

January 27, 1967

New Mexico Oil Conservation Commission ✓
P. O. Box 2088
Santa Fe, New Mexico

Attention of Mr. A. L. Porter, Jr., Secretary-Director

Re: Application for Approval to
Expand MCA Unit Waterflood

Gentlemen:

Under date of January 10, 1967, an application was forwarded to you for administrative approval to expand the MCA Unit Waterflood Project by adding sixteen wells in Sections 19 and 30, T17S, R32E, Lea County, New Mexico. As shown on the plat attached to the application, the two sections involved adjoin the Hudson & Hudson Puckett Waterflood in Section 24, T17S, R31E, Eddy County, New Mexico. It now appears that it will be necessary to make a slight modification to our proposed injection pattern in order to make an adjustment in flood pattern which is satisfactory to all parties.

It is respectfully requested that you withhold action on our January 10, 1967, application. As soon as all parties are in agreement, an amended application will be forwarded to you substituting or adding exhibits which will be appropriate to the amended application.

Yours very truly,

LPT-JS

cc: NMOCC-Hobbs
State Engineer-Santa Fe
Kersey & Company - Artesia
Cities Service Oil Company-Hobbs
Hudson & Hudson - Ft. Worth
Commissioner of Public Lands - Santa Fe
USGS-Roswell (3)



CONTINENTAL OIL COMPANY

P. O. BOX 460
HOBBS, NEW MEXICO 88240

February 22, 1967

1001 NORTH TURNER
TELEPHONE: EX 3-4141

PRODUCTION DEPARTMENT
HOBBS DISTRICT
L. P. THOMPSON
District Manager
G. C. JAMIESON
Assistant District Manager

KVFX-753

Blue 21 4 15

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Attention of Mr. A. L. Porter, Jr., Secretary-Director

Re: Amended Application for Approval
to Expand MCA Unit Waterflood

Gentlemen:

As indicated in my letter of January 27, 1967, and supplementing the application dated January 10, 1967, there are forwarded herewith three copies of an amended application to expand the MCA Unit Waterflood. By agreement with Hudson & Hudson, the injection pattern along the western boundary of the MCA Unit has been revised. You will note that the amended application has attached to it a revised plat and revised schematic diagrams for MCA Unit Wells No. 18 and 104. Well No. 56 will not be used as an injector. Substituted for No. 56 is a new well to be drilled, No. 242. Please substitute these revised exhibits and retain those which are still appropriate.

Your approval of this application will be sincerely appreciated.

Yours very truly,

LPT-JS
Attach

NMOCC
Page 2

Carbon Copies to:

State Engineer (Certified Mail)
P. O. Box 1079
Santa Fe, New Mexico

Kersey and Company (Certified Mail)
P. O. Box 316
Artesia, New Mexico

Cities Service Oil Company (Certified Mail)
P. O. Box 69
Hobbs, New Mexico

Hudson & Hudson (Certified Mail)
1510 First National Building
Fort Worth, Texas

New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico

Commissioner of Public Lands
P. O. Box 1148
Santa Fe, New Mexico

U. S. Geological Survey (3)
P. O. Box 1857
Roswell, New Mexico

Working Interest Owners per attached list (w/o Enc.)

RGP JWK GW

William A. & Edward R. Hudson
1510 First National Building
Fort Worth, Texas

February 24, 1967

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico

Re: Amended Application for
Approval to Expand MCA
Unit Waterflood

Gentlemen:

As offset owners along the common
line between the leases operated by Continental
Oil Company and ourselves, we concur in Conti-
nental's captioned application, and join them
in soliciting your approval of it.

Yours truly,

WILLIAM A. & EDWARD R. HUDSON

By: 

ERHJr/ljs

cc - Mr. L. P. Thompson
Continental Oil Company
Hobbs, New Mexico



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

**S. E. REYNOLDS
STATE ENGINEER**

ADDRESS CORRESPONDENCE TO:
STATE CAPITOL
SANTA FE, NEW MEXICO 87501

March 2, 1967

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, N. M.

Dear Mr. Porter:

Reference is made to the amended application of Continental Oil Company dated February 22, 1967 which seeks approval to expand their MCA Waterflood Unit. The wells involved in the amendment to the application are MCA Unit wells #18 and #104. Well #56 has been deleted from the application and has been replaced with MCA Unit well #242.

I have examined the amended application and the exhibits attached thereto and compared it to the original application which was dated January 10, 1967 and find that there is no need to change the language set forth in my letter of January 20, 1967 pertaining to the original application. My letter may be considered applicable to the amended application.

FEI:ma
cc-Continental Oil Co.
F. H. Hennighausen

Yours truly,

S. E. Reynolds
State Engineer

By: *Frank E. Irby*
Frank E. Irby
Chief
Water Rights Div.

Location of Well

S. 19 T. 17 R. 32
C-WW/4,

Scale: 1" = 4000'

Elevation:

SCHLUMBERGER
ELECTRICAL LOGS

COMPANY: MALJAMAR OIL & GAS COMPANY

WELL: MITCHELL #5 MCA #1113

FIELD: MALJAMAR

SURVEY: 19-17-32

COUNTY: LEA

STATE: NEW MEXICO FILING No.:

PROBLEM: GENERAL STUDY

COUNTY: Lea, N.M. No.:
FIELD OR SURVEY: Maljamar
19-17-32
WELL: Mitchell #5
COMPANY: Maljamar Oil & Gas
June 14, 1940
Co.

First Reading	: 4010	ft.	Started run	: 12:30	m.	
Last Reading	: 3404	ft.	Finished run	: 3:00	m.	
Footage Measured	: 606	ft.	Time well occupied by outfit	: 2 1/2	hrs.	
Casing Shoe Depth:	DRILLER	: 3404	ft.	Time waiting at well	: 1 1/2	hrs.
Bottom Depth	SCHLUMBERGER	: 4020	ft.	Total time incurred by run	: 6 1/2	hrs.
Total Depth Reached	DRILLER	: 4010	ft.	Mileage incurred by run	: 60	Mi.

MUD CHARACTERISTICS

Nature: Oil	Viscosity:		Diameters of hole	from Csg. to T.D.	: 6-1/4"
Weight:	Resistivity:	@ °F	from	to	:
Bottom Temperature:	°F		from	to	:

REMARKS

MEASUREMENTS TAKEN FROM THE FLOOR.

THE OIL AND/OR GAS PAYS IN THIS WELL AS SHOWN BY THE TEMPERATURE SURVEY ARE IN POROUS SAND AND SANDY LIME SECTIONS AS FOLLOWS:

3435' to 3458' - MAIN GAS
 3475' to 3502'
 3535' to 3554'
 3641' to 3680'
 3977' to TOTAL DEPTH 4010'

Date June 14, 1940

Observers: R. W. Rochon

SELF-POTENTIAL LOG - millivolts

INTER-
PRETATIONDEPTHS
2" INCHES
PER 100'GEOL.
LOG.RESISTIVITY LOG - ohms. m²m.

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



SONIC LOG

COUNTY LEA FIELD or LOCATION MALJAMAR WELL MITCHELL B #14 COMPANY BUFFALO OIL CO.	COMPANY <u>BUFFALO OIL CO.</u>	Location of Well
	WELL <u>MITCHELL B #14</u>	SE/SW LC#029405-B
	FIELD <u>MALJAMAR</u>	
	LOCATION <u>SEC. 19-17S-32E</u>	Elevation: D.F.: K.B.: or G.L.: <u>3925</u>
COUNTY <u>LEA</u>	FILING No. _____	
	STATE <u>NEW MEXICO</u>	

RUN No.	One	
Date	2-18-58	
First Reading	3948	
Last Reading	3450	
Feet Measured	498	
Csg. Schlum.	3450	
Csg. Driller	3453	
Depth Reached	3952	
Bottom Driller	3953	
Depth Datum	Top of 7" CSG 1" Adv. GL	
Mud Nat.	Oil	
" Density		
" Viscosity		
" Resist.	(a) F	(a) F
" Res. BHT	(a) F	(a) F
" pH	(a) F	(a) F
" Wtr. Loss	CC 30 min.	CC 30 min.
Max. Temp. °F		
Bit Size	6 3/4	
Spacing	3' 3450 to 3984	
Op. r. Rig Time	2 Hours	
Truck No.	2522-Artesia	
Recorded By	Reinders	
Witness	Shields	

FOLD HERE

CANTANEOUS POTENTIAL

Location of Well

S. 19 T. 17S R. 32E

Sec. NW SW

SCHLUMBERGER ELECTRICAL LOGS

COMPANY: MALJAMAR OIL AND GAS COMPANY

WELL: MITCHELL No. B-15 - MCA Lease No. 56

FIELD: MALJAMAR

SURVEY: C NW SW Sec. 19-17S-32E

COUNTY: LEA

STATE: NEW MEXICO

FILING No.:

COUNTY: LEA
FIELD OR
SURVEY: Sec. 19-17S-32E
WELL: Mitchell No. B-15
COMPANY: MALJAMAR OIL & GAS CO.

Scale: 1" = 400'

Elevation:

PROBLEM:

ILLEGIBLE

First Reading	: 3982	ft.	Started run	: 9:00 A	mi.
Last Reading	: 3402	ft.	Finished run	: 1:30 P	mi.
Footage Measured	: 580	ft.	Time well occupied by outfit	: 4.5	hrs.
Casing Shoe Depth:	DRILLER : 3401	ft.	Time waiting at well	: .5	hrs.
	SCHLUMBERGER : 3402	ft.	Total time incurred by run	: 7.5	hrs.
Bottom Depth	DRILLER : 3989	ft.	Mileage incurred by run	: 60	Mi.
Total Depth Reached	: 3982	ft.			

MUD CHARACTERISTICS

Nature: Oil & Gas Viscosity: _____ @ _____ °F Diameters of hole { from _____ to _____ TL 7"
 Weight: _____ Resistivity: _____ @ _____ °F { from _____ to _____
 Bottom Temperature: 87 °F { from _____ to _____

REMARKS

DEPTH MEASUREMENTS FROM TOP CONTROL HEAD

THIS LOG INDICATES THE POSSIBILITY OF GAS AND/OR OIL IN THE SAND AND
 SANDY LIME ZONES AS FOLLOWS:

3519'	-	3552'
3597	-	3664
3711	-	3748'
3929'	-	3952'

Date June 9, 1941

Observers: E. S. Griffith

SELF-POTENTIAL LOG-millivolts

INTER-
PRETATION

DEPTHS

28.5 INCHES
PER 100'GEOL.
LOG.

RESISTIVITY LOG-ohms m'

- 50 +

1000

2000

5000

10,000

Location of Well
S 19 T 17 R 32
100 50

SCHLUMBERGER ELECTRICAL LOGS

COMPANY: GEORGE W. B. & S. CO.
WELL: 100 50 100 100 100 100
FIELD: INDIANAR
SURVEY: SEP 17-17-11
COUNTY: LIA
STATE: ILLINOIS FILING NO

LOG NO. 100 50 100 100 100 100
DATE: 10-10-11
TIME: 10:00 AM
WELL: 100 50 100 100 100 100
LOG NO. 100 50 100 100 100 100
DATE: 10-10-11
TIME: 10:00 AM

PROBLEM

First Reading	: 3537	ft.	Started run	: 10:00	am.
Last Reading	: 3533	ft.	Finished run	: 1:30	pm
Footage Measured	: 314	ft.	Time well occupied by run	: 3	hrs.
Casing Shoe Depth	: 3522	ft.	Time waiting at well	: 2	hrs.
Bottom Depth	: 3515	ft.	Total time incurred by run	: 5	hrs.
Bottom Depth	: 3540	ft.	Mileage incurred by run	: 100	M.
Total Depth Reached	: 3537	ft.			

MUD CHARACTERISTICS

Nature: Oil	Viscosity: --	Diameters	from 100 to 100
Weight: --	Resistivity: --	of hole	from 100 to 100
Bottom Temperature: 89			

REMARKS

DEPTH MEASUREMENTS FROM TOP OF CEMENT LOG

THIS LOG INDICATES THE POSITION OF THE LOG ON THE LOG

3500 to 3500
3540 to 3571
3500 to 3529

ILLEGIBLE

Date: AUGUST 22, 1941

Observer: E. G. B. B. B.

SELF-POTENTIAL LOG - mud cells

DEPTH
C 8 5
RESISTIVITY

DEPTH
C 8 5
RESISTIVITY

GEOM
LOG

RESISTIVITY LOG - mud cells



<p>Location of Well S. 19 T. 17 R. 32</p> <p>C NE SE</p> <p>Scale: 1" = 1000'</p>	<h1>SCHLUMBERGER</h1> <h1>ELECTRICAL LOGS</h1> <p>COMPANY: MALJAMAR OIL AND GAS COMPANY</p> <p>WELL: MITCHELL A-9</p> <p>FIELD: MALJAMAR <i>MA 5.2</i></p> <p>SURVEY: C NE SE Sec 19-17-32</p> <p>COUNTY: LEA</p> <p>STATE: New Mexico FILING No.:</p>	<p>COUNTY: LEA</p> <p>FIELD OR SURVEY: MALJAMAR 19-17-32</p> <p>WELL: MITCHELL A-9</p> <p>COMPANY: MALJAMAR O & G</p>
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Elevation: _____ PROBLEM: _____

First Reading	: 3298	ft.	Started run	: 8:00		Pm.
Last Reading	: 3503	ft.	Finished run	: 9:00		Pm.
Footage Measured	: 495	ft.	Time well occupied by outfit	: 3		hrs.
Casing Shoe Depth:	DRILLER : ----	ft.	Time waiting at well	: 1		hrs.
	SCHLUMBERGER : 3503	ft.	Total time incurred by run	: 7		hrs.
Bottom Depth	DRILLER : 3999	ft.	Mileage incurred by run	: 00		Mt.
Total Depth Reached	: 3998	ft.				

MUD CHARACTERISTICS

Nature: Oil	Viscosity: _____	Diameters	from	to	8 5/8"
Weight: _____	Resistivity: _____ @ _____ °F	of hole	from	to	
Bottom Temperature: _____ °F			from	to	

REMARKS

MEASUREMENTS FROM DERRICK FLOOR

3.0
2.24
1.0

Date May 22, 1942 Observers: J. S. Kellough

SELF-POTENTIAL LOG - millivolts	INTER- PRETATION	DEPTHS 285 INCHES PER 100'	GEOLOGICAL LOG	RESISTIVITY LOG - ohms. m.m.
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Location of Well

S.19 T.17S R.32E

C NW SE

Scale: 1" = 400'

SCHLUMBERGER ELECTRICAL LOGS

COMPANY: MALJAMAR OIL & GAS COMPANY

WELL: WM. MITCHELL #B-11

FIELD: MALJAMAR

SURVEY: SEC. 19-17S-32E

COUNTY: LEA

STATE: NEW MEXICO FILING No.:

PROBLEM:

COUNTY: LEA No. 1
FIELD OR SURVEY: Sec. 19-17S-32E
WELL: Mr. Pittselli #B-11

COMPANY: Maljamar Oil Co.
July 17, 1942

First Reading

Last Reading

Footage Measured

Casing Shoe Depth:

Bottom Depth

Total Depth Reached

: 3987 ft.

: 3470 ft.

: 517 ft.

: 3477 ft.

: 3470 ft.

: 3995 ft.

: 3987 ft.

: 3:30

: 6:00

Time well occupied by outfit: 2 1/2

Time waiting at well: 1

Total time incurred by run: 3 1/2

Mileage incurred by run: 60

MUD CHARACTERISTICS

Nature: Oil

Weight: --

Bottom Temperature: 81 °F

Viscosity: --

Resistivity: -- @ -- °F

Diameters

from

of hole

from C&G. to T.D. 7"

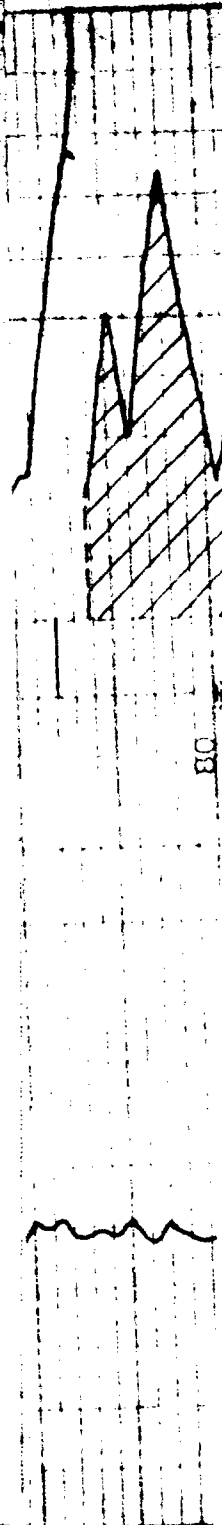
to

to

REMARKS

DEPTH MEASUREMENTS FROM DERRICK FLOOR

FLUID LEVEL APPROX. 3100' AT TIME OF SURVEY



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE