CONTINENTAL OIL COMPANY

P. O. Box 460
Hobbs, New Mexico
August 3, 1967

WFX - 267

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

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 EIGHT WATER INJECTION WELLS IN SECTION 25, TOWNSHIP 17 SOUTH, RANGE 32 EAST, AND SECTION 30, TOWNSHIP 17 SOUTH, RANGE 33 EAST, LEA COUNTY, NEW MEXICO

Gentlemen:

The New Mexico Oil Conservation Commission 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.

The Pearl Pilot flood was authorized by orders nos. R-841 and R-1075, which approved injection into wells nos. 197 and 195, respectively. Conversion to water injection of nos. 200 and 135 was authorized by orders nos. WFX-216 and WFX-259, respectively.

Continental Oil Company, as operator of the MCA Unit, respectfully requests administrative approval under the provisions of Order No. R-2403 to further expand the MCA Unit secondary revocery project to include eight additional water injection wells in Section 25, Township 17 South, Range 32 East, and Section 30, Township 17 South, Range 33 East, Lea County, New Mexico. Under this proposed expansion, it is planned to convert the following MCA Unit wells to water in-

'67 Aug 7 A

Well No.	Location
127	Unit D, Sec. 25-17S-32E
131	Unit B, Sec. 25-17S-32E
133	Unit D, Sec. 30-17S-33E
137	Unit H, Sec. 25-17S-32E
139	Unit F, Sec. 25-17S-32E
190	Unit L, Sec. 25-17S-32E
194	Unit J, Sec. 25-17S-32E
198	Unit L, Sec. 30-17S-33E

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

Well No.	Location
128	Unit F, Sec. 25-17S-32E
130	Unit G, Sec. 25-17S-32E
193	Unit J, Sec. 25-17S-32E

It is also proposed to cease injection into the following wells:

Well No.	Location
195	Unit I, Sec. 25-17S-32E
197	Unit L, Sec. 30-17S-33E

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 four 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 1,750 BWPD is being injected into the 3 injection wells in the MCA Unit Pearl Waterflood area. Anticipated total water injection rates into the eight (8) injection wells proposed herein and the two presently approved injection wells remaining in service is 4,200 BWPD in the Pearl area of the MCA Unit. Exact volumes to be injected in each well will be dependent upon net producing interval open and injection pressures encountered.

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-MEH
Attach.
See Attached Mailing List

MAILING LIST

By Certified Mail:

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

Sinclair Oil & Gas
Box 1920
Hobbs, New Mexico

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

Phillips Petroleum Company
Phillips Building
Odessa, Texas

Fair Oil Company
Box 689
Tyler, Texas

Pennzoil Company
1007 Midland Savings Bldg.
Midland, 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

MCA Unit Working Interest Owners

MCA UNIT - PEARL AREA

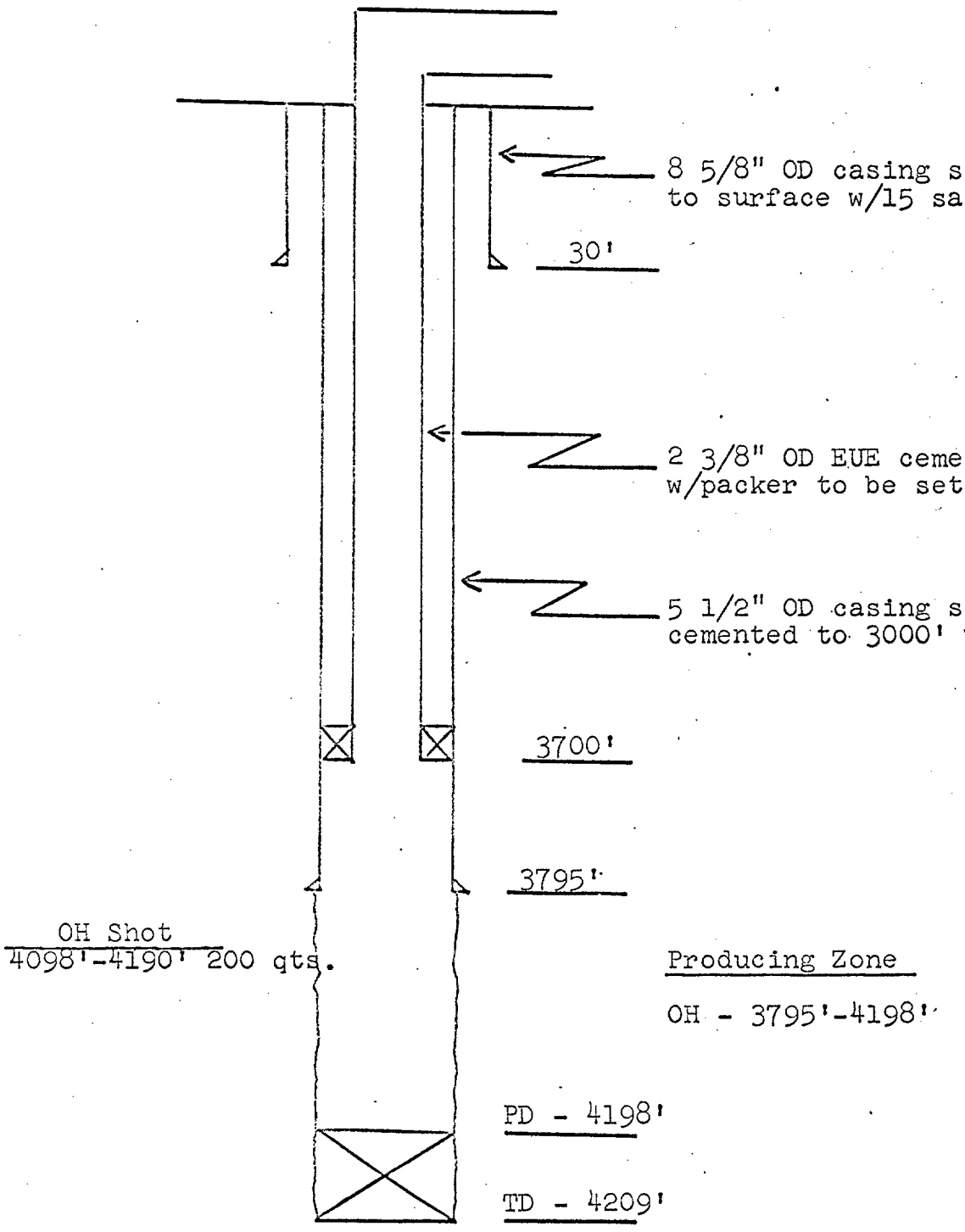
WATER INJECTION WELL DATA

Well No. MCA Unit	TD/PBD	SURFACE CASING				PRODUCTION CASING				Producing Interval	
		OD	Depth	Sacks Cement	Cement Top	OD	Depth	Sacks Cement	Cement Top		
127	4209'/4198'	8 5/8"	30'	15	Surf.	5 1/2"	3795'	200	3000'	3795'-4198' (OH)	
131	4200'	8 5/8"	33'	12	Surf.	5 1/2"	3900'	200	3000'	3900'-4200' (OH)	(1)
133	4248'/4225'	10 3/4"	21'	20	Surf.	7"	3913'	200	3300'	3913'-4225' (OH)	(2)
137	4260'/4200'	8 5/8"	27'	9	Surf.	5 1/2"	3900'	200	3000'	3900'-4200' (OH)	(3)
139	4232'	8 5/8"	33'	12	Surf.	5 1/2"	3892'	200	3000'	3892'-4232' (OH)	
190	4200'	8 5/8"	33'	9	Surf.	5 1/2"	3900'	200	3000'	3900'-4200' (OH)	(4)
194	4215'	None				5 1/2"	3900'	200	2500'	3900'-4215' (OH)	(5)
198	4300'	None				7"	3938'	200	3000'	3938'-4300' (OH)	(6)

(1) 5 1/2" OD csg. also cemented from 1000'-surf. w/200 sacks. Propose to deepen 40' to 4240'.
(2) 7" OD csg. perf. @ 1300' (±) and cemented 1300'-surf. w/200 sacks.
(3) Propose to deepen 55' to 4315'
(4) Propose to deepen 120' to 4320'
(5) 5 1/2" OD csg. perf. 1085' & cemented 1085'-surf. w/150 sacks. Propose to deepen 145' to 4360'.
(6) 7" OD csg. perf. 1300' & cemented 1300'-surf. w/350 sacks. Propose to deepen 40' to 4340'.

JAG-CL
7-20-67
Hobbs District

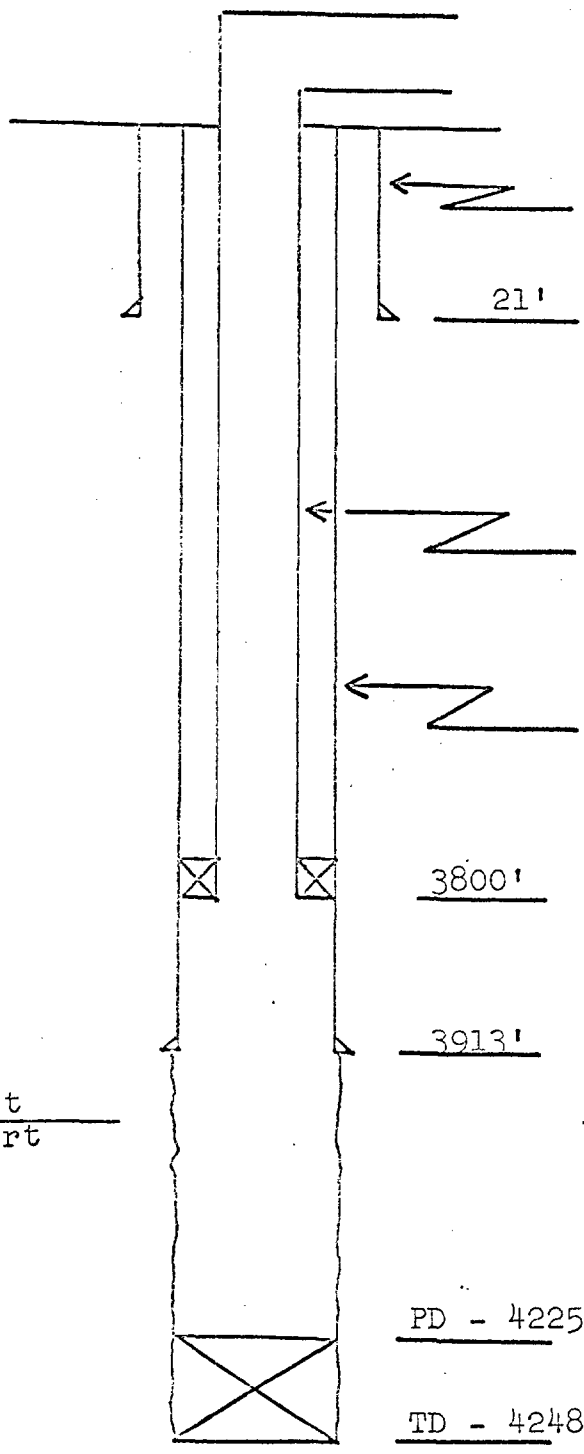
WATER INJECTION WELL DATA
MCA UNIT NO. 127
UNIT D - 660' FNL & 660' FWL - SEC. 25-17S-32E
ELEV: 4017' (GL)



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4198'.
3. Run gamma ray-neutron log w/caliper 4198' to 3300'.
4. Run cement-lined tubing w/packer to be set at 3700'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to clean out to TD/PD (Step 2) - run unlined tubing with packer to be set at 3700' and commence injection. Steps 2 through 4 would be completed after well pressures up.

WATER INJECTION WELL DATA
MCA UNIT NO. 133
UNIT D - 660' FNL & 660' FWL SEC. 30-17S-33E
ELEV: 4037' GL (4039' DF)



OH Shot
No Report

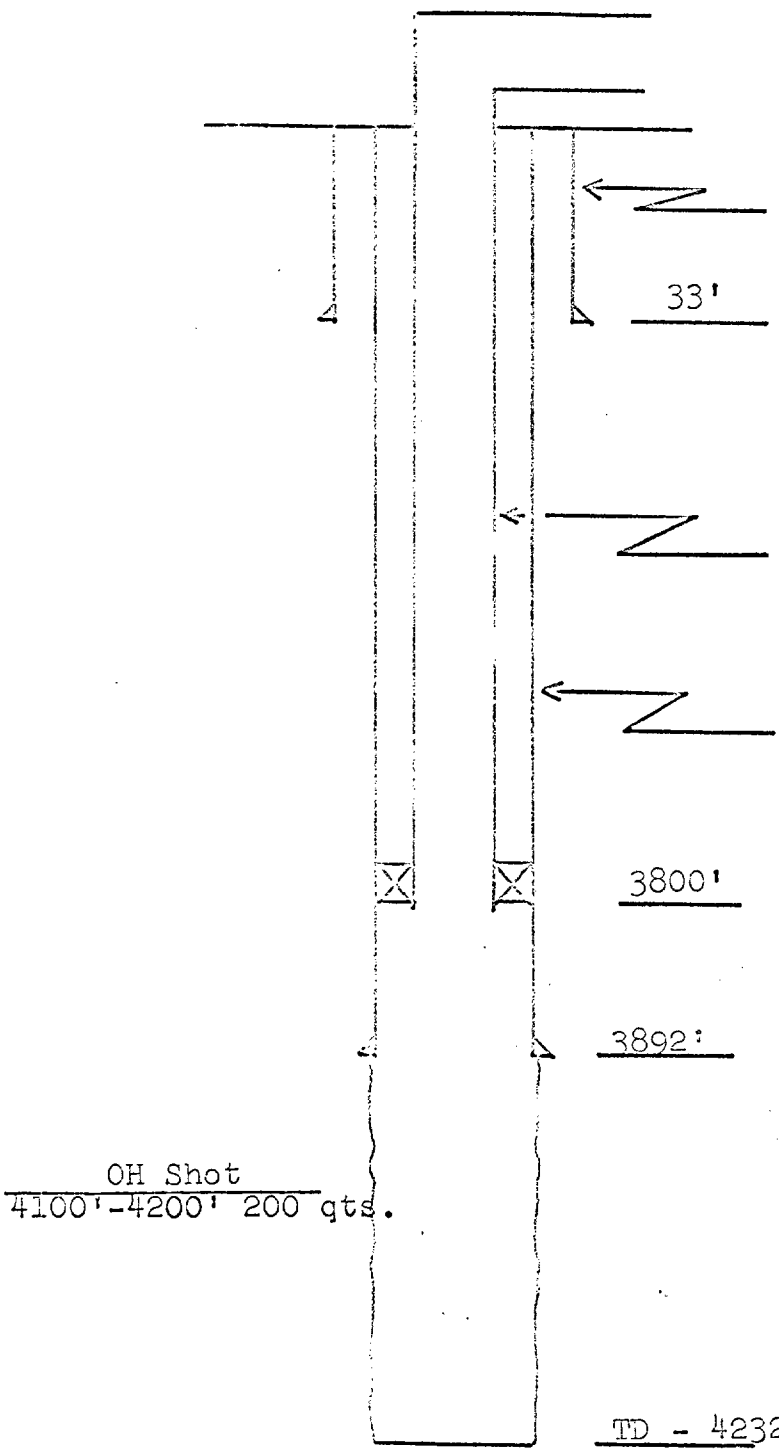
Producing Zone

OH - 3913'-4225'

PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4225'.
3. Run gamma ray-neutron log w/caliper 4225' to 3300'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

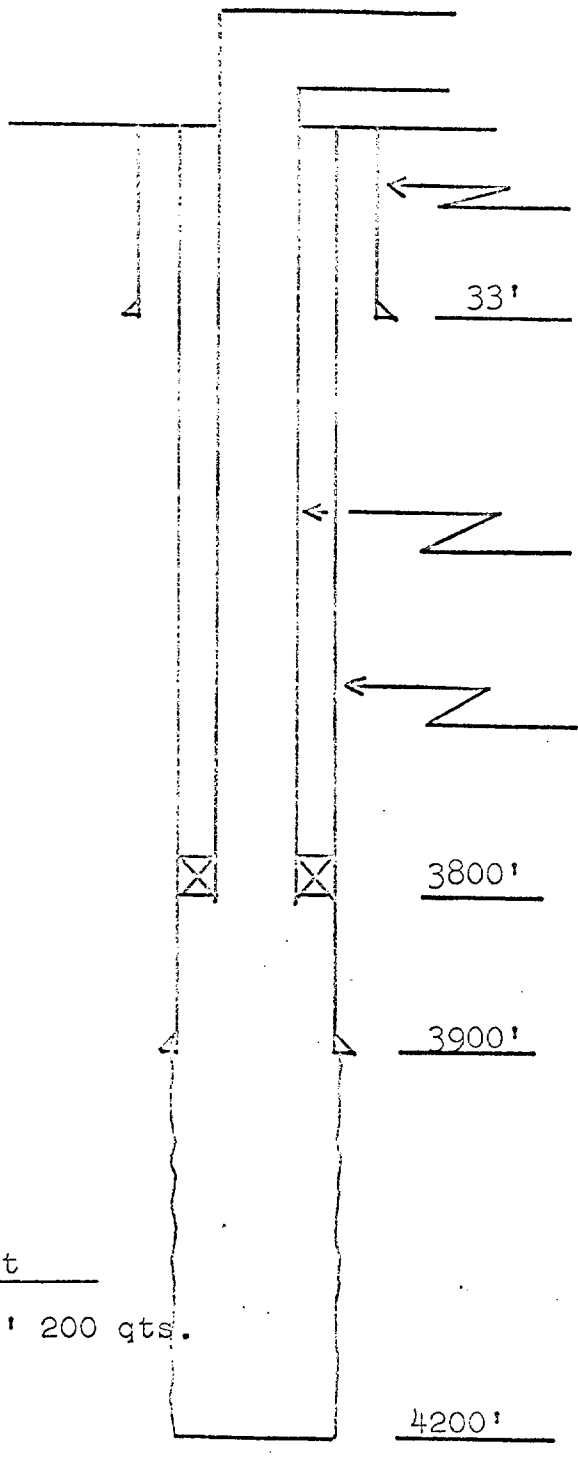
WATER INJECTION WELL DATA
MCA UNIT NO. 139
UNIT F - 1980' FNL & 1980' FWL SEC. 25-17S-32E
ELEV: 4006'



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4232'.
3. Run gamma ray-neutron log w/caliper 4232' to 3400'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

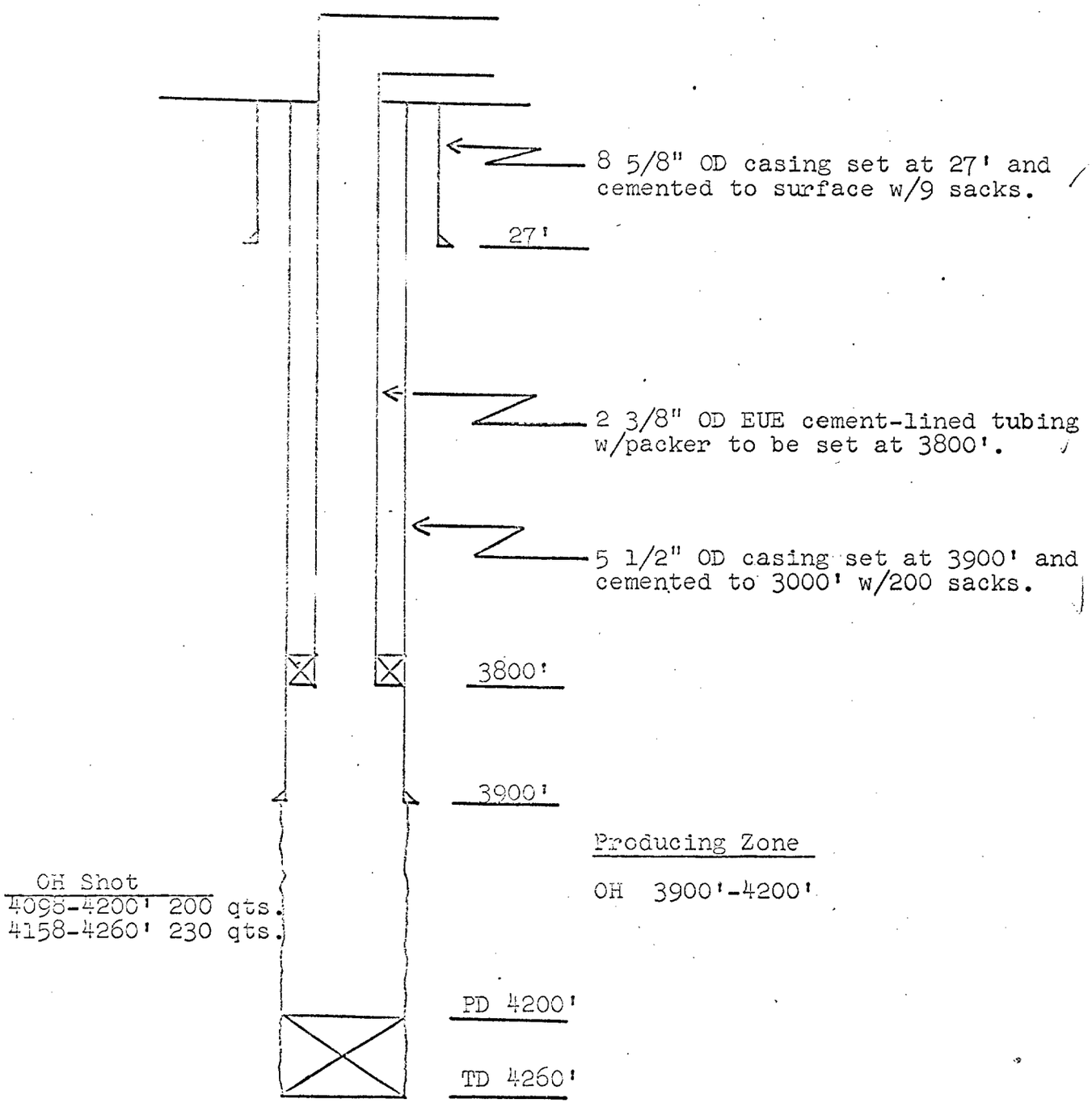
WATER INJECTION WELL DATA
MCA UNIT NO. 131
UNIT B - 660' FNL & 1980' FEL - SEC. 25-17S-32E
ELEV: 4038'



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4200'. Drill out 40' to 4240'.
3. Run gamma ray-neutron log w/caliper 4240' to 3300'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

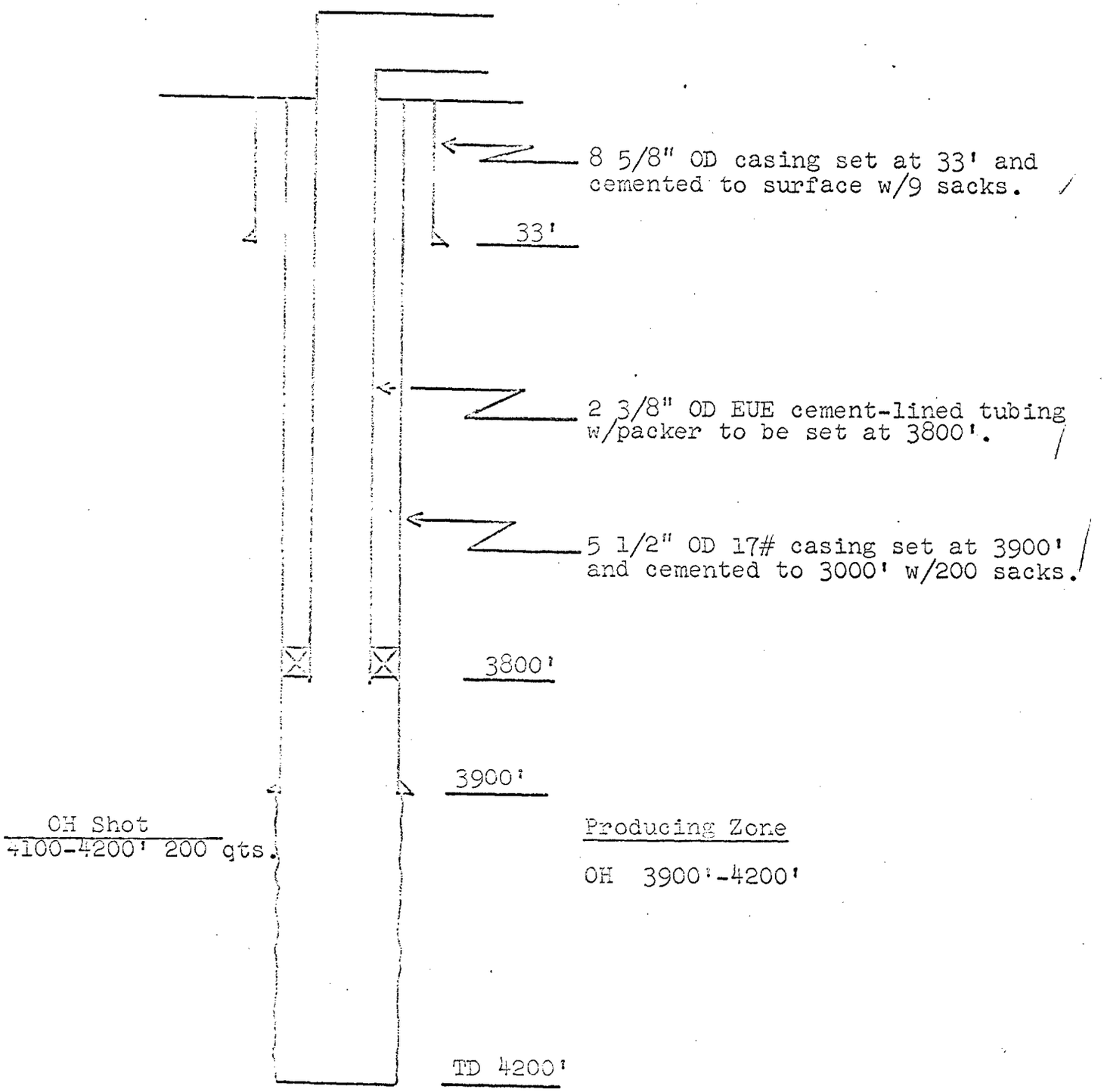
WATER INJECTION WELL DATA
MCA UNIT NO. 137
UNIT H - 1980' FNL & 660' FEL - SEC. 25-17S-32E
ELEV: 4024'



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4260'. Drill out 55' to 4315'.
3. Run gamma ray-neutron log w/caliper 4315' to 3400'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

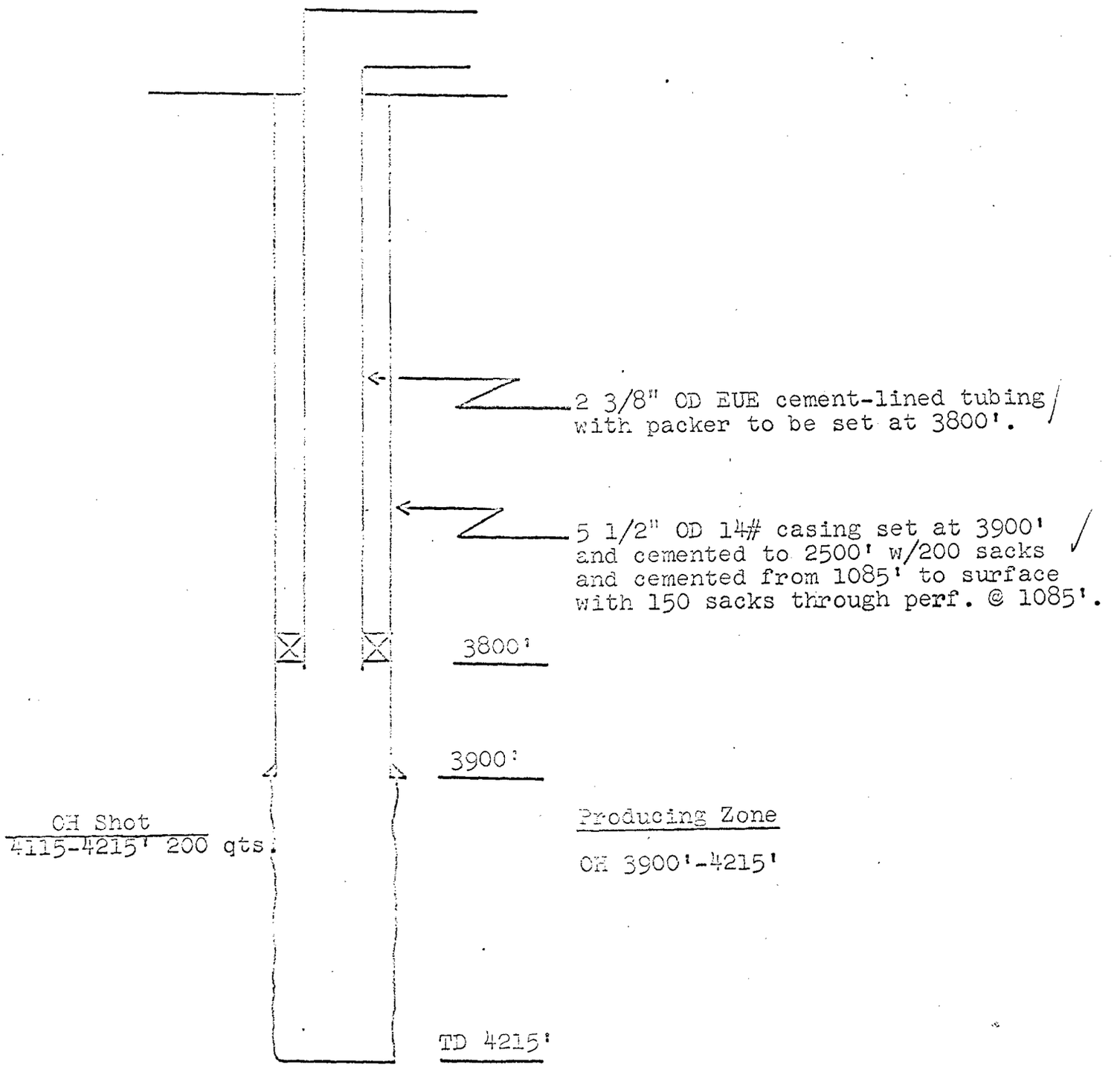
WATER INJECTION WELL DATA
MCA UNIT NO. 190
UNIT L - 1980' FSL & 660' FWL - SEC. 25-17S-32E
ELEV: 3985'



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4200'. Drill out 120' to 4320'.
3. Run gamma ray-neutron log w/caliper 4320' to 3400'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

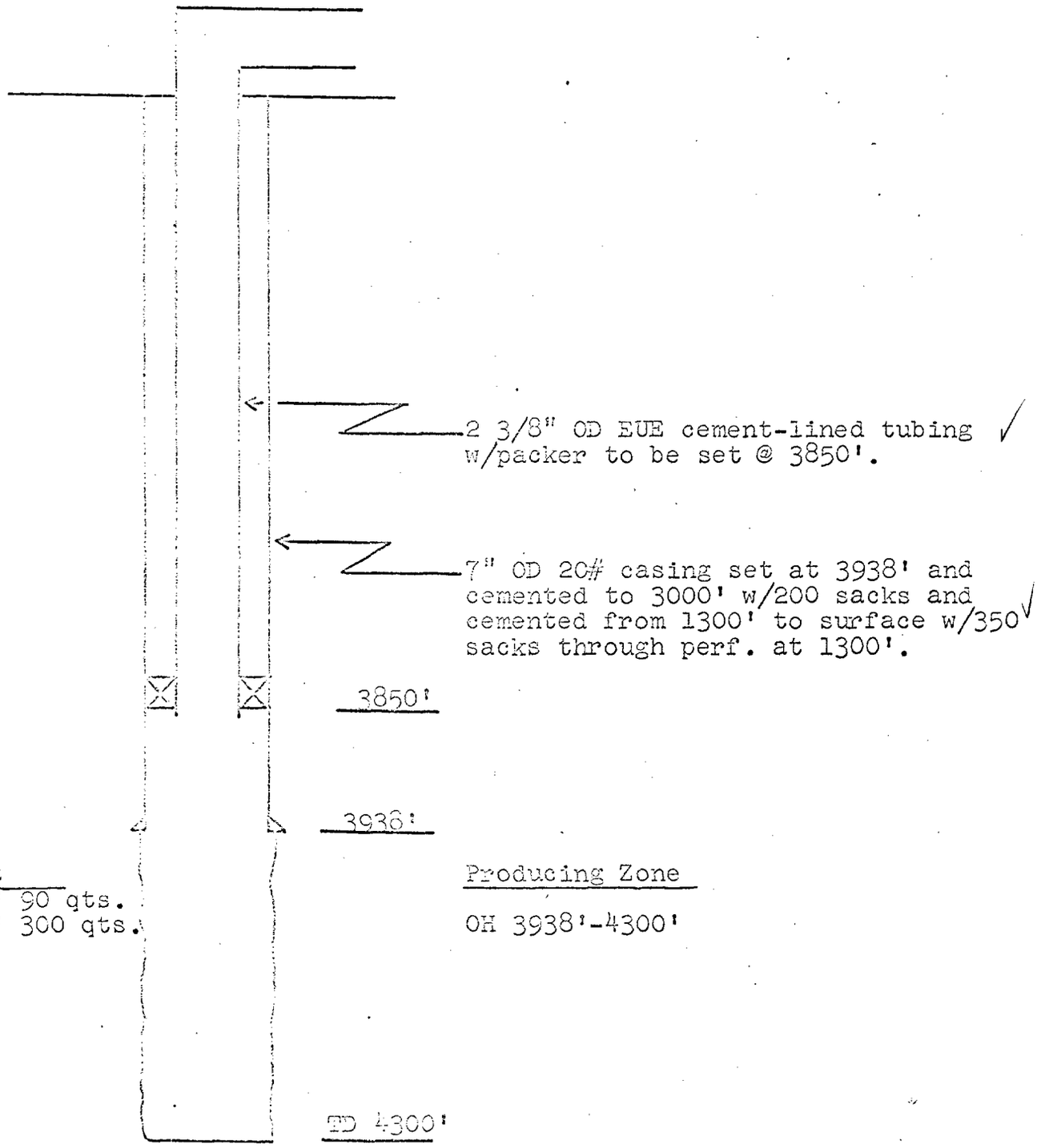
WATER INJECTION WELL DATA
MOA UNIT NO. 194
UNIT J - 1980' FSL & 1980' FEL - SEC. 25-17S-32E
ELEV: 4007' DF



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4215'. Drill out 145' to 4360'.
3. Run gamma ray-neutron log w/caliper 4360' to 3400'.
4. Run cement-lined tubing w/packer to be set at 3800'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3800' and commence injection. Steps 2 through 4 would be completed after well pressures up.

WATER INJECTION WELL DATA
MCA UNIT NO. 198
UNIT L - 1980' FSL & 660' FWL - SEC. 30-17S-33E
ELEV: 4038'



PROPOSED PROCEDURE

1. Run tubing caliper survey. Tag bottom & tally out to check fill.
2. Cleanout to TD/PD of 4300'. Drill out 40' to 4340'.
3. Run gamma ray-neutron log w/caliper 4340' to 3400'.
4. Run cement-lined tubing w/packer to be set at 3850'. Make wireline dummy run to determine if injection survey tools can be run through shot hole. Run fiberglass tailpipe depending upon dummy run.
5. If unable to cleanout to TD/PD (Step 2) - run unlined tubing with packer to be set at 3850' and commence injection. Steps 2 through 4 would be completed after well pressures up.

Company JOHNEY COCKBURN
Well MILLER # B-5.
Field Millamar
County Lea State N.M.
Location 660' fr. N.& 1980' fr. E.
Sec. 25-T17S-R32E.

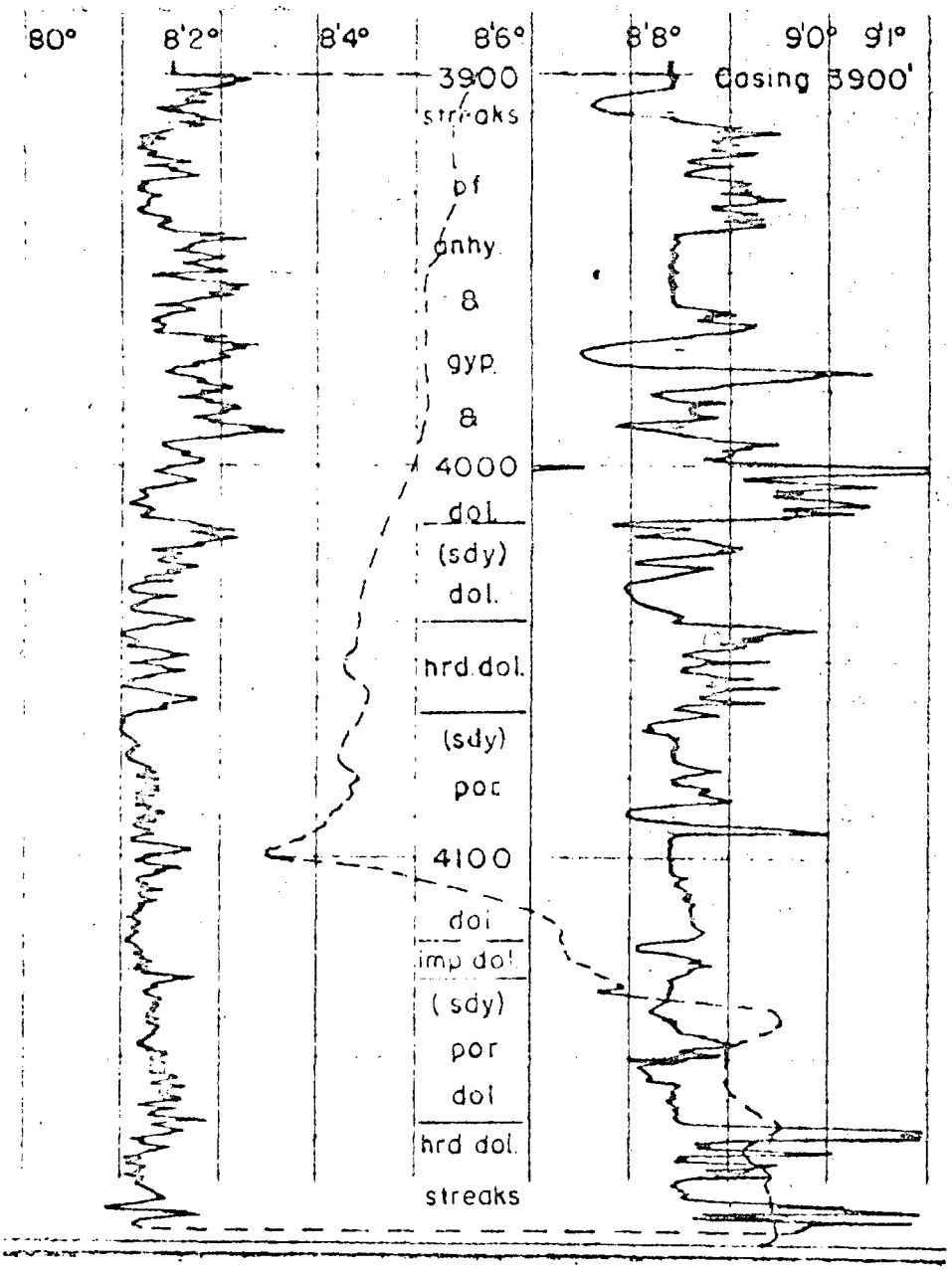
Halliburton
PATENTED PROCESS
Oil Well Cementing Co.

WELL LOG

Company JOHNEY COCKBURN
Well MILLER # B-5.
Field Millamar
County Lea State N.M.

Potential-Millivolts +720 -360

Impedance-Ohms 21 3,000 30,000 90,000 150,000



Depth Logged 4194'
Driller 4200'
TD -
Meas. 4195.5'

DETAIL LOG

WELL LOG

Company [illegible]
Well [illegible]
Field [illegible]
County [illegible] State [illegible]
Location [illegible]

Potential-Millivolts
-100

Impedance-Ohms
1970
3840

ILLEGIBLE

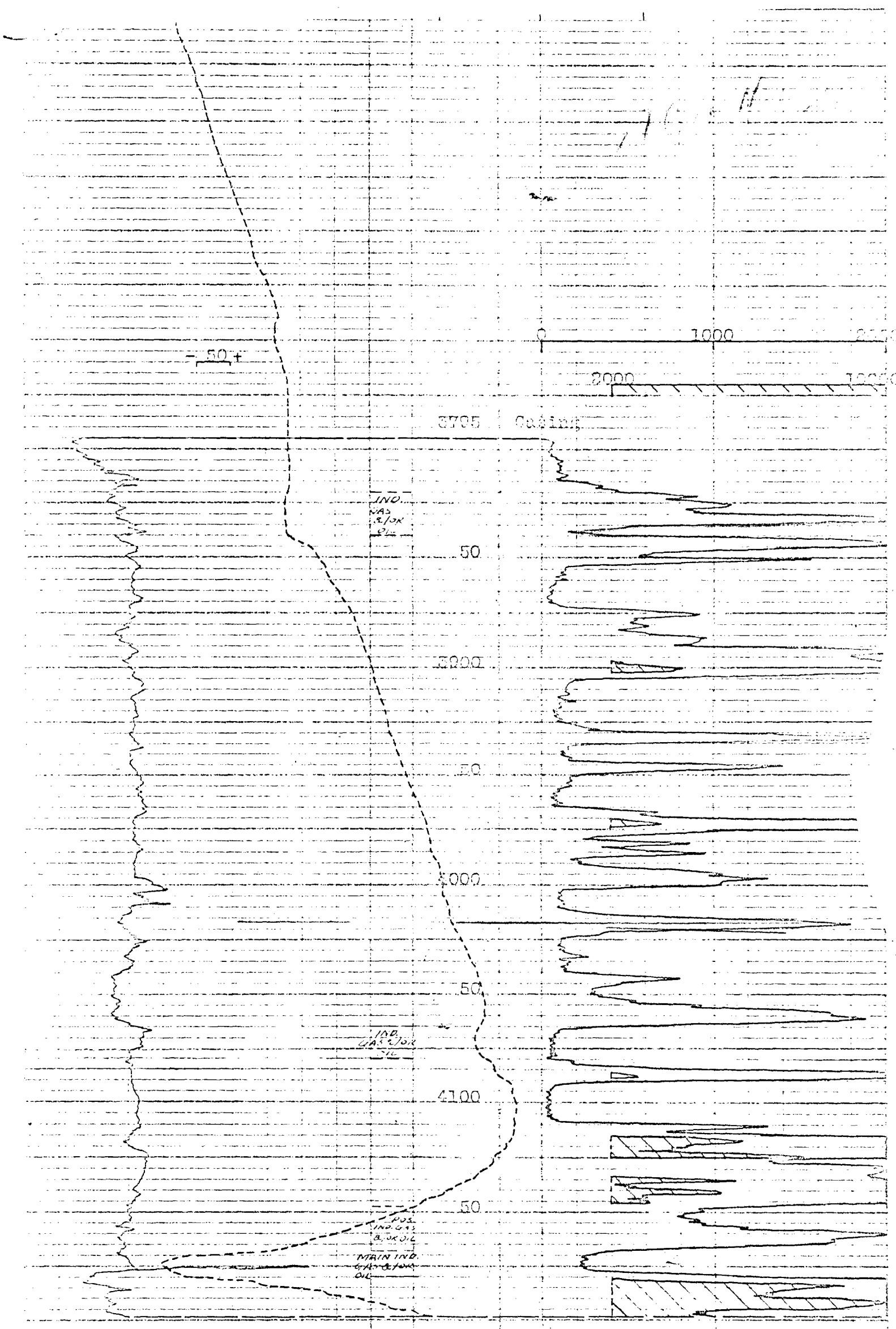
8°0 8°2 8°4

Casing 3898'

strks
of
anhy
&
4000
gyp
&
dol
4100
sdy
dol
sdy
por
4200
dol

Imp. Ohms
5 10
15 20

Depth Logged 4221'
T.D. Driller 4215'
Meas. 42225'



JOHNEY COCKBURN
MILLER #3-J
[illegible]JAMAR FIELD
LEA CO., NEW MEXICO

Halliburton
PATENTED PROCESS
Oil Well Cementing Co.

WELL LOG

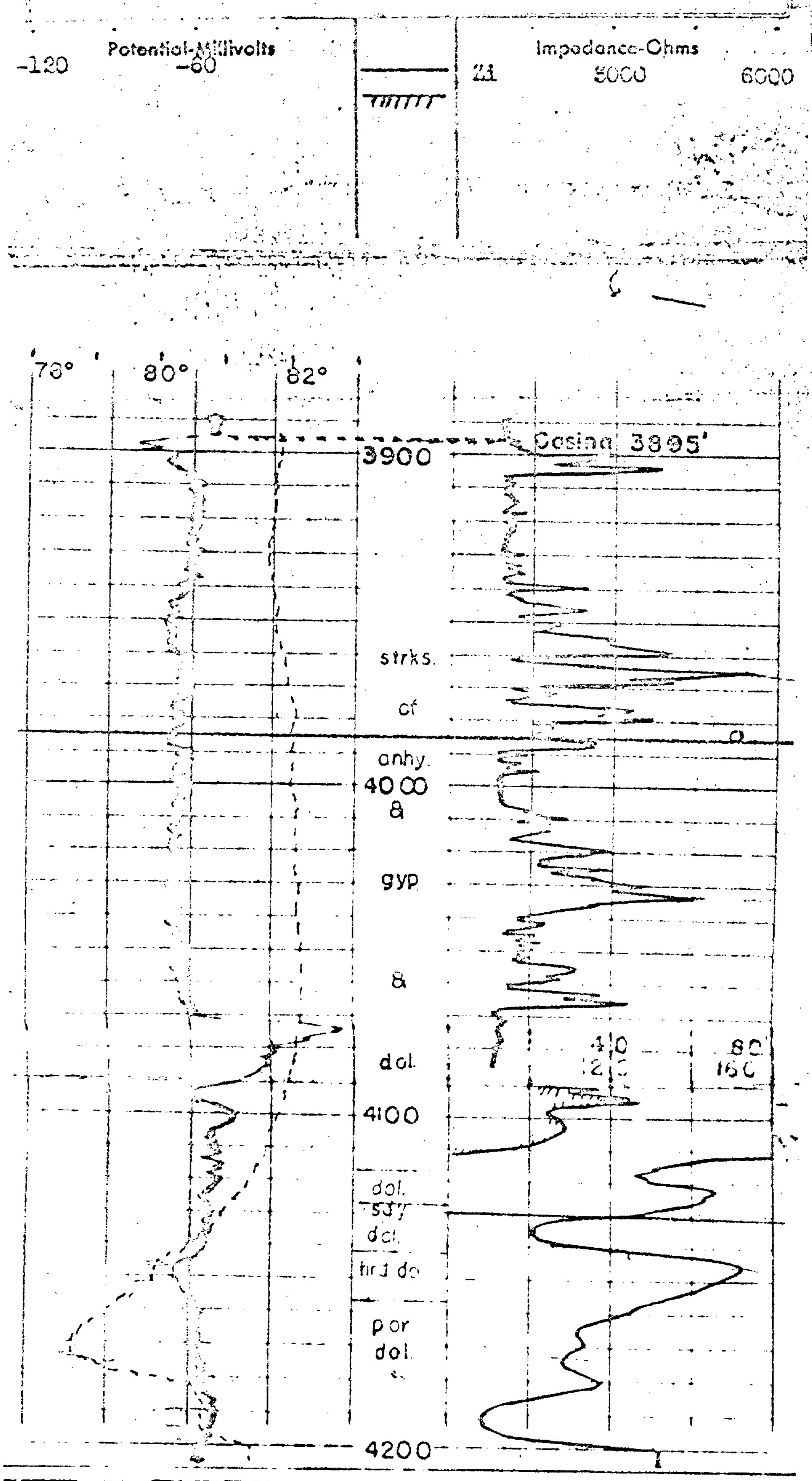
Company JOHNEY COCKBURN

Well MILLER #B 17

Field Maljamar

County Lea State New Mexico

Location C NW SW 25-17S-32E



TD Logged 4200'
TD Driller 4200'

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