Case 1217

FORM 470 2-57

PAN AMERICAN PETROLEUM CORPORATION

Roswell, New Mexico
February 18, 1957

Regular March 4 On 3/14

File: E-36-986.510.1

Subject: Application to Convert State "A" Tract 9, Well No. 13, Hobbs Field to Salt Water Disposal Well in Accordance with Rule 701 of the NMOCC Rules and Regulations.

New Mexico Oil Conservation Commission (3)
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

Pan American Petroleum Corporation hereby makes application to convert its State "A" Tract 9 No. 13 located 990' FNL and 2310' FWL Section 15, Township 19S, Range 38E, Hobbs Field, Lea County, New Mexico, to a salt water disposal well in accordance with Rule 701. The location of the proposed disposal well and of all oil and gas wells in the vicinity are shown on the attached plat of a portion of the Hobbs Field. All wells in the vicinity of the proposed disposal well are producing from the Grayburg-San Andres formation which is the Hobbs Field pay horizon.

State "A" Tract 9 No. 13 was originally completed June 28, 1930 by Midwest Refining Company. Attached is the drillers log of the well. On initial potential it produced 423 BOPD, no water from an open hole interval of 4010' to 4178'. In an effort to decrease water production and increase oil production, the well was worked over in August, 1944. This workover consisted of squeezing the open hole interval 4010' to 4178' and deepening to 4297'. Tests below a formation packer set at 4266' showed the interval 4266' to 4297' to be water bearing. The interval 4257' to 4297' was then squeezed and the well was completed in the open section 4010' - 4257'. After acidizing with 2000 gallons and 4000 gallons, it was re-potentialed for 114 barrels of oil and 40 barrels of water per day. It has declined to a current production of about 5 barrels of oil and 60 barrels of water per day.

In the conversion of the well for salt water disposal it is proposed to deepen from 4257' to approximately 4400' in the San Andres formation. In completing the disposal well, it is planned to set a liner from above the present oil string casing seat to total depth. Sufficient cement will be used to assure that the two strings are tied together. The present condition of the hole and a brief outline of the procedure to be followed in completing

the well for salt water disposal is shown on the attached well diagram. The liner will then be perforated in indicated porous zones below the oil-water contact in the San Andres and salt water will be injected through these perforations.

Pan American Petroleum Corporation further requests that this case be heard at the March 14 regular hearing of the New Mexico Oil Conservation Commission. For simplification of presentation it is requested that this case be heard in conjunction with the companion case regarding transfer of the remaining allowable of State "A" Tr. 9 No. 13.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

C. L. Kelley
District Superintendent

/dc
Attachments

STATE "A" TR. 9 NO. 13
HOBBS FIELD

Log of Well

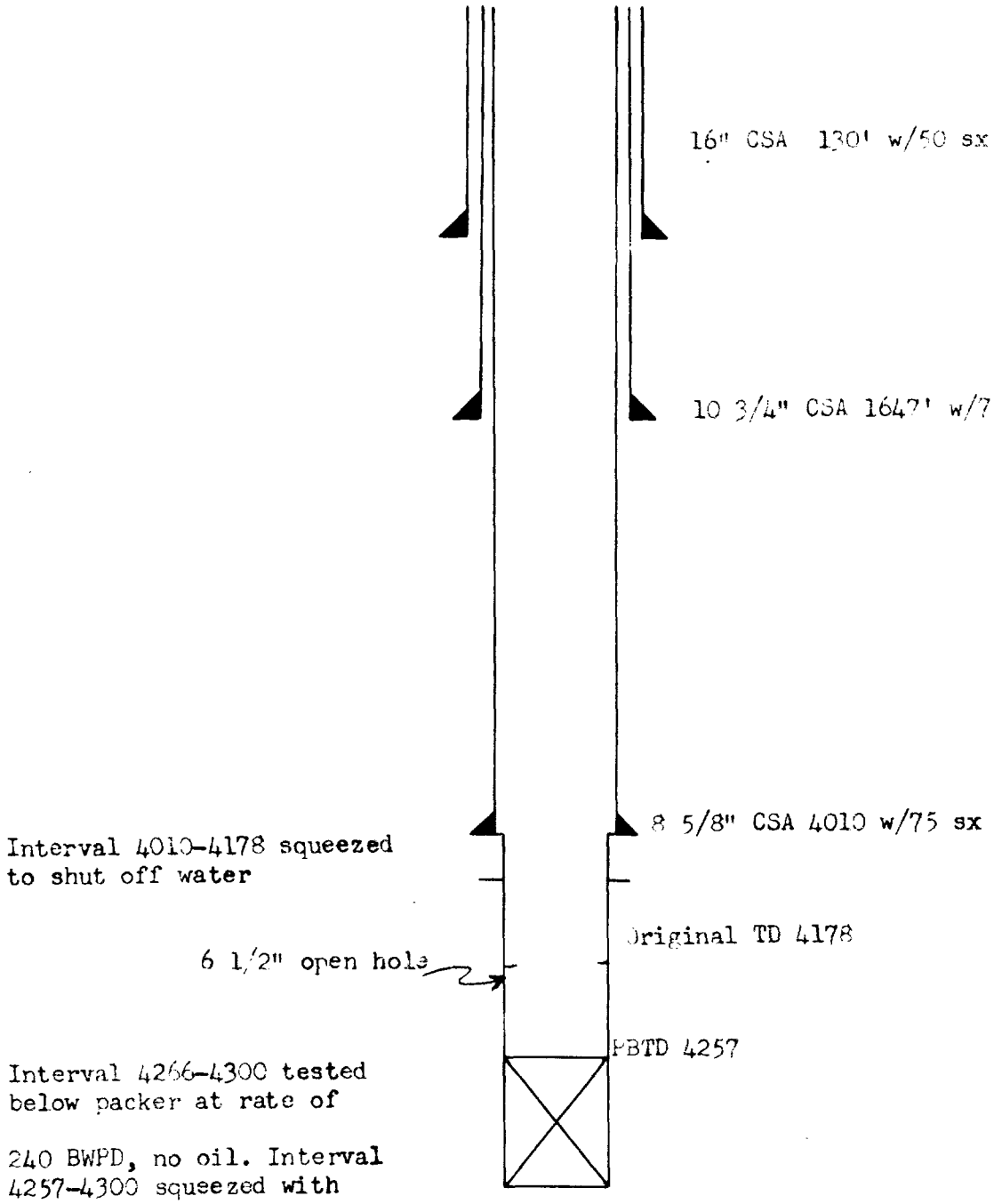
FROM	TO	THICKNESS IN FEET	FORMATION
0	45	45	Gypsum
45	120	75	Gypsum, red beds and sand
120	129	9	Sand
129	135	6	Anhydrite
135	140	5	Red Beds
140	200	60	Red shale
200	500	300	Red beds
500	599	99	Red beds and hard sand
599	955	356	Broken red rock and red shale
955	961	6	Red rock
961	1155	194	Red beds with streaks of hard sand
1155	1164	9	Red rock
1164	1266	102	Red rock and hard sand rock
1266	1275	9	Anhydrite
1275	1305	30	Hard sand
1305	1308	3	Lime
1308	1320	12	Broken red rock
1320	1360	40	Red rock and hard sand
1360	1363	3	Lime
1363	1423	60	Broken red rock
1423	1525	102	Broken red rock and red beds
1525	1533	8	Hard sand
1533	1553	20	Red rock
1553	1568	15	Hard sand
1568	1571	3	Boulders
1571	1596	25	Red rock
1596	1710	114	Anhydrite
1710	1725	15	Red beds
1725	2485	760	Salt
2485	2500	15	Anhydrite
2500	2650	150	Salt
2650	2725	75	Salt and anhydrite
2725	2780	55	Anhydrite
2780	2810	30	Red beds
2810	2835	25	Red rock
2835	2850	15	Anhydrite
2850	2880	30	Red rock
2880	2905	25	Anhydrite
2905	3230	325	Lime
3230	3235	5	Red rock
3235	3280	45	Anhydrite
3280	3345	65	Lime and anhydrite
3345	3670	325	Lime
3670	3685	15	Brown lime
3685	3760	75	Lime and anhydrite
3760	4178	418	Lime
4178	4297	119	Lime

Note: Cable tools were used from surface to 130 feet and from 1647' to 4178'. Rotary tools were used from 130' to 1647', and from 4178' to 4297'.

PRESENT CONDITION OF WELL

WELL DIAGRAM

State "A" Tr. 9 Well No. 13



PROPOSED PROCEDURE

1. Drill out to total depth of 4300, possibly deepen to 4400
2. Test zone 4266-total depth below packer
3. If only water production encountered, run water injectivity tests
4. If tests successful, run gamma ray neutron log
5. Run and cement 5 1/2" liner
6. Perforate liner as determined by logs