

PAN AMERICAN PETROLEUM CORPORATION

Box 487, Farmington, New Mexico
May 24, 1960

File: B-2180-400.1 x 986.510

Subject: Request for Exemption from
Directional Survey Requirements
O. J. Hoover "E" No. 4
Horseshoe Gallup Field

Mr. E. C. Arnold (2)
New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico

Dear Sir:

This will refer to our letter of October 7, 1959, File: B-2326-400.1 x 986.510, furnishing background information for wells drilled in the Horseshoe Gallup and Verde Gallup Fields insofar as substitution of hole deviation computations for directional surveys in determining bottom hole locations is concerned. The specific case was in regard to our J. J. Lommori "A" No. 6 in the Horseshoe Gallup Field.

Your letter of October 23, 1959, pointed out that the Commission has ruled a directional survey is unnecessary on any well which has a deviation from the vertical provided that TOTCO or other deviational surveys are made throughout the course of drilling the well, and the cumulative drift according to such deviational surveys, if assumed to be all in one direction and toward the nearest outer boundary of the proration unit on which the well is located, shows conclusively that the bottom of the hole is on the same tract as the surface location.

It is respectfully requested that Pan American Petroleum Corporation be granted similar exemption from directional survey requirements for the O. J. Hoover "E" No. 4 in the Horseshoe Gallup Field where hole deviations have exceeded the five-degree limitation averaged over a 500-foot interval. We are submitting the attached graphs and calculations for your consideration in acting on this application. You will note that the information presented conclusively demonstrates that the well is bottomed on the same proration unit as the surface location, even when computing cumulative drift to the nearest outer boundary of the tract.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

L. C. Speer, Jr.
L. C. Speer, Jr.
Area Superintendent

WWS:hh
Attach.



will file

Attachment No. 1

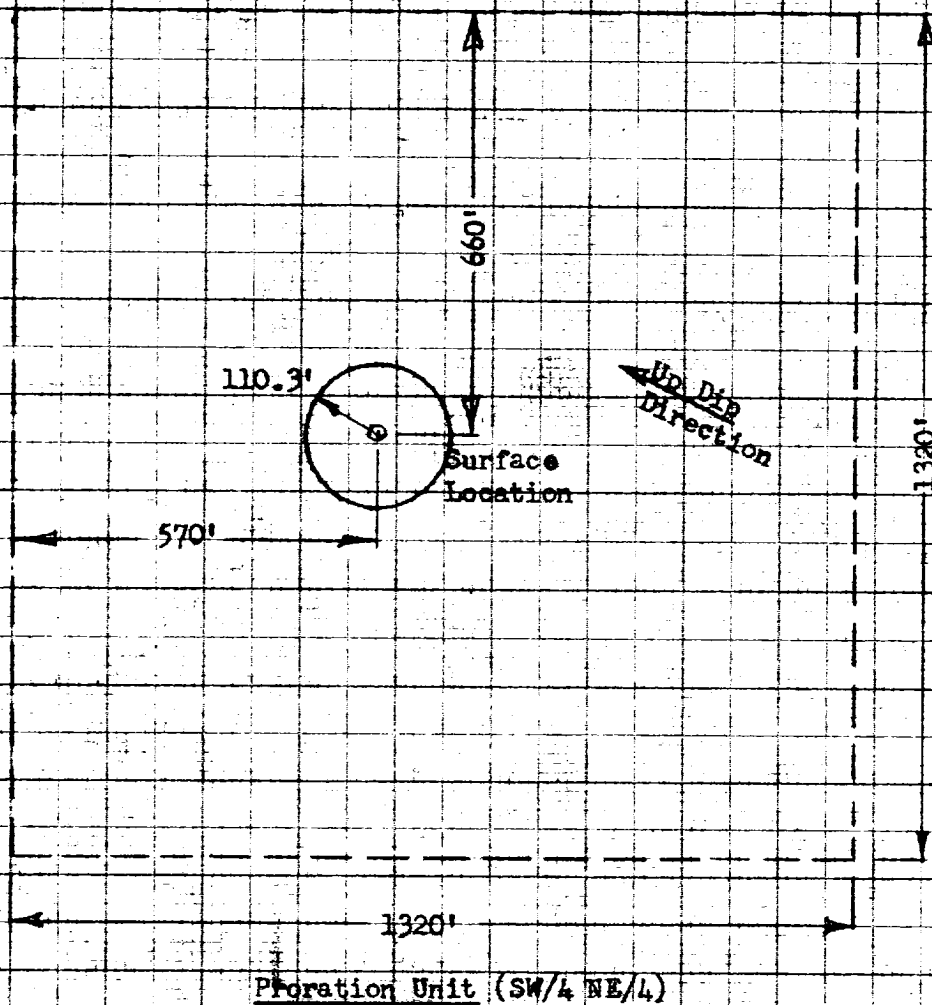
Drift Calculations Using
TOTCO Survey Readings
O. J. Hoover "E" No. 4
Horseshoe Gallup Field

<u>Depth Interval (feet)</u>	<u>Average TOTCO Hole Inclination (Degree)</u>	<u>Horizontal Drift (feet)</u>	<u>Cumulative Horizontal Drift (feet)</u>
0-100	1	1.8	1.8
100-200	1	1.8	3.6
200-300	1	1.8	5.4
300-400	1-1/2	2.4	7.8
400-500	1-1/2	2.4	10.2
500-600	2	3.5	13.7
600-700	2-1/2	4.3	18.0
700-800	3	5.2	23.2
800-900	3-1/2	6.1	29.3
900-1000	4	7.0	36.3
1000-1100	4	7.0	43.3
1100-1200	4	7.0	50.3
1200-1300	4-1/2	7.8	58.1
1300-1400	4-1/2	7.8	65.9
1400-1500	5	8.7	74.6
1500-1600	5	8.7	83.3
1600-1700	5-1/2	9.5	92.8
1700-1800	5-1/2	9.5	102.3
1800-1870	6	8.0	<u>Total</u> <u>110.3</u>

Attachment No. 2

Estimated Bottom Hole Location Using
TOTCO Survey Readings
O. J. Hoover "E" No. 4
Horseshoe Gallup Field

Surface Location: 1980 FNL & 2070 FEL Section 15, T-30-N, R-16-W,
San Juan County, New Mexico



Scale: 1" = 300'

Figure No. 1

O. J. Hoover "E" No. 4
Horseshoe Gallup Field

