

CASE 2898: Application of AMERADA
for COMPULSORY POOLING, Lea Co.,
New Mexico. (Warlick Well No. 2)

Sept Reg.

CASE No.
2898

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

August 4, 1961

Amerada Petroleum Corporation
P. O. Box 591
Midland, Texas

ATTENTION: Mr. John Cornwall RE: Operating Agreement dated
July 22, 1961, Section
19, T-21-S, R-37-E, Lea
County, New Mexico.

Dear Mr. Cornwall:

Captioned operating agreement covers only N/2 of SE/4 under which Campbell & Hedrick have a one sixteenth interest and it proposes a test well which will be quadruple completed. The Sumont zone will produce gas and it is possible that the Blinbry production will also be gas.

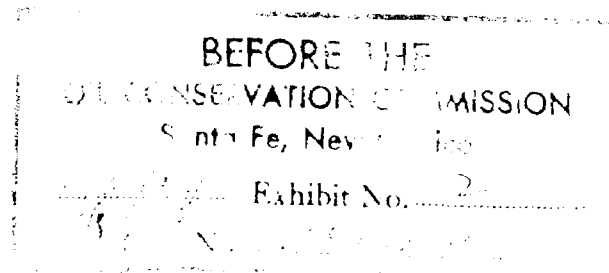
Inasmuch as a standard proration unit for gas wells in these fields exceed the eighty acres included in this operating agreement, it is possible, you may plan to dedicate additional acreage to this well. Please advise us if this is your intention.

Further if additional gas acreage is dedicated to the proposed well, in that event our interest in the zone or zones would be reduced. Please advise us the manner in which the various costs of drilling and completing the proposed test would be prorated among the various zones. We would also appreciate your sending us a copy of AFE covering the proposed test.

Very truly yours,

C. F. Hedrick, Jr.

OFH:WET



RAILROAD COMMISSION REPORTS PREPARED
LEASE APPRAISALS
EVALUATIONS

COMPLETE ENGINEERING SERVICE
BOTTOM HOLE PRESSURES
GAS-OIL RATIOS
WELL COMPLETIONS

WEST TEXAS OIL REPORTS

AND ENGINEERING SERVICE

TELEPHONE MU 4-6381 - P. O. BOX 953

401 WILKINSON-FOSTER BUILDING

MIDLAND, TEXAS

EVERETT L. SMITH
REGISTERED PROFESSIONAL ENGINEER

LAMAR ESCHBERGER
REGISTERED PROFESSIONAL ENGINEER

June 18, 1963

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

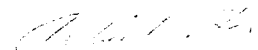
Gentlemen:

Attached are Form C-122 and back pressure curve showing the results of a 4-point back pressure test made June 14-15, 1963, on Ralph Lowe's Indian Hills Unit No. 1 discovery gas well located in unit M-21-21S-24E, Eddy County, New Mexico. Due to the exceptionally high permeability (maximum shut-in pressure was observed 15 minutes after well was shut in), the calculated working pressure draw-down for the first three data points was either too small to be plotted or slightly greater than the shut-in pressure although the flow rates ranged from 2492 MCF to 4180 MCF per day. Even the highest rate of 5774 MCF per day resulted in a draw-down of less than 4 percent.

The attached back pressure curve was constructed by drawing a straight line with a slope "n" of .500 through the plotted fourth data point. This curve indicates an absolute potential of 21,500 MCF per day which is believed to be reasonably accurate and certainly the smallest absolute potential that might be expected.

Mr. Landua discussed with Mr. Utz by phone the various problems involved in obtaining sufficient working pressure draw-down for a regular multi-point curve. Due to the absence of a pipeline connection and the extremely large volume of gas that would have to be vented in order to comply with the Commission's suggested 5 to 30 percent draw-down, it was decided to file the single point test.

Yours very truly,



Archie P. Farr
Petroleum Engineer

APF/jt

Attachments: 2

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Undesignated Formation Upper Penn County Eddy
 Initial X Annual _____ Special _____ Date of Test June 14-15, 1963
 Company Ralph Lomo Lease Indian Hills Unit Well No. 1
 Unit M Sec. 21 Twp. 21-S Rge. 24-E Purchaser Nora
 Casing 7" Wt. 26.00 I.D. 6.275 Set at 10,160 Perf. 7316 To 7332
 Tubing 2-3/8" Wt. 4.70 I.D. 1.995 Set at 7270 Perf. _____ To _____
 Gas Pay: From 7316 To 7332 L 7270 xGL .664 -GL 4827 Bar. Press. 13.2
 Producing Thru: Casing _____ Tubing X Type Well Single - Gas
 Date of Completion: June 7, 1963 Packer I. D. 6974 Reservoir Temp. 134° F
 Single-Bradenhead-G. G. or G.O. Dual

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps Flange

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						2396				15 Minutes*
1.	3.068	1.750	855	16.5	75	2359				6
2.	3.068	1.750	860	25.0	71	2343				6
3.	3.068	1.750	845	37.0	74	2295				6
4.	3.068	1.750	820	90.0	73	2097				6
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	20.45	119.69		.9859	.9721	1.078	2692
2.	20.45	117.75		.9836	.9721	1.080	3093
3.	20.45	100.63		.9858	.9721	1.077	1160
4.	20.45	277.11		.9877	.9721	1.077	5774
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 93.024 cf/bbl. Specific Gravity Separator Gas .635
 Gravity of Liquid Hydrocarbons 50.4 deg. Specific Gravity Flowing Fluid 7453
 F_c 9.935 (1-e^{-s}) .985 P_c 2802.2 P_c 5804.2

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w /P _c
1.	2045	41840.25	2692	7265.66	7135.5	2000.00	3640.25	2000.0	.9997
2.	2045	41840.25	3093	9566.49	9412.2	2000.00	41840.25	2000.0	1.0000
3.	2045	41840.25	1160	1345.60	1335.1	2000.00	2000.00	2000.0	1.0000
4.	2045	41840.25	5774	33338.28	32755.5	2000.00	36040.25	2000.0	.9997
5.									

Absolute Potential: 2045 MCFPD; n 1.0

COMPANY Indian Hills Unit

ADDRESS Indian Hills Unit, Eddy Co., N.M.

AGENT and TITLE John J. Loefer Geologist, New Mexico Oil Conservation Commission

WITNESSED

COMPANY

REMARKS

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

5-21

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w).
MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.
psia

P_w = Static wellhead working pressure as determined at the end of flow period.
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

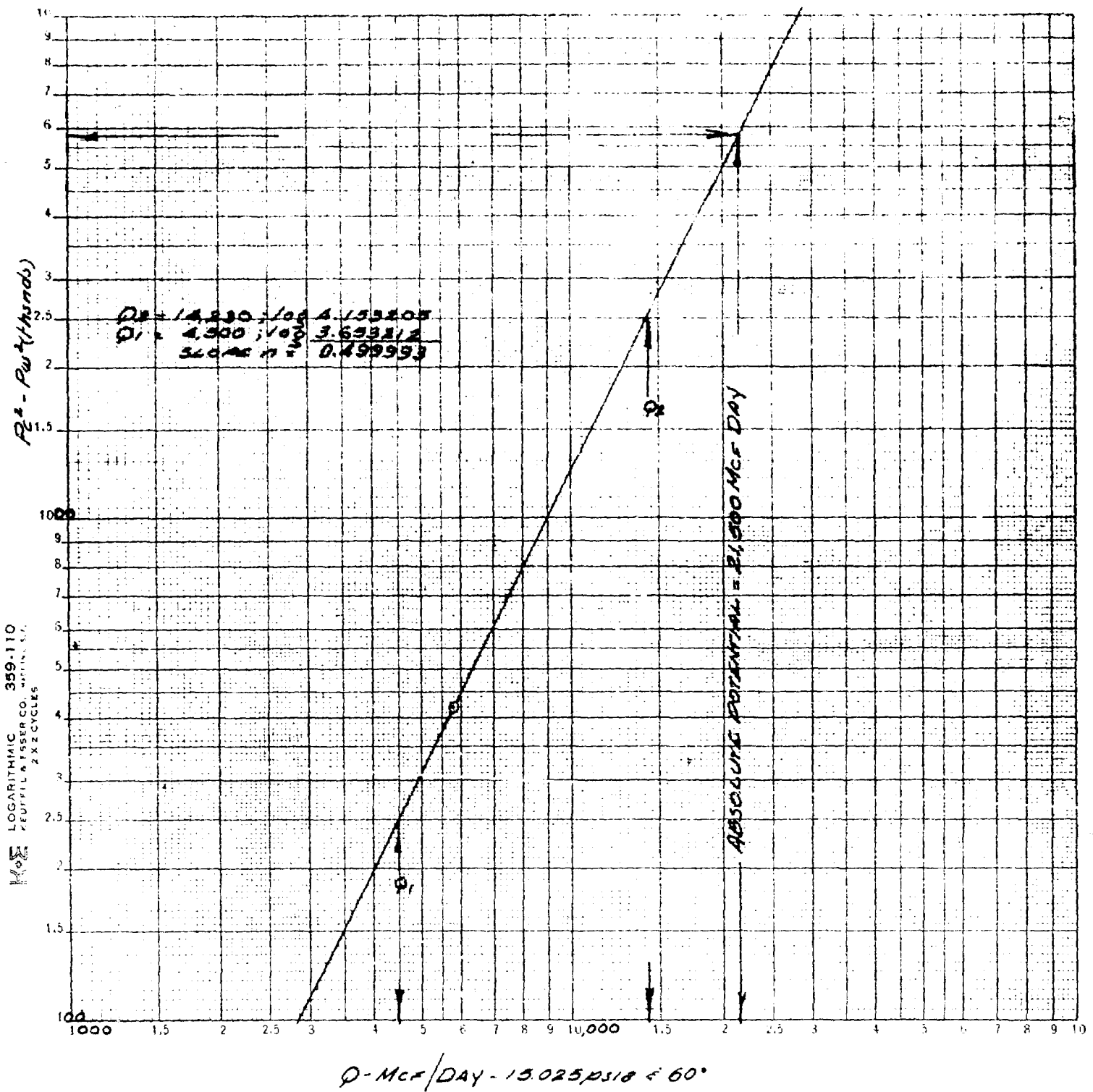
F_t = Flowing temperature correction factor.

F_{pv} = Supercompressibility factor.

n = Slope of back pressure curve.

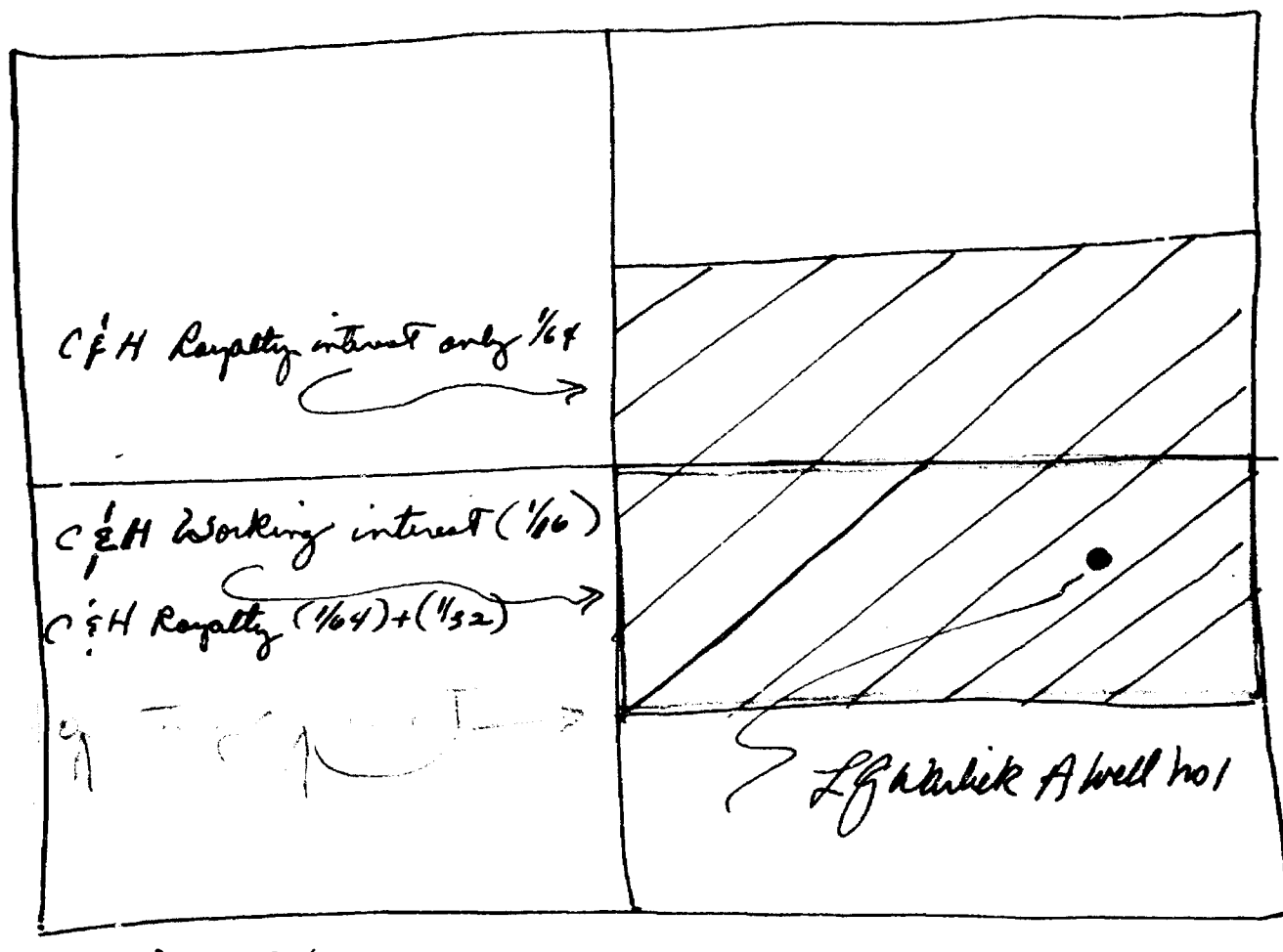
Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t .

RALPH LOWE
 INDIAN HILLS UNIT NO 1 (PENN.)
 M. 21-21-24, EDDY CO. N.M.
 A.P. = 21,500 McF/DAY
 G = 63.5; n = .575



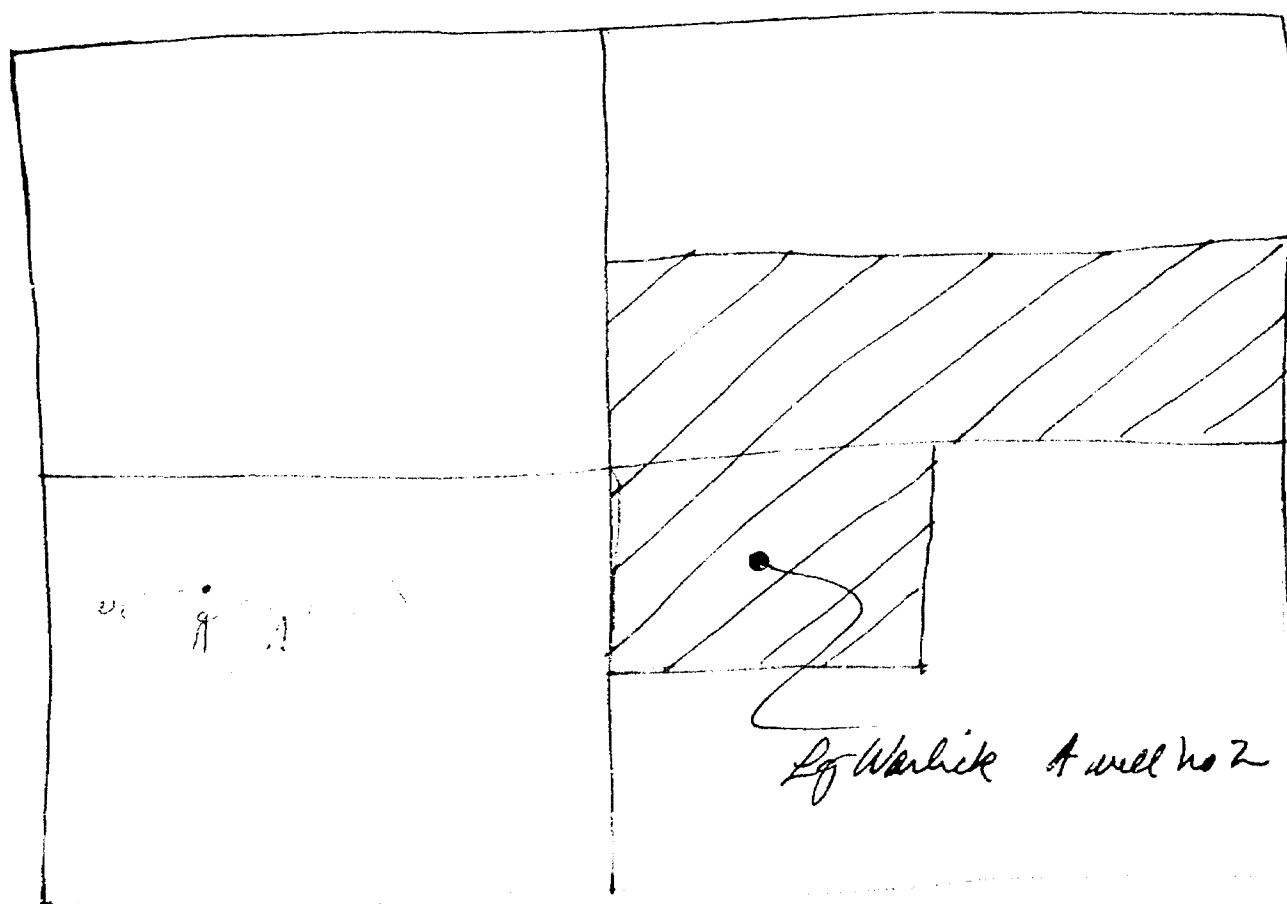
Case No 2535
 Order No N-2228
 L.G. Warlick "A" well no 1
 160 Cumont NSP

Standard = 640



Case No 2840
 Order No R-2523
 L.G. Warlick "A" well no 2
 120 Blinbury NSP

Standard = 160



DOCKET: REGULAR HEARING - WEDNESDAY - SEPTEMBER 18, 1963

OIL CONSERVATION COMMISSION - 9 A.M., MORGAN HALL, STATE LAND OFFICE BUILDING,
SANTA FE, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for October, 1963.
- (2) Consideration of the allowable production of gas for October, 1963, from ten prorated pools in Lea and Eddy Counties, New Mexico, also consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico for October, 1963.

CASE 2897: Application of Amerada Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Eumont Gas Pool underlying the S/2 NE/4 and the N/2 SE/4 of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico. Said acreage to be dedicated to applicant's Warlick "A" Well No. 1, located in Unit I of said Section 19.

CASE 2898: Application of Amerada Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Blinebry Gas Pool underlying the S/2 NE/4 and NW/4 SE/4 of Section 19, Township 21 South, Range 37 East, Lea County, New Mexico. Said acreage to be dedicated to applicant's Warlick "A" Well No. 2, located in Unit J of said Section 19.

CASE 2899: Southeastern New Mexico nomenclature case calling for an order for the creation, extension, and abolishment of certain pools in Lea and Eddy Counties, New Mexico.

(a) Create a new pool in Lea County, New Mexico, classified as an oil pool for Granite Wash production, designated as the South Brunson-Granite Wash Pool, and described as:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM
SECTION 31: SE/4

(b) Create a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production, designated as the Lovington-Pennsylvanian Pool, and described as:

TOWNSHIP 16 SOUTH, RANGE 36 EAST, NMPM
SECTION 23: SW/4

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production, designated as the Seven Rivers Hills-Morrow Gas Pool, and described as:

TOWNSHIP 21 SOUTH, RANGE 25 EAST, NMPM
SECTION 4: Lots 1, 2, 7 & 8

(d) Extend the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
SECTION 25: E/2 NE/4

(e) Extend the Indian Basin-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM
SECTION 10: ALL
SECTION 14: ALL
SECTION 15: ALL

(f) Extend the Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 23 EAST, NMPM
SECTION 10: ALL
SECTION 14: ALL
SECTION 15: ALL

(g) Extend the Jenkins-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 29: E/2 and SW/4

(h) Extend the South Lane-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM
SECTION 27: SE/4

(i) Extend the Lusk-Strawn Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
SECTION 19: SE/4

(j) Extend the Lynch-Yates Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM
SECTION 23: S/2 SW/4

(k) Abolish the Robinson-Grayburg-San Andres Pool in Lea County, New Mexico, described as:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM
SECTION 30: S/2
SECTION 31: ALL
SECTION 32: NW/4 and S/2

(l) Extend the Maljamar (Grayburg-San Andres) Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM
SECTION 30: S/2
SECTION 31: ALL
SECTION 32: ALL

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
SECTION 6: N/2

(m) Extend the Sawyer-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 38 EAST, NMPM
SECTION 6: NE/4

(n) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
SECTION 25: SE/4
SECTION 36: E/2

(o) Extend the Vacuum-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
SECTION 36: SW/4

(p) Extend the North Vacuum-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
SECTION 8: SW/4

CASE 2900:

Northwest New Mexico nomenclature case calling for the creation and extension of certain pools in San Juan and Rio Arriba Counties, New Mexico, and for the designation and redesignation of certain vertical limits.

(a) Redesignate the Rattlesnake Pennsylvanian Oil Pool, San Juan County, as the Rattlesnake Pennsylvanian "CD" Oil Pool, and define the vertical limits to be from the depth correlative to the point depicted at 6549 feet on the log of the Continental Rattlesnake Well No. 144, located in Unit P of Section 2, Township 29 North, Range 19 West, to the depth correlative to the point depicted at 6709 feet on said log.

(b) Create the Rattlesnake Pennsylvanian "B" Gas Pool in Township 29 North, Range 19 West, San Juan County, and define the vertical limits to be identical to the zone from 6402 feet to 6549 feet on the log of the above-described Continental Rattlesnake Well No. 144. Horizontal limits to be described as:

TOWNSHIP 29 NORTH, RANGE 19 WEST, NMPM
SECTION 2: S/2
SECTION 11: N/2

(c) Create the Pajarito Pennsylvanian "D" Oil Pool in Township 29 North, Range 17 West, San Juan County, and define the vertical limits to be from 7197 feet to 7251 feet on the log of the Amerada Navajo 20 Well No. 1 located in Unit D of Section 31 of said township. Horizontal limits to be described as:

TOWNSHIP 29 NORTH, RANGE 17 WEST, NMPM
SECTION 31: NW/4

(d) Create the Table Mesa-Pennsylvanian "C" Gas Pool in Township 27 North, Range 17 West, San Juan County, and define the vertical limits to be from 7182 feet to 7249 feet on the log of the Continental Table Mesa Well No. 24 located in Unit K of Section 4 of said township. Horizontal limits to be described as:

TOWNSHIP 27 NORTH, RANGE 17 WEST, NMPM
SECTION 3: W/2
SECTION 4: S/2

(e) Extend the Cha Cha-Gallup Oil Pool boundary in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 12 WEST, NMPM
SECTION 30: NE/4

(f) Extend the Many Rocks-Gallup Oil Pool boundary in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 16 WEST, NMPM
SECTION 17: S/2 NW/4

TOWNSHIP 32 NORTH, RANGE 17 WEST, NMPM
SECTION 27: SW/4 NW/4 & N/2 SW/4
SECTION 28: E/2 NE/4

(g) Extend the Simpson-Gallup Oil Pool boundary in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM
SECTION 30: NW/4

(h) Extend the Totah-Gallup Oil Pool boundary in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 12 WEST, NMPM
SECTION 17: N/2 NW/4

(i) Extend the Tapacito-Pictured Cliffs Pool boundary in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM
SECTION 5: NE/4

(j) Extend the Boulder-Mancos Oil Pool boundary in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 1 WEST, NMPM
SECTION 10: SW/4 SE/4
SECTION 14: E/2 E/2
SECTION 23: E/2 E/2
SECTION 26: W/2 SW/4, S/2 SE/4, & NE/4 SE/4
SECTION 35: N/2 NE/4

(k) Extend the Devils Fork-Gallup Pool boundary in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
SECTION 6: W/2
SECTION 7: E/2 NW/4
SECTION 8: E/2 SE/4
SECTION 9: W/2 NW/4
SECTION 10: S/2
SECTION 15: W/2 NW/4
SECTION 16: E/2 NE/4

(l) Extend the Otero-Gallup Oil Pool boundary in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 5 WEST, NMPM
SECTION 16: SW/4
SECTION 17: E/2
SECTION 21: NW/4

(m) Extend the Puerto Chiquito-Gallup Oil Pool boundary in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 27 NORTH, RANGE 1 EAST, NMPM
SECTION 17: S/2 SE/4
SECTION 19: SE/4 SE/4
SECTION 20: SW/4 SW/4, NE/4 & N/2 SE/4

BEFORE THE NEW MEXICO
OIL CONSERVATION COMMISSION

APPLICATION OF AMERADA PETROLEUM CORPORATION)
FOR THE COMPULSORY POOLING OF ALL INTERESTS)
IN THE BLINEBRY GAS UNIT COMPRISED OF THE)
S/2 NE/4 AND NW/4 SE/4 SEC. 19-21S-37E, LEA)
COUNTY, NEW MEXICO.)

Case No. 2898

APPLICATION

Applicant Amerada Petroleum Corporation states that:

1. By Commission Order No. R-2523, dated July 17, 1963, a nonstandard Blinebry gas proration unit was established comprised of the S/2 NE/4 and the NW/4 SE/4 Section 19, Township 21 South, Range 37 East, Lea County, New Mexico.
2. Applicant owns part of the working interest in such proration unit and operates the unit well, the Warlick "A" Well No. 2 located in the NW/4 SE/4 Section 19-21S-37E.
3. Applicant has been unable to effect the voluntary pooling of the working interests and the royalty interests in the subject proration unit.
4. In order to prevent waste, avoid the drilling of unnecessary wells, protect correlative rights, and afford to the owner of each interest in the proration unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas and associated hydrocarbons in the Blinebry Gas Pool, this Commission should:
 - (a) Pool all interests in the Blinebry gas proration unit comprised of the S/2 NE/4 and the NW/4 SE/4 Section 19-21S-37E, Lea County, New Mexico.
 - (b) Determine the costs of drilling, completing and operating the unit well, and allocate or charge such costs to the working interest owners on an equitable basis.
 - (c) Make such other provisions as may be just and reasonable under the circumstances.

Applicant Amerada Petroleum Corporation therefore requests that this matter be set for hearing before an examiner, that notice thereof be given as required by law, and that upon conclusion of such hearing the Commission enter an order granting this application.

AMERADA PETROLEUM CORPORATION

By Jason W. Kellahin
Jason W. Kellahin
Kellahin and Fox

By Thomas W. Lynch
Thomas W. Lynch
P. O. Box 2040
Tulsa 2, Oklahoma

DOCKET MAILED

ROUGH DRAFT
JMD/lr
Jan. 3, 1964

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

2898
CASE NO. ~~2897~~
Order No. R- *2637*

[Signature]
APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m., on September 18, 1963, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 19th day of Jan, 1964, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amerada Petroleum Corporation, seeks an order pooling all mineral interests in the ^{*Blinbury*} ~~Eumont~~ Gas Pool underlying the S/2 NE/4 and ^{*NW/4*} ~~N/2~~ SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That pursuant to the provisions of an operating agreement covering the N/2 SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, the applicant and other operators owning working interests in the N/2 SE/4 of said Section 19 drilled the L. G. Warlick "A" Well No. ^{*2*} ~~1~~ in Unit ^{*J*} ~~1~~ of said Section 19.

(4) That the L. G. Warlick "A" Well No. ^{*2*} ~~1~~ was subsequently completed in the ^{*Blinbury*} ~~Eumont~~ Gas Pool, as authorized by Order No. R-227

(5) That by order No. ^{*R-2523*} ~~R-2228~~, a ^{*120*} ~~160~~-acre non-standard gas proration unit in the ^{*Blinbury*} ~~Eumont~~ Gas Pool, consisting of the S/2 N and ^{*NW/4*} ~~N/2~~ SE/4 of said Section 19, was established and dedicate the L. G. Warlick "A" Well No. ^{*2*} ~~1~~.

-2- ²⁸⁹⁸
Case No. 2897
Order No. R-

(6) That the owners in the subject area have not agreed to pool their interests to form the ¹²⁰~~160~~-acre unit.

(7) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said proration unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas in the ^{Blumby}~~Sunset~~ Gas Pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit.

(8) That based upon a ¹²⁰~~160~~-acre proration unit, Campbell & Hedrick advanced ^{\$1289.31}~~\$828.00~~ more than their pro rata share of the cost of drilling and completing the L. G. Warlick "A" Well No. 2, that Amerada Petroleum Corporation elected not to pay ^{\$1289.31}~~its~~ proportionate share of the ^{\$1289.31}~~\$828.00~~ ^{Cost} in advance, and that it is just and reasonable to require Amerada Petroleum Corporation to ^{pay}~~refund~~ to Campbell & Hedrick the sum of ^{\$1289.31}~~\$828.00~~, plus 50% thereof as a charge for the risk involved in the drilling of the well.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, in the ^{Blumby}~~Sunset~~ Gas Pool, underlying the S/2 NE/4 and ^{NW/4}~~SE/4~~ of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, are hereby pooled to form a non-standard ¹²⁰~~160~~-acre gas proration unit to be dedicated to the Warlick "A" Well No. 2 located in Unit J of said Section 19.

(2) That Amerada Petroleum Corporation is hereby designated the operator of the subject well and unit.

(3) That within 30 days following the date of this order, Amerada Petroleum Corporation shall ^{pay}~~refund~~ to Campbell & Hedrick the sum of ^{\$1933.97}~~\$1,243.32~~.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2898
Order No. R-2637

APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on September 18, 1963, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 13th day of January, 1964, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amerada Petroleum Corporation, seeks an order pooling all mineral interests in the Blinebry Gas Pool underlying the S/2 NE/4 and NW/4 SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That pursuant to the provisions of an operating agreement covering the N/2 SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, the applicant and other operators owning working interests in the N/2 SE/4 of said Section 19 drilled the L. G. Warlick "A" Well No. 2 in Unit J of said Section.

(4) That the L. G. Warlick "A" Well No. 2 was subsequently completed in the Blinebry Gas Pool.

(5) That by Order No. R-2523, a 120-acre non-standard gas proration unit in the Blinebry Gas Pool, consisting of the S/2 NE/4 and NW/4 SE/4 of said Section 19, was established and dedicated to the L. G. Warlick "A" Well No. 2.

(6) That the owners in the subject area have not agreed to pool their interests to form the 120-acre unit.

-2-

CASE No. 2898
Order No. R-2637

(7) That to avoid the drilling of unnecessary wells, to protect correlative rights, and to afford to the owner of each interest in said proration unit the opportunity to recover or receive without unnecessary expense his just and fair share of the gas in the Blinebry Gas Pool, the subject application should be approved by pooling all mineral interests, whatever they may be, within said unit.

(8) That based upon a 120-acre proration unit, Campbell & Hedrick advanced \$1289.31 more than their pro rata share of the cost of drilling and completing the L. G. Warlick "A" Well No. 2; that Amerada Petroleum Corporation elected not to pay \$1289.31 of its proportionate share of the costs in advance; and that it is just and reasonable to require Amerada Petroleum Corporation to pay Campbell & Hedrick the sum of \$1289.31, plus 50% thereof as a charge for the risk involved in the drilling of the well.

IT IS THEREFORE ORDERED:

(1) That all mineral interests, whatever they may be, in the Blinebry Gas Pool, underlying the S/2 NE/4 and NW/4 SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, are hereby pooled to form a non-standard 120-acre gas proration unit to be dedicated to the L. G. Warlick "A" Well No. 2, located in Unit J of said Section 19.

(2) That Amerada Petroleum Corporation is hereby designated the operator of the subject well and unit.

(3) That within 30 days following the date of this order, Amerada Petroleum Corporation shall pay to Campbell & Hedrick the sum of \$1933.97.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

csr/

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

January 13, 1964

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Box 1713
Santa Fe, New Mexico

Re: Case No. 2897
 & 2898
Order No. R-2636 & R-2637
Applicant:
AMERADA PETROLEUM CORPORATION

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Commission order recently entered in the subject case.

Very truly yours,

A handwritten signature in cursive script that reads "A. L. Porter, Jr.".

A. L. PORTER, Jr.
Secretary-Director

ix/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Antec OCC

OTHER Mr. Richard Morris

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2840
Order No. R-2523

APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR A NON-STANDARD
GAS PRORATION UNIT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 26, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 17th day of July, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Amerada Petroleum Corporation, seeks approval of a 120-acre non-standard gas proration unit comprising the S/2 NE/4 and NW/4 SE/4 of Section 19, Township 21 South, Range 37 East, NMPM, Blinbry Gas Pool, Lea County, New Mexico, for its L. G. Warlick "A" Well No. 2 located in Unit J of said Section 19.

(3) That although the proposed non-standard gas proration unit does not lie wholly within a single governmental quarter section and therefore is not eligible for administrative approval, it consists of less acreage than a standard proration unit, consists of contiguous quarter-quarter sections or lots, and the entire unit may reasonably be presumed to be productive of gas from the Blinbry Gas Pool.

(4) That approval of the subject application will prevent waste and protect correlative rights.

#1357

MODEL FORM OPERATING AGREEMENT-1956
Non-Federal Lands

OPERATING AGREEMENT

DATED

July 22, 19⁶¹

FOR UNIT AREA IN TOWNSHIP 21 South, RANGE 37 East
Lea COUNTY, STATE OF New Mexico

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Campbell & Hedrick Exhibit 1
Case No. 2897 - 2898

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OPERATING AGREEMENT

Note
THIS AGREEMENT, entered into this 22nd day of July, 1961, between
AMERADA PETROLEUM CORPORATION

hereafter designated as "Operator", and the signatory parties other than Operator.

WITNESSETH, THAT:

WHEREAS, the parties to this agreement are owners of oil and gas leases covering and, if so indicated, unleased mineral interests in the tracts of land described in Exhibit "A", and all parties have reached an agreement to explore and develop these leases and interests for oil and gas to the extent and as hereinafter provided;

NOW, THEREFORE, it is agreed as follows:

1. DEFINITIONS

As used in this agreement, the following words and terms shall have the meanings here ascribed to them.

- (1) The words "party" and "parties" shall always mean a party, or parties, to this agreement.
- (2) The parties to this agreement shall always be referred to as "it" or "they", whether the parties be corporate bodies, partnerships, associations, or persons real.
- (3) The term "oil and gas" shall include oil, gas, casinghead gas, gas condensate, and all other liquid or gaseous hydrocarbons, unless an intent to limit the inclusiveness of this term is specifically stated.
- (4) The term "oil and gas interests" shall mean unleased fee and mineral interests in tracts of land lying within the Unit Area which are owned by parties to this agreement.
- (5) The term "Unit Area" shall refer to and include all of the lands, oil and gas leasehold interests and oil and gas interests intended to be developed and operated for oil and gas purposes under this agreement. Such lands, oil and gas leasehold interests and oil and gas interests are described in Exhibit "A".
- (6) The term "drilling unit" shall mean the area fixed for the drilling of one well by order or rule of any state or federal body having authority. If a drilling unit is not fixed by any such rule or order, a drilling unit shall be the drilling unit as established by the pattern of drilling in the Unit Area or as fixed by express agreement of the parties.
- (7) All exhibits attached to this agreement are made a part of the contract as fully as though copied in full in the contract.
- (8) The words "equipment" and "materials" as used here are synonymous and shall mean and include all oil field supplies and personal property acquired for use in the Unit Area.

2. TITLE EXAMINATION, LOSS OF LEASES AND OIL AND GAS INTERESTS

A. Title Examination:

There shall be no examination of title to leases, or to oil and gas interests, except that title to the drilling unit on which the exploratory well is to be drilled in accordance with Section 7, which drilling unit is more particularly described in Exhibit "A", shall be examined on a complete abstract record by Operator's attorney, or, if the location is on one of Operator's leases, by an attorney for one of the other parties, and the title to both the oil and gas lease and to the fee title of the lessors must be approved by the examining attorney, or accepted by all parties. A copy of the examining attorney's opinion shall be sent to each party immediately after the opinion is written, and, also, each party shall be given, as they are written, a copy of all subsequent supplemental attorney's reports. A good faith effort to satisfy the examining attorney's requirements shall be made by the party owning the lease covering the drillsite.

If title to the proposed drillsite is not approved by the examining attorney or the lease is not acceptable for a material reason, and all the parties do not accept the title, the parties shall select a new drillsite for the first exploratory well; provided, if the parties are unable to agree upon another drillsite, this agreement shall, in that case, come to an end and all parties shall then forfeit their rights and be relieved of obligations hereunder. If a new drillsite is selected, title to the oil and gas lease covering it and to the fee title of the lessor shall be examined, and title shall be approved or accepted or rejected in like manner as provided above concerning the drillsite first selected. If title to the oil and gas lease covering the second choice drillsite is not approved or accepted, other drillsites shall be successively selected and title examined, until a drillsite is chosen

to which title is approved or accepted, or until the parties fail to select another drillsite. As in the case of the drillsite first selected, so also with successive choices if the time comes that the parties have not approved title and are unable to agree upon an alternate drillsite, the contract shall, in that case and at that time, come to an end and all parties shall forfeit their rights and be relieved of obligations under this contract.

No well other than the first test shall be drilled in the Unit Area until after (1) the title to the drilling unit has been examined by an attorney for one of the parties other than the party whose lease embraces the drillsite, and (2) the title has been approved by the examining attorney or the title has been accepted by all of the parties who are to participate in the drilling of the well.

B. Failure of Title:

Should any oil and gas lease, or interest therein, be lost through failure of title, this agreement shall, nevertheless, continue in force as to all remaining leases and interests, and

- (1) The party whose lease or interest is affected by the title failure shall bear alone the entire loss and it shall not be entitled to recover from Operator or the other parties any development or operating costs which it may have theretofore paid, but there shall be no monetary liability on its part to the other parties hereto by reason of such title failure; and
- (2) There shall be no retroactive adjustment of expenses incurred or revenues received from the operation of the interest which has been lost, but the interests of the parties shall be revised on an acreage basis, as of the time it is determined finally that title failure has occurred, so that the interest of the party whose lease or interest is affected by the title failure will thereafter be reduced in the Unit Area by the amount of the interest lost; and
- (3) If the proportionate interests of the other parties hereto in any producing well theretofore drilled on the Unit Area is increased by reason of the title failure, the party whose title has failed shall receive the proceeds attributable to the increase in such interests (less operating costs attributable thereto) until it has been reimbursed for unrecovered costs paid by it in connection with such well; and
- (4) Should any person not a party to this agreement, who is determined to be the owner of any interest in the title which has failed, pay in any manner any part of the cost of operation, development, or equipment, previously paid under this agreement, such amount shall be proportionately paid to the party or parties hereto who in the first instance paid the costs which are so refunded; and
- (5) Any liability to account to a third party for prior production of oil and gas which arises by reason of title failure shall be borne by the parties in the same proportions in which they shared in such prior production.

C. Loss of Leases for Causes Other Than Title Failure:

If any lease or interest subject to this agreement be lost through failure to develop or because express or implied covenants have not been performed, or if any lease be permitted to expire at the end of its primary term and not be renewed or extended, or if any lease or interest therein is lost due to the fact that the production therefrom is shut in by reason of lack of market, the loss shall not be considered a failure of title and all such losses shall be joint losses and shall be borne by all parties in proportion to their interests and there shall be no readjustment of interests in the Unit Area.

3. UNLEASED OIL AND GAS INTERESTS

If any party owns an unleased oil and gas interest in the Unit Area, that interest shall be treated for the purpose of this agreement as if it were a leased interest under the form of oil and gas lease attached as "Exhibit B" and for the primary term therein stated. As to such interests, the owner shall receive royalty on production as prescribed in the form of oil and gas lease attached hereto as Exhibit "B". Such party shall, however, be subject to all of the provisions of this agreement relating to lessees, to the extent that it owns the lessee interest.

4. INTERESTS OF PARTIES

Exhibit "A" lists all of the parties, and their respective percentage or fractional interests under this agreement. Unless changed by other provisions, all costs and liabilities incurred in operations under this contract shall be borne and paid, and all equipment and material acquired in operations on the Unit Area shall be owned, by the parties as their interests are given in Exhibit "A". All production of oil and gas from the Unit Area, subject to the payment of lessor's royalties, shall also be owned by the parties in the same manner.

If any oil and gas lease covered by this agreement is subject to an overriding royalty, production payment, or other charge over and above the usual one-eighth ($\frac{1}{8}$) royalty, the party contributing that lease shall assume and alone bear all such excess obligations and shall account for them to the owners thereof out of its share of the working interest production of the Unit Area.

5. OPERATOR OF UNIT

AMERADA PETROLEUM CORPORATION shall be the Operator of the Unit Area, and shall conduct and direct and have full control of all operations on the Unit Area as permitted and required by, and within the limits of, this agreement. It shall conduct all such operations in a good and workmanlike manner, but it shall have no liability as Operator to the other parties for losses sustained, or liabilities incurred, except such as may result from gross negligence or from breach of the provisions of this agreement.

6. EMPLOYEES

The number of employees and their selection, and the hours of labor and the compensation for services performed, shall be determined by Operator. All employees shall be the employees of Operator.

7. TEST WELL

On or before the 20th day of September, 1961, Operator shall commence the drilling of a well for oil and gas in the following location:

1980 feet North of the South line and
660 feet West of the East line of
Section 19-21S-37E, Lea County,
New Mexico

and shall thereafter continue the drilling of the well with due diligence to

A depth sufficient to thoroughly test the
Drinkard Formation at an approximate
subsurface depth of 6,700 feet,

unless granite or other practically impenetrable substance is encountered at a lesser depth or unless all parties agree to complete the well at a lesser depth.

Operator shall make reasonable tests of all formations encountered during drilling which give indication of containing oil and gas in quantities sufficient to test, unless this agreement shall be limited in its application to a specific formation or formations, in which event Operator shall be required to test only the formation or formations to which this agreement may apply.

If in Operator's judgment the well will not produce oil or gas in paying quantities, and it wishes to plug and abandon the test as a dry hole, it shall first secure the consent of all parties to the plugging, and the well shall then be plugged and abandoned as promptly as possible.

8. COSTS AND EXPENSES

Except as herein otherwise specifically provided, Operator shall promptly pay and discharge all costs and expenses incurred in the development and operation of the Unit Area pursuant to this agreement and shall charge each of the parties hereto with their respective proportionate shares upon the cost and expense basis provided in the Accounting Procedure attached hereto and marked Exhibit "C". If any provision of Exhibit "C" should be inconsistent with any provision contained in the body of this agreement, the provisions in the body of this agreement shall prevail.

Operator, at its election, shall have the right from time to time to demand and receive from the other parties payment in advance of their respective shares of the estimated amount of the costs to be incurred in operations hereunder during the next succeeding month, which right may be exercised only by submission to each such party of an itemized statement of such estimated costs, together with an invoice for its share thereof. Each such statement and invoice for the payment in advance of estimated costs shall be submitted on or before the 20th day of the next preceding month. Each party shall pay to Operator its proportionate share of such estimate within fifteen (15) days after such estimate and invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest at the rate of six percent (6%) per annum until paid. Proper adjustment shall be made monthly between advances and actual cost, to the end that each party shall bear and pay its proportionate share of actual costs incurred, and no more.

9. OPERATOR'S LIEN

Operator is given a first and preferred lien on the interest of each party covered by this contract, and in each party's interest in oil and gas produced and the proceeds thereof, and upon each party's interest in material and equipment, to secure the payment of all sums due from each such party to Operator.

In the event any party fails to pay any amount owing by it to Operator as its share of such costs and expense or such advance estimate within the time limited for payment thereof, Operator, without prejudice to other existing remedies, is authorized, at its election, to collect from the purchaser or purchasers of oil or gas, the proceeds accruing to the working interest or interests in the Unit Area of the delinquent party up to the amount owing by such party, and each purchaser of oil or gas is authorized to rely upon Operator's statement as to the amount owing by such party.

In the event of the neglect or failure of any non-operating party to promptly pay its proportionate part of the cost and expense of development and operation when due, the other non-operating parties and Operator, within thirty (30) days after the rendition of statements therefor by Operator, shall proportionately contribute to the payment of such delinquent indebtedness and the non-operating parties so contributing shall be entitled to the same lien rights as are granted to Operator in this section. Upon the payment by such delinquent or defaulting party to Operator of any amount or amounts on such delinquent indebtedness, or upon any recovery on behalf of the non-operating parties under the lien conferred above, the amount or amounts so paid or recovered shall be distributed and paid by Operator to the other non-operating parties and Operator proportionately in accordance with the contributions theretofore made by them.

10. TERM OF AGREEMENT

This agreement shall remain in full force and effect for as long as any of the oil and gas leases subjected to this agreement remain or are continued in force as to any part of the Unit Area, whether by production, extension, renewal or otherwise; provided, however, that in the event the first well drilled hereunder results in a dry hole and no other well is producing oil or gas in paying quantities from the Unit Area, then at the end of ninety (90) days after abandonment of the first test well, this agreement shall terminate unless one or more of the parties are then engaged in drilling a well or wells pursuant to Section 12 hereof, or all parties have agreed to drill an additional well or wells under this agreement, in which event this agreement shall continue in force until such well or wells shall have been drilled and completed. If production results therefrom this agreement shall continue in force thereafter as if said first test well had been productive in paying quantities, but if production in paying quantities does not result therefrom this agreement shall terminate at the end of ninety (90) days after abandonment of such well or wells. It is agreed, however, that the termination of this agreement shall not relieve any party hereto from any liability which has accrued or attached prior to the date of such termination.

11. LIMITATION ON EXPENDITURES

Without the consent of all parties: (a) No well shall be drilled on the Unit Area except any well expressly provided for in this agreement and except any well drilled pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the drilling of a well shall include consent to all necessary expenditures in the drilling, testing, completing, and equipping of the well, including necessary tankage; (b) No well shall be reworked, plugged back or deepened except a well reworked, plugged back or deepened pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the reworking, plugging back or deepening of a well shall include consent to all necessary expenditures in conducting such operations and completing and equipping of said well to produce, including necessary tankage; (c) Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of Five Thousand and No/100 ----- Dollars (\$ 5,000.00) except in connection with a well the drilling, reworking, deepening, or plugging back of which has been previously authorized by or pursuant to this agreement; provided, however, that in case of explosion, fire, flood, or other sudden emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion are required to deal with the emergency and to safeguard life and property, but Operator shall, as promptly as possible, report the emergency to the other parties. Operator shall, upon request, furnish copies of its "Authority for Expenditures" for any single project costing in excess of \$ 1,000.00.

12. OPERATIONS BY LESS THAN ALL PARTIES

If all the parties cannot mutually agree upon the drilling of any well on the Unit Area other than the test well provided for in Section 7, or upon the reworking, deepening or plugging back of a dry hole drilled at the joint expense of all parties or a well jointly owned by all the parties and not then producing in paying quantities on the Unit Area, any party or parties wishing to drill, rework, deepen or plug back such a well may give the other parties written notice of the proposed operation, specifying the work to be performed, the location, proposed depth, objective formation and the estimated cost of the operation. The parties receiving such a notice shall have thirty (30) days (except as to reworking, plugging back or drilling deeper, where a drilling rig is on location, the period shall be limited to forty-eight (48) hours exclusive of Saturday or Sunday) after receipt of the notice within which to notify the parties wishing to do the work whether they elect to participate in the cost of the proposed operation. Failure of a party receiving such a notice to so reply to it within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.

If any party receiving such a notice elects not to participate in the proposed operation (such party or parties being hereafter referred to as "Non-Consenting Party"), then in order to be entitled to the benefits of this section, the party or parties giving the notice and such other parties as shall elect to participate in the operation (all such parties being hereafter referred to as the "Consenting Parties") shall, within thirty (30) days after the expiration of the notice period of thirty (30) days (or as promptly as possible after the expiration of the 48-hour period where the drilling rig is on location, as the case may be) actually commence work on the proposed operation and complete it with due diligence.

The entire cost and risk of conducting such operations shall be borne by the Consenting Parties in the proportions that their respective interests as shown in Exhibit "A" bear to the total interests of all Consenting Parties. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results in a dry hole, the Consenting Parties shall plug and abandon the well at their sole cost, risk and expense. If any well drilled, reworked, deepened or plugged back under the provisions of this section results in a producer of oil and/or gas in paying quantities, the Consenting Parties shall complete and equip the well to produce at their sole cost and risk, and the well shall then be turned over to Operator and shall be operated by it at the expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, reworking, deepening or plugging back of any such well by Consenting Parties in accordance with the provisions of this section, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-Consenting Party's interest in the well, its leasehold operating rights, and share of production therefrom until the proceeds or market value thereof (after deducting production taxes, royalty, overriding royalty and other interests payable out of or measured by the production from such well accruing with respect to such interest until it reverts) shall equal the total of the following:

- (A) 100% of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead connections (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus 100% of each such Non-Consenting Party's share of the cost of operation of the well commencing with first production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other provisions of this section, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that interest which would have been chargeable to each Non-Consenting Party had it participated in the well from the beginning of the operation; and
- (B) 200% of that portion of the costs and expenses of drilling, reworking, deepening or plugging back, testing and completing, after deducting any cash contributions received under Section 24, and 200% of that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections), which would have been chargeable to such Non-Consenting Party if it had participated therein.

In the case of any reworking, plugging back or deeper drilling operation, the Consenting Parties shall be permitted to use, free of cost, all casing, tubing and other equipment in the well, but the ownership of all such equipment shall remain unchanged; and upon abandonment of a well after such reworking, plugging back or deeper drilling, the Consenting Parties shall account for all such equipment to the owners thereof, with each party receiving its proportionate part in kind or in value.

Within sixty (60) days after the completion of any operation under this section, the party conducting the operations for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to the well, and an itemized statement of the cost of drilling, deepening, plugging back, testing, completing, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement of such costs of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the Consenting Parties are being reimbursed as provided above, the Consenting Parties shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of the well, together with a statement of the quantity of oil and gas produced from it and the amount of proceeds realized from the sale of the well's working interest production during the preceding month. Any amount realized from the sale or other disposition of equipment newly acquired in connection with any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited against the total unreturned costs of the work done and of the equipment purchased, in determining when the interest of such Non-Consenting Party shall revert to it as above provided; if there is a credit balance it shall be paid to such Non-Consenting Party.

If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it and from and after such reversion such Non-Consenting Party shall own the same interest in such well, the operating rights and working interest therein, the material and equipment in or pertaining thereto, and the production therefrom as such Non-Consenting Party would have owned had it participated in the drilling, reworking, deepening or plugging back of said well. Thereafter, such Non-Consenting Party shall be charged with and shall pay its proportionate part of the further costs of the operation of said well in accordance with the terms of this agreement and the accounting procedure schedule, Exhibit "C", attached hereto.

Notwithstanding the provisions of this Section 12, it is agreed that without the mutual consent of all parties, no wells shall be completed in or produced from a source of supply from which a well located elsewhere on the Unit Area is producing, unless such well conforms to the then-existing well spacing pattern for such source of supply.

The provisions of this section shall have no application whatsoever to the drilling of the initial test well on the Unit Area, but shall apply to the reworking, deepening, or plugging back of the initial test well after it has been drilled to the depth specified in Section 7, if it is, or thereafter shall prove to be, a dry hole or non-commercial well, and to all other wells drilled, reworked, deepened, or plugged back, or proposed to be drilled, reworked, deepened, or plugged back, upon the Unit Area subsequent to the drilling of the initial test well.

13. RIGHT TO TAKE PRODUCTION IN KIND

Each party shall take in kind or separately dispose of its proportionate share of all oil and gas produced from the Unit Area, exclusive of production which may be used in development and producing operations and in preparing and treating oil for marketing purposes and production unavoidably lost. Each party shall pay or deliver, or cause to be paid or delivered, all royalties, overriding royalties, or other payments due on its share of such production, and shall hold the other parties free from any liability therefor. Any extra expenditure incurred in the taking in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party.

Each party shall execute all division orders and contracts of sale pertaining to its interest in production from the Unit Area, and shall be entitled to receive payment direct from the purchaser or purchasers thereof for its share of all production.

In the event any party shall fail to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the oil and gas produced from the Unit Area, Operator shall have the right, subject to revocation at will by the party owning it, but not the obligation, to purchase such oil and gas or sell it to others for the time being, at not less than the market price prevailing in the area, which shall in no event be less than the price which Operator receives for its portion of the oil and gas produced from the Unit Area. Any such purchase or sale by Operator shall be subject always to the right of the owner of the production to exercise at any time its right to take in kind, or separately dispose of, its share of all oil and gas not previously delivered to a purchaser. Notwithstanding the foregoing, Operator shall not make a sale into interstate commerce of any other party's share of gas production without first giving such other party sixty (60) days notice of such intended sale.

14. ACCESS TO UNIT AREA

Each party shall have access to the Unit Area at all reasonable times, at its sole risk, to inspect or observe operations, and shall have access at reasonable times to information pertaining to the development or operation thereof, including Operator's books and records relating thereto. Operator shall, upon request, furnish each of the other parties with copies of all drilling reports, well logs, tank tables, daily gauge and run tickets and reports of stock on hand at the first of each month, and shall make available samples of any cores or cuttings taken from any well drilled on the Unit Area.

15. DRILLING CONTRACTS

All wells drilled on the Unit Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. Operator, if it so desires, may employ its own tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the field, and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by Operator under the same terms and conditions as shall be customary and usual in the field in contracts of independent contractors who are doing work of a similar nature.

16. ABANDONMENT OF WELLS

No well, other than any well which has been drilled or reworked pursuant to Section 12 hereof for which the Consenting Parties have not been fully reimbursed as therein provided, which has been completed as a producer shall be plugged and abandoned without the consent of all parties; provided, however, if all parties do not agree to the abandonment of any well, those wishing to continue its operation shall tender to each of the other parties its proportionate share of the value of the well's salvable material and equipment, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. Each abandoning party shall then assign to the non-abandoning parties, without warranty, express or implied, as to title or as to quantity, quality, or fitness for use of the equipment and material, all of its interest in the well and its equipment, together with its interest in the leasehold estate as to, but only as to, the interval or intervals of the formation or formations then open to production. The assignments so limited shall encompass the "drilling unit" upon which the well is located. The payments by, and the assignments to, the assignees shall be in a ratio based upon the relationship of their respective percentages of participation in the Unit Area to the aggregate of the percentages of participation in the Unit Area of all assignees. There shall be no readjustment of interest in the remaining portion of the Unit Area.

After the assignment, the assignors shall have no further responsibility, liability, or interest in the operation of or production from the well in the interval or intervals then open. Upon request of the assignees, Operator shall continue to operate the assigned well for the account of the non-abandoning parties at the rates and charges contemplated by this agreement, plus any additional cost and charges which may arise as the result of the separate ownership of the assigned well.

17. DELAY RENTALS AND SHUT-IN WELL PAYMENTS

Delay rentals and shut-in well payments which may be required under the terms of any lease shall be paid by the party who has subjected such lease to this agreement, at its own expense. Proof of each payment shall be given to Operator at least ten (10) days prior to the rental or shut-in well payment date. Operator shall furnish similar proof to all other parties concerning payments it makes in connection with its leases. Any party may request, and shall be entitled to receive, proper evidence of all such payments. If, through mistake or oversight, any delay rental or shut-in well payment is not paid or is erroneously paid, and as a result a lease or interest therein terminates, there shall be no monetary liability against the party who failed to make such payment. Unless the party who failed to pay a rental or shut-in well payment secures a new lease covering the same interest within ninety (90) days from the discovery of the failure to make proper payment, the interests of the parties shall be revised on an acreage basis effective as of the date of termination of the lease involved, and the party who failed to make proper payment will no longer be credited with an interest in the Unit Area on account of the ownership of the lease which has terminated. In the event the party who failed to pay the rental or the shut-in well payment shall not have been fully reimbursed, at the time of the loss, from the proceeds of the sale of oil and gas attributable to the lost interest, calculated on an acreage basis, for the development and operating costs theretofore paid on account of such interest, it shall be reimbursed for unrecovered actual costs theretofore paid by it (but not for its share of the cost of any dry hole previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

- (1) proceeds of oil and gas, less operating expenses, theretofore accrued to the credit of the lost interest, on an acreage basis, up to the amount of unrecovered costs;
- (2) proceeds, less operating expenses thereafter incurred attributable to the lost interest on an acreage basis, of that portion of oil and gas thereafter produced and marketed (excluding production from any wells thereafter drilled) which would, in the absence of such lease termination, be attributable to the lost interest on an acreage basis, up to the amount of unrecovered costs, the proceeds of said portion of the oil and gas to be contributed by the other parties in proportion to their respective interests; and
- (3) any moneys, up to the amount of unrecovered costs, that may be paid by any party who is, or becomes, the owner of the interest lost, for the privilege of participating in the Unit Area or becoming a party to this contract.

~~18. PREFERENTIAL RIGHT TO PURCHASE~~

*Paragraph 18 Stricken in entirety
MCP Inc. R.*

~~Should any party desire to sell all or any part of its interests under this contract, or its rights and interests in the Unit Area, it shall promptly give written notice to the other parties, with full information concerning its proposed sale, which shall include the name and address of the prospective purchaser (who must be ready, willing and able to purchase), the purchase price, and all other terms of the offer. The other parties shall then have an optional prior right, for a period of ten (10) days after receipt of the notice, to purchase on the same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage its interests, or to dispose of its interests by merger, reorganization, consolidation, or sale of all of its assets, or a sale or transfer of its interests to a subsidiary or parent company, or subsidiary of a parent company, or to any company in which any one party owns a majority of the stock.~~

Should a sale be made by Operator of its rights and interests, the other parties shall have the right within sixty (60) days after the date of such sale, by majority vote in interest, to select a new Operator. If a new Operator is not so selected, the transferee of the present Operator shall assume the duties of and act as Operator. In either case, the retiring Operator shall continue to serve as Operator, and discharge its duties in that capacity under this agreement, until its successor Operator is selected and begins to function, but the present Operator shall not be obligated to continue the performance of its duties for more than 120 days after the sale of its rights and interests has been completed.

19. MAINTENANCE OF UNIT OWNERSHIP

For the purpose of maintaining uniformity of ownership in the oil and gas leasehold interests covered by this contract, and notwithstanding any other provisions to the contrary, no party shall sell, encumber, transfer or make other disposition of its interest in the leases embraced within the Unit Area and in wells, equipment and production unless such disposition covers either:

- (1) the entire interest of the party in all leases and equipment and production; or
- (2) an equal undivided interest in all leases and equipment and production in the Unit Area.

Every such sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement, and shall be made without prejudice to the rights of the other parties.

If at any time the interest of any party is divided among and owned by four or more co-owners, Operator may, at its discretion, require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures, receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to bind, the co-owners of such party's interests within the scope of the operations embraced in this contract; however, all such co-owners shall enter into and execute all contracts or agreements for the disposition of their respective shares of the oil and gas produced from the Unit Area and they shall have the right to receive, separately, payment of the sale proceeds thereof.

20. RESIGNATION OF OPERATOR

Operator may resign from its duties and obligations as Operator at any time upon written notice of not less than ninety (90) days given to all other parties. In this case, all parties to this contract shall select by majority vote in interest, not in numbers, a new Operator who shall assume the responsibilities and duties, and have the rights, prescribed for Operator by this agreement. The retiring Operator shall deliver to its successor all records and information necessary to the discharge by the new Operator of its duties and obligations.

21. LIABILITY OF PARTIES

The liability of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs of developing and operating the Unit Area. Accordingly, the lien granted by each party to Operator in Section 9 is given to secure only the debts of each severally. It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other partnership or association, or to render them liable as partners.

22. RENEWAL OR EXTENSION OF LEASES

If any party secures a renewal of any oil and gas lease subject to this contract, each and all of the other parties shall be notified promptly, and shall have the right to participate in the ownership of the renewal lease by paying to the party who acquired it their several proper proportionate shares of the acquisition cost, which shall be in proportion to the interests held at that time by the parties in the Unit Area.

If some, but less than all, of the parties elect to participate in the purchase of a renewal lease, it shall be owned by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in the unit area to the aggregate of the percentages of participation in the unit area of all parties participating in the purchase of such renewal lease. Any renewal lease in which less than all the parties elect to participate shall not be subject to this agreement.

Each party who participates in the purchase of a renewal lease shall be given an assignment of its proportionate interest therein by the acquiring party.

The provisions of this section shall apply to renewal leases whether they are for the entire interest covered by the expiring lease or cover only a portion of its area or an interest therein. Any renewal lease taken before the expiration of its predecessor lease, or taken or contracted for within six (6) months after the expiration of the existing lease shall be subject to this provision; but any lease taken or contracted for more than six (6) months after the expiration of an existing lease shall not be deemed a renewal lease and shall not be subject to the provisions of this section.

The provisions in this section shall apply also and in like manner to extensions of oil and gas leases.

23. SURRENDER OF LEASES

The leases covered by this agreement, in so far as they embrace acreage in the Unit Area, shall not be surrendered in whole or in part unless all parties consent.

However, should any party desire to surrender its interest in any lease or in any portion thereof, and other parties not agree or consent, the party desiring to surrender shall assign, without express or implied warranty of title, all of its interest in such lease, or portion thereof, and any well, material and equipment which may be located thereon and any rights in production thereafter secured, to the parties not desiring to surrender it. Upon such assignment, the assigning party shall be relieved from all obligations thereafter accruing, but not theretofore accrued, with respect to the acreage assigned and the operation of any well thereon, and the assigning party shall have no further interest in the lease assigned and its equipment and production. The parties assignee shall pay to the party assignor the reasonable salvage value of the latter's interest in any wells and equipment on the assigned acreage, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. If the assignment is in favor of more than one party, the assigned interest shall be shared by the parties assignee in the proportions that the interest of each bears to the interest of all parties assignee.

Any assignment or surrender made under this provision shall not reduce or change the assignors' or surrendering parties' interest, as it was immediately before the assignment, in the balance of the Unit Area; and the acreage assigned or surrendered, and subsequent operations thereon, shall not thereafter be subject to the terms and provisions of this agreement.

24. ACREAGE OR CASH CONTRIBUTIONS

If any party receives while this agreement is in force a contribution of cash toward the drilling of a well or any other operation on the Unit Area, such contribution shall be paid to the party who conducted the drilling or other operation and shall be applied by it against the cost of such drilling or other operation. If the contribution be in the form of acreage, the party to whom the contribution is made shall promptly execute an assignment of the acreage, without warranty of title, to all parties to this agreement in proportion to their interests in the Unit Area at that time, and such acreage shall become a part of the Unit Area and be governed by all the provisions of this contract. Each party shall promptly notify all other parties of all acreage or money contributions it may obtain in support of any well or any other operation on the Unit Area.

25. PROVISION CONCERNING TAXATION

Each of the parties hereto elects, under the authority of Section 761(a) of the Internal Revenue Code of 1954, to be excluded from the application of all of the provisions of Subchapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954. If the income tax laws of the state or states in which the property covered hereby is located contain, or may hereafter contain, provisions similar to those contained in the Subchapter of the Internal Revenue Code of 1954 above referred to under which a similar election is permitted, each of the parties agrees that such election shall be exercised. Each party authorizes and directs the Operator to execute such an election or elections on its behalf and to file the election with the proper governmental office or agency. If requested by the Operator so to do, each party agrees to execute and join in such an election.

Operator shall render for ad valorem taxation all property subject to this agreement which by law should be returned for such taxes, and it shall pay all such taxes assessed thereon before they become delinquent. Operator shall bill all other parties for their proportionate share of all tax payments in the manner provided in Exhibit "C".

If any tax assessment is considered unreasonable by Operator, it may at its discretion protest such valuation within the time and manner prescribed by law, and prosecute the protest to a final determination, unless all parties agree to abandon the protest prior to final determination. When any such protested valuation shall have been finally determined, Operator shall pay the assessment for the joint account, together with interest and penalty accrued, and the total cost shall then be assessed against the parties, and be paid by them, as provided in Exhibit "C".

26. INSURANCE

At all times while operations are conducted hereunder, Operator shall comply with the Workmen's Compensation Law of the State where the operations are being conducted. Operator shall also carry or provide insurance for the benefit of the joint account of the parties as may be outlined in Exhibit "D" attached to and made a part hereof. Operator shall require all contractors engaged in work on or for the Unit Area to comply with the Workmen's Compensation Law of the State where the operations are being conducted and to maintain such other insurance as Operator may require.

In the event Automobile Public Liability Insurance is specified in said Exhibit "D", or subsequently receives the approval of the parties, no direct charge shall be made by Operator for premiums paid for such insurance for operator's fully owned automotive equipment.

27. CLAIMS AND LAWSUITS

If any party to this contract is sued on an alleged cause of action arising out of operations on the Unit Area, or on an alleged cause of action involving title to any lease or oil and gas interest subjected to this contract, it shall give prompt written notice of the suit to the Operator and all other parties.

The defense of lawsuits shall be under the general direction of a committee of lawyers representing the parties, with Operator's attorney as Chairman. Suits may be settled during litigation only with the joint consent of all parties. No charge shall be made for services performed by the staff attorneys for any of the parties, but otherwise all expenses incurred in the defense of suits, together with the amount paid to discharge any final judgment, shall be considered costs of operation and shall be charged to and paid by all parties in proportion to their then interests in the Unit Area. Attorneys, other than staff attorneys for the parties, shall be employed in lawsuits involving Unit Area operations only with the consent of all parties; if outside counsel is employed, their fees and expenses shall be considered Unit Area expense and shall be paid by Operator and charged to all of the parties in proportion to their then interests in the Unit Area. The provisions of this paragraph shall not be applied in any instance where the loss which may result from the suit is treated as an individual loss rather than a joint loss under prior provisions of this agreement, and all such suits shall be handled by and be the sole responsibility of the party or parties concerned.

Damage claims caused by and arising out of operations on the Unit Area, conducted for the joint account of all parties, shall be handled by Operator and its attorneys, the settlement of claims of this kind shall be within the discretion of Operator so long as the amount paid in settlement of any one claim does not exceed one thousand (\$1000.00) dollars and, if settled, the sums paid in settlement shall be charged as expense to and be paid by all parties in proportion to their then interests in the Unit Area.

28. FORCE MAJEURE

If any party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, other than the obligation to make money payments, that party shall give to all other parties prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The affected party shall use all possible diligence to remove the force majeure as quickly as possible.

The requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes; how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

The term "force majeure" as here employed shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental restraint, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

29. NOTICES

All notices authorized or required between the parties, and required by any of the provisions of this agreement, shall, unless otherwise specifically provided, be given in writing by United States mail or Western Union Telegram, postage or charges prepaid, and addressed to the party to whom the notice is given at the

addresses listed on Exhibit "A". The originating notice to be given under any provision hereof shall be deemed given only when received by the party to whom such notice is directed and the time for such party to give any notice in response thereto shall run from the date the originating notice is received. The second or any responsive notice shall be deemed given when deposited in the United States mail or with the Western Union Telegraph Company, with postage or charges prepaid. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties.

30. OTHER CONDITIONS, IF ANY, ARE:

Handwritten: #625

The Unit Area described in Exhibit "A" hereto has been heretofore a part of a Unit Area covered by an Operating Agreement (hereinafter called "Prior Agreement") dated July 28, 1949, by and between all parties hereto except Campbell & Hedrick. It is hereby agreed that the said Prior Agreement shall, insofar only as it covers the Unit Area hereunder, be superseded by this Operating Agreement in all respects; provided, however, that should this Operating Agreement terminate prior to termination of said Prior Agreement, then the remaining interest of all parties hereto, except Campbell & Hedrick, in the Unit Area hereunder shall, unless otherwise agreed upon by such parties, revert to and again be subjected to said Prior Agreement in all respects.

This agreement may be signed in counterpart, and shall be binding upon the parties and upon their heirs, successors, representatives and assigns.

ATTEST:

[Signature]
Assistant Secretary

AMERADA PETROLEUM CORPORATION

By *[Signature]*

Vice President

OPERATOR

ATTEST:

[Signature]
Secretary

PEERLESS OIL AND GAS COMPANY

By *[Signature]*

Vice President

ATTEST:

[Signature]
Asst. Secretary

NEVILLE G. PENROSE, INC.

By *[Signature]*

President

CAMPBELL & HEDRICK, a partnership
comprised of Joe H. Campbell and
O. F. Hedrick

By *[Signature]*

Joe H. Campbell

and

By *[Signature]*

O. F. Hedrick

ATTEST:

[Signature]
Secretary

BROSECO CORPORATION

By *[Signature]*

Vice President

[Signature]
JOHN B. RICH

EXHIBIT "A"

Attached to and made a part of an Operating Agreement dated.....
July 22,....., 1961, by and between AMERADA
PETROLEUM CORPORATION and.....PEERLESS OIL AND GAS COMPANY,
NEVILLE G. PENROSE, INC., and CAMPBELL & HEDRICK, a partnership
comprised of Joe H. Campbell and O. F. Hedrick.....
.....

(1) UNIT AREA

(a) Lands Subject to Agreement:

The Unit Area shall include and be comprised of all hydrocarbon substances in all formations and depths set forth under subparagraph (b) below under the following described lands situated in.....
Lea.....County,.....New Mexico.....:

The N/2 SE/4 Section 19-21S-37E,
containing 80 acres, more or less

(b) Hydrocarbon Substances, Formations and Depths covered by Agreement:

All

(c) Drilling Unit:

The drilling unit for the initial test well described in Section 7 of the Agreement shall be:

All of the Unit Area

(2) Percentage or Fractional Interest of the Parties and the Addresses to which Notices shall be sent:

Party	Interest
Amerada Petroleum Corporation P. O. Box 2040 Tulsa 2, Oklahoma	311/512
Peerless Oil and Gas Company Alamo National Building 441 Mid Am Bldg. San Antonio 5, Texas	61/512 21/512
Neville G. Penrose, Inc. 1815 Fair Building Fort Worth 2, Texas	70/512 105/512
Campbell & Hedrick 444 Mid America Building Midland, Texas	32/512 1/512
Broseco Corporation 618 Mercantile Trust Building 518 Mercantile Savings Bldg. Baltimore, Maryland- Fort Worth 2, Texas	33.25/512
John B. Rich 618 Mercantile Trust Building Baltimore, Maryland	1.75/512

EXHIBIT "A"

(3) *Leasehold and Unleased Interest of the Parties:*

Each of the parties hereto hereby contribute to the agreement and the Unit Area described above all of their unleased interest and all of their leasehold interest covered in Paragraph (1)(b) above under the lands comprising the Unit Area and under the oil and gas leases of record in Lea County, New Mexico, ~~described below or in the schedule of leases attached hereto as Exhibit "A-1".~~

EXHIBIT "B"

Attached to and made a part of an Operating Agreement dated.....
July 22,....., 19 61....., by and between AMERADA
PETROLEUM CORPORATION and..... PEERLESS OIL AND GAS COMPANY,
NEVILLE G. PENROSE, INC., and CAMPBELL & HEDRICK, a partnership
comprised of Joe H. Campbell and O. F. Hedrick.....
.....

A standard form of oil, gas and mineral lease agreeable to the parties hereto
providing for a primary term of ten years and a Lessor's royalty of one-eighth
shall be used.

EXHIBIT " C "

PASO-T-1955-2

Attached to and made a part of an Operating Agreement dated July 22, 1961,
by and between AMERADA PETROLEUM CORPORATION and PEERLESS OIL
AND GAS COMPANY, NEVILLE G. PENROSE, INC., and CAMPBELL & HEDRICK,
a partnership comprised of Joe H. Campbell and O. F. Hedrick

ACCOUNTING PROCEDURE

(UNIT AND JOINT LEASE OPERATIONS)

I. GENERAL PROVISIONS

1. Definitions

"Joint property" as herein used shall be construed to mean the subject area covered by the agreement to which this "Accounting Procedure" is attached.

"Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the subject area for the joint account of the parties hereto.

"Non-Operator" as herein used shall be construed to mean any one or more of the non-operating parties.

2. Statements and Billings

Operator shall bill Non-Operator on or before the last day of each month for its proportionate share of costs and expenditures during the preceding month. Such bills will be accompanied by statements, reflecting the total costs and charges as set forth under Subparagraph A below:

A. Statement in detail of all charges and credits to the joint account.

B. Statement of all charges and credits to the joint account, summarized by appropriate classifications indicative of the nature thereof.

C. Statements as follows:

(1) Detailed statement of material ordinarily considered controllable by operators of oil and gas properties;

(2) Statement of ordinary charges and credits to the joint account summarized by appropriate classifications indicative of the nature thereof; and

(3) Detailed statement of any other charges and credits.

3. Payments by Non-Operator

Each party shall pay its proportion of all such bills within fifteen (15) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest at the rate of six per cent (6%) per annum until paid.

4. Adjustments

Payment of any such bills shall not prejudice the right of Non-Operator to protest or question the correctness thereof. Subject to the exception noted in Paragraph 5 of this section I, all statements rendered to Non-Operator by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period Non-Operator takes written exception thereto and makes claim on Operator for adjustment. Failure on the part of Non-Operator to make claim on Operator for adjustment within such period shall establish the correctness thereof and preclude the filing of exceptions thereto or making of claims for adjustment thereon. The provisions of this paragraph shall not prevent adjustments resulting from physical inventory of property as provided for in Section VI, Inventories, hereof.

5. Audits

A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the accounting hereunder for any calendar year within the twenty-four (24) month period following the end of such calendar year, provided, however, that Non-Operator must take written exception to and make claim upon the Operator for all discrepancies disclosed by audit within said twenty-four (24) month period. Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct joint or simultaneous audits in a manner which will result in a minimum of inconvenience to the Operator.

II. DEVELOPMENT AND OPERATING CHARGES

Subject to limitations hereinafter prescribed, Operator shall charge the joint account with the following items:

1. Rentals and Royalties

Delay or other rentals, when such rentals are paid by Operator for the joint account; royalties, when not paid directly to royalty owners by the purchaser of the oil, gas, casinghead gas, or other products.

2. Labor

A. Salaries and wages of Operator's employees directly engaged on the joint property in the development, maintenance, and operation thereof, including salaries or wages paid to geologists and other employees who are temporarily assigned to and directly employed on a drilling well.

B. Operator's cost of holiday, vacation, sickness and disability benefits, and other customary allowances applicable to the salaries and wages chargeable under Subparagraph 2 A and Paragraph 11 of this Section II. Costs under this Subparagraph 2 B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable under Subparagraph 2 A and Paragraph 11 of this Section II. If percentage assessment is used, the rate shall be based on the Operator's cost experience.

C. Costs of expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's labor costs of salaries and wages as provided under Subparagraphs 2 A, 2 B, and Paragraph 11 of this Section II.

3. Employee Benefits

Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of a like nature, applicable to Operator's labor cost, provided that the total of such charges shall not exceed ten per cent (10%) of Operator's labor costs as provided in Subparagraphs A and B of Paragraph 2 of this Section II and in Paragraph 11 of this Section II.

4. Material

Material, equipment, and supplies purchased or furnished by Operator for use of the joint property. So far as it is reasonably practical and consistent with efficient and economical operation, only such material shall be purchased for or transferred to the joint property as may be required for immediate use; and the accumulation of surplus stocks shall be avoided.

5. Transportation

Transportation of employees, equipment, material, and supplies necessary for the development, maintenance, and operation of the joint property subject to the following limitations:

A. If material is moved to the joint property from vendor's or from the Operator's warehouse or other properties, no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where such material is available, except by special agreement with Non-Operator.

- B. If surplus material is moved to Operator's warehouse or other storage point, no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point, except by special agreement with Non-Operator. No charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Non-Operator.

6. Service

- A. Outside Services:
The cost of contract services and utilities procured from outside sources.
- B. Use of Operator's Equipment and Facilities:
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 5 of Section III entitled "Operator's Exclusively Owned Facilities."

7. Damages and Losses to Joint Property and Equipment

All costs or expenses necessary to replace or repair damages or losses incurred by fire, flood, storm, theft, accident, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after report of the same has been received by Operator.

8. Litigation Expense

All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorneys' fees and expenses as hereinafter provided, together with all judgments obtained against the parties or any of them on account of the joint operations under this agreement, and actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.

- A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto; and a charge commensurate with cost of providing and furnishing such services rendered may be made against the joint account; but no such charge shall be made until approved by the legal departments of or attorneys for the respective parties hereto.
- B. Fees and expenses of outside attorneys shall not be charged to the joint account unless authorized by the majority of the interests hereunder.

9. Taxes

All taxes of every kind and nature assessed or levied upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.

10. Insurance and Claims

- A. Premiums paid for insurance required to be carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.
- B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.

11. District and Camp Expense (Field Supervision and Camp Expense)

A pro rata portion of the salaries and expenses of Operator's production superintendent and other employees serving the joint property and other properties of the Operator in the same operating area, whose time is not allocated directly to the properties, and a pro rata portion of the cost of maintaining and operating a production office known as Operator's Midland District office located at or near Midland, Texas (or a comparable office if location changed), and necessary suboffices (if any), maintained for the convenience of the above-described office, and all necessary camps, including housing facilities for employees if required, used in the conduct of the operations on the joint property and other properties operated in the same locality. The expense of, less any revenue from, these facilities should be inclusive of depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned to all properties served on some equitable basis consistent with Operator's accounting practice.

12. Administrative Overhead

Operator shall have the right to assess against the joint property covered hereby the following management and administrative overhead charges, which shall be in lieu of all expenses of all offices of the Operator not covered by Section II, Paragraph 11, above, including salaries and expenses of personnel assigned to such offices, except that salaries of geologists and other employees of Operator who are temporarily assigned to and directly serving on the joint property will be charged as provided in Section II, Paragraph 2, above. Salaries and expenses of other technical employees assigned to such offices will be considered as covered by overhead charges in this paragraph unless charges for such salaries and expenses are agreed upon between Operator and Non-Operator as a direct charge to the joint property.

WELL BASIS (Rate Per Well Per Month)

Well Depth	DRILLING WELL RATE		PRODUCING WELL RATE (Use Completion Depth)		All Wells Over Ten
	Each Well	First Five	Next Five		
6,000' to 7,000'	\$100.00	\$25.00	\$15.00		\$10.00

- A. Overhead charges for drilling wells shall begin on the date each well is spudded and terminate when it is on production or is plugged, as the case may be, except that no charge shall be made during the suspension of drilling operations for fifteen (15) or more consecutive days.
- B. In connection with overhead charges, the status of wells shall be as follows:
- (1) Injection wells for recovery operations, such as for repressure or water flood, shall be included in the overhead schedule the same as producing oil wells.
 - (2) Water supply wells utilized for water flooding operations shall be included in the overhead schedule the same as producing oil wells.
 - (3) Producing gas wells shall be included in the overhead schedule the same as producing oil wells.

- (4) Wells permanently shut down but on which plugging operations are deferred shall be dropped from the overhead schedule at the time the shutdown is effected. When such wells are plugged, overhead shall be charged at the producing well rate during the time required for the plugging operation.
- (5) Wells being plugged back, drilled deeper, or converted to a source or input well shall be included in the overhead schedule the same as drilling wells.
- (6) Temporarily shut-down wells (other than by governmental regulatory body) which are not produced or worked upon for a period of a full calendar month shall not be included in the overhead schedule; however, wells shut in by governmental regulatory body shall be included in the overhead schedule only in the event the allowable production is transferred to other wells on the same property. In the event of a unit allowable, all wells capable of producing will be counted in determining the overhead charge.
- (7) Wells completed in dual or multiple horizons shall be considered as two wells in the producing overhead schedule.
- (8) Lease salt water disposal wells shall not be included in the overhead schedule unless such wells are used in a secondary recovery program on the joint property.
- C. The above overhead schedule for producing wells shall be applied to the total number of wells operating under the Operating Agreement to which this accounting procedure is attached, irrespective of individual leases.
- D. It is specifically understood that the above overhead rates apply only to drilling and producing operations and are not intended to cover the construction or operation of additional facilities such as, but not limited to, gasoline plants, compressor plants, repressuring projects, salt water disposal facilities, and similar installations. If at any time any or all of these become necessary to the operation, a separate agreement will be reached relative to an overhead charge and allocation of district expense.
- E. The above specific overhead rates may be amended from time to time by agreement between Operator and Non-Operator if, in practice, they are found to be insufficient or excessive.

13. Operator's Fully Owned Warehouse Operating and Maintenance Expense
(Describe fully the agreed procedure to be followed by the Operator.)

None, either direct or indirect.

14. Other Expenditures

Any expenditure, other than expenditures which are covered and dealt with by the foregoing provisions of this Section II, incurred by the Operator for the necessary and proper development, maintenance, and operation of the joint property.

III. BASIS OF CHARGES TO JOINT ACCOUNT

1. Purchases

Material and equipment purchased and service procured shall be charged at price paid by Operator after deduction of all discounts actually received.

2. Material Furnished by Operator

Material required for operations shall be purchased for direct charge to joint account whenever practicable, except that Operator may furnish such material from Operator's stocks under the following conditions:

A. New Material (Condition "A")

- (1) New material transferred from Operator's warehouse or other properties shall be priced f.o.b. the nearest reputable supply store or railway receiving point, where such material is available, at current replacement cost of the same kind of material. This will include material such as tanks, pumping units, sucker rods, engines, and other major equipment. Tubular goods, two-inch (2") and over, shall be priced on carload basis effective at date of transfer and f.o.b. railway receiving point nearest the joint account operation, regardless of quantity transferred.
- (2) Other material shall be priced on basis of a reputable supply company's preferential price list effective at date of transfer and f.o.b. the store or railway receiving point nearest the joint account operation where such material is available.
- (3) Cash discount shall not be allowed.

B. Used Material (Condition "B" and "C")

- (1) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classed as Condition "B" and priced at seventy-five per cent (75%) of new price.
- (2) Material which cannot be classified as Condition "B" but which:
 - (a) After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
 - (b) Is serviceable for original function but substantially not suitable for reconditioning.
 shall be classed as Condition "C" and priced at fifty per cent (50%) of new price.
- (3) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use.
- (4) Tanks, buildings, and other equipment involving erection costs shall be charged at applicable percentage of knocked-down new price.

3. Premium Prices

Whenever materials and equipment are not readily obtainable at the customary supply point and at prices specified in Paragraphs 1 and 2 of this Section III because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the joint account for the required materials on the basis of the Operator's direct cost and expense incurred in procuring such materials, in making it suitable for use, and in moving it to the location, provided, however, that notice in writing is furnished to Non-Operator of the proposed charge prior to billing the Non-Operator for the material and/or equipment acquired pursuant to this provision, whereupon Non-Operator shall have the right, by so electing and notifying Operator within 10 days after receiving notice from the Operator, to furnish in kind, or in tonnage as the parties may agree, at the location, nearest railway receiving point, or Operator's storage point within a comparable distance, all or part of his share of material and/or equipment suitable for use and acceptable to the Operator. Transportation costs on any such material furnished by Non-Operator, at any point other than at the location, shall be borne by such Non-Operator. If, pursuant to the provisions of this paragraph, any Non-Operator furnishes material and/or equipment in kind, the Operator shall make appropriate credits therefor to the account of said Non-Operator.

4. Warranty of Material Furnished by Operator

Operator does not warrant the material furnished beyond or back of the dealer's or manufacturer's guaranty; and in case of defective material, credit shall not be passed until adjustment has been received by Operator from the manufacturers or their agents.

5. Operator's Exclusively Owned Facilities

The following rates shall apply to service rendered to the joint account by facilities owned exclusively by Operator:

- A. Water, fuel, power, compressor and other auxiliary services at rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.

- B. Automotive equipment at rates commensurate with cost of ownership and operation. Such rates should generally be in line with the schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck and tractor rates may include wages and expenses of driver.
- C. A fair rate shall be charged for the use of drilling and cleaning-out tools and any other items of Operator's fully owned machinery or equipment which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property; provided that such charges shall not exceed those currently prevailing in the field where the joint property is located. Pulling units shall be charged at hourly rates commensurate with the cost of ownership and operation, which shall include repairs and maintenance, operating supplies, insurance, depreciation, and taxes. Pulling unit rates may include wages and expenses of the operator.
- D. A fair rate shall be charged for laboratory services performed by Operator for the benefit of the joint account, such as gas, water, core, and any other analyses and tests; provided such charges shall not exceed those currently prevailing if performed by outside service laboratories.
- E. Whenever requested, Operator shall inform Non-Operator in advance of the rates it proposes to charge.
- F. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

IV. DISPOSAL OF LEASE EQUIPMENT AND MATERIAL

The Operator shall be under no obligation to purchase interest of Non-Operator in surplus new or secondhand material. The disposition of major items of surplus material, such as derricks, tanks, engines, pumping units, and tubular goods, shall be subject to mutual determination by the parties hereto; provided Operator shall have the right to dispose of normal accumulations of junk and scrap material either by transfer or sale from the joint property.

1. Material Purchased by the Operator or Non-Operator

Material purchased by either the Operator or Non-Operator shall be credited by the Operator to the joint account for the month in which the material is removed by the purchaser.

2. Division in Kind

Division of material in kind, if made between Operator and Non-Operator, shall be in proportion to their respective interests in such material. Each party will thereupon be charged individually with the value of the material received or receivable by each party, and corresponding credits will be made by the Operator to the joint account. Such credits shall appear in the monthly statement of operations.

3. Sales to Outsiders

Sales to outsiders of material from the joint property shall be credited by Operator to the joint account at the net amount collected by Operator from vendee. Any claims by vendee for defective material or otherwise shall be charged back to the joint account if and when paid by Operator.

V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

Material purchased by either Operator or Non-Operator or divided in kind, unless otherwise agreed, shall be valued on the following basis:

1. New Price Defined

New price as used in the following paragraphs shall have the same meaning and application as that used above in Section III, "Basis of Charges to Joint Account."

2. New Material

New material (Condition "A"), being new material procured for the joint account but never used thereon, at one hundred per cent (100%) of current new price (plus sales tax if any).

3. Good Used Material

Good used material (Condition "B"), being used material in sound and serviceable condition, suitable for reuse without reconditioning:

- A. At seventy-five per cent (75%) of current new price if material was charged to joint account as new, or
- B. At sixty-five per cent (65%) of current new price if material was originally charged to the joint property as secondhand at seventy-five per cent (75%) of new price.

4. Other Used Material

Used material (Condition "C"), at fifty per cent (50%) of current new price, being used material which:

- A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
- B. Is serviceable for original function but substantially not suitable for reconditioning.

5. Bad-Order Material

Material and equipment (Condition "D"), which is no longer usable for its original purpose without excessive repair cost but is further usable for some other purpose, shall be priced on a basis comparable with that of items normally used for that purpose.

6. Junk

Junk (Condition "E"), being obsolete and scrap material, at prevailing prices.

7. Temporarily Used Material

When the use of material is temporary and its service to the joint account does not justify the reduction in price as provided in Paragraph 3 B. above, such material shall be priced on a basis that will leave a net charge to the joint account consistent with the value of the service rendered.

VI. INVENTORIES

1. Periodic Inventories, Notice and Representation

At reasonable intervals, inventories shall be taken by Operator of the joint account material, which shall include all such material as is ordinarily considered controllable by operators of oil and gas properties.

Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operator may be represented when any inventory is taken.

Failure of Non-Operator to be represented at an inventory shall bind Non-Operator to accept the inventory taken by Operator, who shall in that event furnish Non-Operator with a copy thereof.

2. Reconciliation and Adjustment of Inventories

Reconciliation of inventory with charges to the joint account shall be made by each party at interest, and a list of overages and shortages shall be jointly determined by Operator and Non-Operator.

Inventory adjustments shall be made by Operator with the joint account for overages and shortages, but Operator shall be held accountable to Non-Operator only for shortages due to lack of reasonable diligence.

3. Special Inventories

Special Inventories may be taken, at the expense of the purchaser, whenever there is any sale or change of interest in the joint property; and it shall be the duty of the party selling to notify all other parties hereto as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be represented and shall be governed by the inventory so taken.

EXHIBIT "D"

Attached to and made a part of an Operating Agreement dated.....
July 22, 1961, by and between AMERADA
PETROLEUM CORPORATION and PEERLESS OIL AND GAS COMPANY,
NEVILLE G. PENROSE, INC., and CAMPBELL & HEDRICK, a partnership
comprised of Joe H. Campbell and O. F. Hedrick

Insurance to be carried:

- (a) Workmen's Compensation — Statutory limit.
- (b) Employers' Liability Insurance with limits of not less than \$25,000.00.
- (c) Public Liability Insurance, covering only personal injury claims, with limits of not less than \$100,000.00 as to any one person, and \$300,000.00 as to any one accident.
- (d) Automobile Public Liability Insurance with limits of not less than \$50,000.00 as to any one person and \$100,000.00 as to any one accident, and Automobile Property Damage Insurance with limits of not less than \$10,000.00.

AMERADA PETROLEUM CORP.
EXHIBIT 2
FIGURE

DIVISION OF OWNERSHIP

WARLICK "A" EUMONT GAS UNIT
S/2 NE/4 AND N/2 SE/4 SECTION 19-21S-37E
LEA COUNTY, NEW MEXICO

WARLICK "A" BLINEBRY GAS UNIT
S/2 NE/4 AND NW/4 SE/4 SECTION 19-21S-37E
LEA COUNTY, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Amerada Exhibit No. *2*
Case No. *2897*

DIVISION OF OWNERSHIP FOR THE
S/2 NE/4 and N/2 SE/4 of Sec. 19-21S-37E

<u>INTEREST OWNER AND ADDRESS</u>	<u>THE 7/8 WORKING INTEREST</u>		
	<u>S/2 NE/4</u>	<u>NE/4 SE/4</u>	<u>NW/4 SE/4</u>
AMERADA PETROLEUM CORPORATION P. O. Box 2040 Tulsa 2, Oklahoma	343/512	311/512	311/512
BROSECO CORPORATION Mercantile Trust Building Baltimore 2, Maryland	33.25/512	33.25/512	33.25/512
CAMPBELL & HEDRICK, A Partnership comprised of Joe H. Campbell and O. F. Hedrick, Jr. P. O. Box 401 Midland, Texas		1/16	1/16
JOHN B. RICH Mercantile Trust Building Baltimore 2, Maryland	1.75/512	1.75/512	1.75/512
SOHIO PETROLEUM COMPANY, PP ACCOUNT #1 970 First National Office Building Oklahoma City 2, Oklahoma	70/512	70/512	70/512
THE FLUOR CORPORATION, LTD. c/c Continental Illinois National Bank and Trust Company of Chicago Chicago, Illinois	1/8	1/8	1/8

<u>THE 1/8 ROYALTY INTEREST</u>			
# J. M. ARMSTRONG Box 990 Midland, Texas	1/32	1/32	1/32
# SAMUEL TAYLOR BEARE, SR. and BETTY B. BEARE Columbian Mutual Tower Memphis, Tennessee	1/1024	1/1024	1/1024
# BEATRICE CHRISTMAN BELL 3521 Southwestern Boulevard Dallas, Texas	1/256	1/256	1/256
# C. P. BORDAGES Box 1416 Beaumont, Texas	7/64	7/64	7/64
# BARBARA CHRISTMAN BROWN Avalon Apts. #3 3011 Highland Avenue Birmingham, Alabama	1/256	1/256	1/256
@ CAMPBELL & HEDRICK, A Partnership comprised of Joe H. Campbell and O. F. Hedrick, Jr. P. O. Box 401 Midland, Texas	1/8	5/32	1/8
# FRANCES J. CHRISTMAN 1425 La Salle Avenue Minneapolis 3, Minnesota	1/256	1/256	1/256
# LOUIS F. CHRISTMAN 1127 West Lexington Circle Memphis, Tennessee	3/1024	3/1024	3/1024
# J. V. GOWAN P. O. Box 839 Lockhart, Texas	1/64	1/64	1/64

THE 1/8 ROYALTY INTEREST (CONTINUED)

<u>INTEREST OWNER AND ADDRESS</u>	<u>S/2 NE/4</u>	<u>NE/4 SE/4</u>	<u>NW/4 SE/4</u>
# FELMONT OIL CORPORATION 285 Madison Avenue New York 17, New York	23/512	23/512	23/512
# B. T. GALE c/o First Trust Company of Saint Paul St. Paul, Minnesota	1/64	1/64	1/64
# FIRST TRUST COMPANY OF ST. PAUL, AS TRUSTEE FOR GRACE D. GALE, DECEASED St. Paul, Minnesota	1/64*	1/64*	1/64*
*These interests are in suspense, pending determination that such interests were committed to the Grace D. Gale Trust.			
# JULIAN W. GLASS, JR., TRUSTEE UNDER THE WILL OF J. WOOD GLASS, DECEASED P. O. Box 587 Nowata, Oklahoma	3/512	3/512	3/512
% SUE SAUNDERS GRAHAM P. O. Box 172 Salt Lake City 10, Utah	1/96		
# GRARIDGE CORPORATION Box 1110 Graham, Texas	1/15	1/15	1/15
% ELYSE SAUNDERS PATTERSON 6444 Indian Lane Shawnee Mission, Kansas	1/96		
@ FRANK HAYNES Grantville, Kansas		1/32	1/64
@ JAMES ARTHUR HAYNES 6506 Northeast 33rd Street Portland 11, Oregon			1/128
@ ESTATE OF JAMES R. HAYNES, N.C.M.; FRANK HAYNES, GUARDIAN Grantville, Kansas			1/128*
*This interest in suspense, pending evidence that a New Mexico Guardian was appointed. Frank Haynes is the Kansas Guardian.			
@ WILLIAM G. KENDALL, DECEASED c/o Mrs. Veronica Kendall Felt 1265 Wilshire Drive Union, New Jersey			1/32**
**This interest in suspense. After completion of Title requirements, 1/2 of this interest will go to Veronica Kendall Felt, with the other 1/2 going to Rose Kendall For Life and the Remainder to Richard W. Kendall and Rosemary K. Geary, equally.			
# PHILLIPS INVESTMENT CORPORATION 806 South Denver Tulsa 19, Oklahoma	3/512	3/512	3/512
# ESTATE OF WOODLAN P. SAUNDERS, DECEASED; VIRGINIA LEE SAUNDERS, EXECUTRIX 1442 Seville Road Santa Fe, New Mexico	1/64	1/64	1/64
# SPARKS HEALEY COMPANY, A CO-PARTNERSHIP P. O. Box 12382 Fort Worth 16, Texas	1/20	1/20	1/20
# SOUTHERN MINERALS CORPORATION P. O. Box 716 Corpus Christi, Texas	2/15	2/15	2/15
% SARAH SAUNDERS TOLES P. O. Box 1300 Roswell, New Mexico	1/96		

THE 1/8 ROYALTY INTEREST (CONTINUED)

<u>INTEREST OWNER AND ADDRESS</u>	<u>S/2 NE/4</u>	<u>NE/4 SE/4</u>	<u>NW/4 SE/4</u>
# L. M. WARLICK Star Route "A", Box 206 Hobbs, New Mexico	1/8	1/8	1/8
# WARREN BANK AND TRUST COMPANY, TRUSTEE UNDER THE WILL OF A. W. GOAL, DECEASED Warren, Pennsylvania	3/512*	3/512*	3/512*
	*These interests are in suspense, pending ancillary probate in New Mexico.		
% NEIL H. WILLS Box 529 Carlsbad, New Mexico	1/32		
# W. A. YEAGER Box 990 Midland, Texas	1/32	1/32	1/32
# THE FLUOR CORPORATION, LTD. c/o Continental Illinois National Bank and Trust Company of Chicago Chicago, Illinois	1/8	1/8	1/8

- These interest owners own uniformly throughout the entire 160 acres; hence, no pooling consents are necessary.

% - Proper pooling authority has been granted by these parties.

@ - Need pooling authority from these parties.

GENERAL OFFICE
BOX 2040
TULSA 2, OKLA.

AMERADA PETROLEUM CORPORATION
BOX 551
MIDLAND, TEXAS

August 14, 1961

Campbell & Hedrick
Box 401
Midland, Texas

RE: Operating Agreement
N/2 SE/4 Sec. 19-21S-37E
Lea County, New Mexico

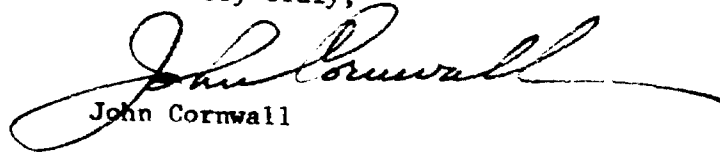
Gentlemen:

With reference to your letter of August 4, 1961 concerning the above subject, we are attaching a copy of a letter attempting to clarify some of the points raised.

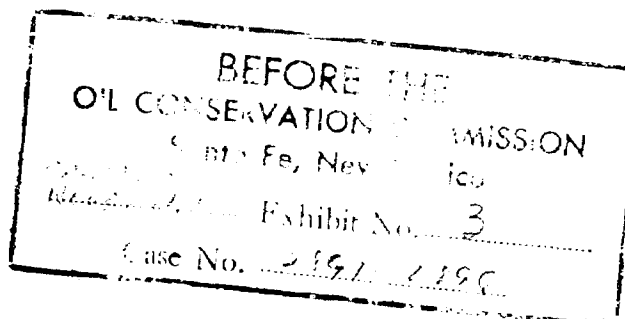
We are also attaching a letter from our Production Department in Tulsa with an estimated AFE attached.

After checking this material please advise if you are ready to go ahead with this Operating Agreement and get this well started.

Yours very truly,


John Cornwall

JC:lhv
Encl:



AMERADA PETROLEUM CORPORATION
P. O. BOX 2040
TULSA 2, OKLAHOMA

August 11, 1961

Re: Operating Agreement
N/2 SE/4 Sec. 19-21S-37E
Lea County, New Mexico

MR. JOHN CORNWALL:

*This letter
is called
1A + 15
in NE/4 SE/4
15H.*

Campbell and Hedrick, in their letter of August 4th, have raised a couple of questions regarding the proposed drilling of the Warlick No. 2 well.

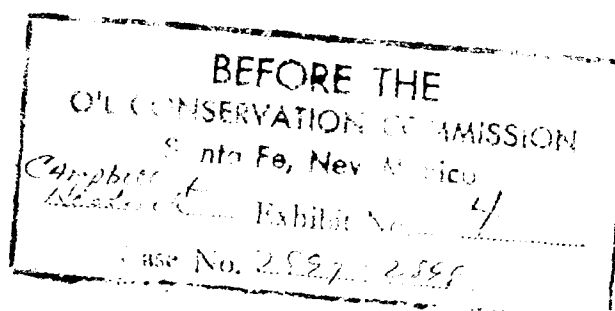
→ Their first question as to what might happen if a gas unit is created for Eumont and possibly Blinbry formations, larger than the 80 acres on which the proposed Warlick No. 2 will be drilled. To start out with, it is the feeling of the Production Department that the Eumont gas zone would not be able to produce a 320-acre allowable, but might possibly produce the allowable for the Warlick 160-acre tract. They expect at this time to get oil in the Blinbry; however, if gas is obtained, the same will hold true with it.

Second question raised as to how the cost of the well to the various zones would be split up if, in any event, a gas proration unit was created to take in outside acreage. As an example, if the Eumont gas zone is found at 5,000 feet, and the total depth of the well is 6,700 feet, 1/4 of the intangible drilling cost will be allocated to the Eumont zone. Any tangible equipment used solely for the Eumont zone would be charged directly to that zone. Again, the same will hold true for the Blinbry. Division of cost of the zone would then be divided in the ratio of the number of acres allocated to that zone.

Very truly yours,

Joe B. Denton
Joe B. Denton
Land Department

JBD/lc



AMERADA PETROLEUM CORPORATION

P. O. BOX 2040

TULSA 2, OKLA.

PRODUCTION DEPARTMENT
J. O. HATHAWAY
ASST. GENERAL SUPERINTENDENT

August 29, 1961

Neville G. Penrose, Inc.
1815 Fair Building
Fort Worth 2, Texas
Attention: Mr. Clem Ware

Campbell & Hedrick
444 Mid-America Building
Midland, Texas

Pearless Oil and Gas Company
Alamo National Building
San Antonio 5, Texas

Gentlemen:

Enclosed is Authorization For Expenditure No. PD-250 dated March 21, 1961, in the amount of \$102,100.00 to cover estimated cost to drill and complete a quadruple completed well on the jointly owned L. G. Warlick Lease, Lea County, New Mexico, to meet offset obligations.

We propose to run and cement three strings of 2-7/8" tubing as casing. Two strings of the casing will be tubeless completion to produce oil from the Drinkard and Paddock formations. One string will be dually completed by running 1-1/4" tubing and packer to produce Hinebry oil through the tubing and cement gas through the 2-7/8" and 1-1/4" annulus.

The Penrose-Shelly is probably productive. However, this would be considered salvage oil and will be produced at a later date.

If this expenditure meets with your approval, please sign and return one copy of the A.F.E. to this office.

Yours very truly,

BEFORE	DATE
C. C. ELEVATION	SS EN
Fe, No.	
Exhibit	5
Case	EW:mk 2887-188
10018.	

[Signature]

AMERADA PETROLEUM CORPORATION

AUTHORIZATION FOR DRILLING
ESTIMATED EXPENSE

FD-250

March 21

1961

☒ ORIGINAL ☐ SUPPLEMENTALLEASE NO. MM-1031 Series with production ☐ COMMENCE OR ☐ COMPLETE ☒ COM'L ☐ DEPT. ☐ STATELEASE NAME L. G. WARLICK "A" WELL NO. 1 FIELD DrinkardCOUNTY Lea STATE New Mexico DEPTH 6700' HORIZON (DrinkardA.W. 311/512 OTHER W.I. Neville G. Penrose, Inc. - 105/512 (BlinebryADJACENT DEVELOPMENT Peerless Oil & Gas Co. 64/512 (PaddockCampbell & Hedrick32/512(Eumont

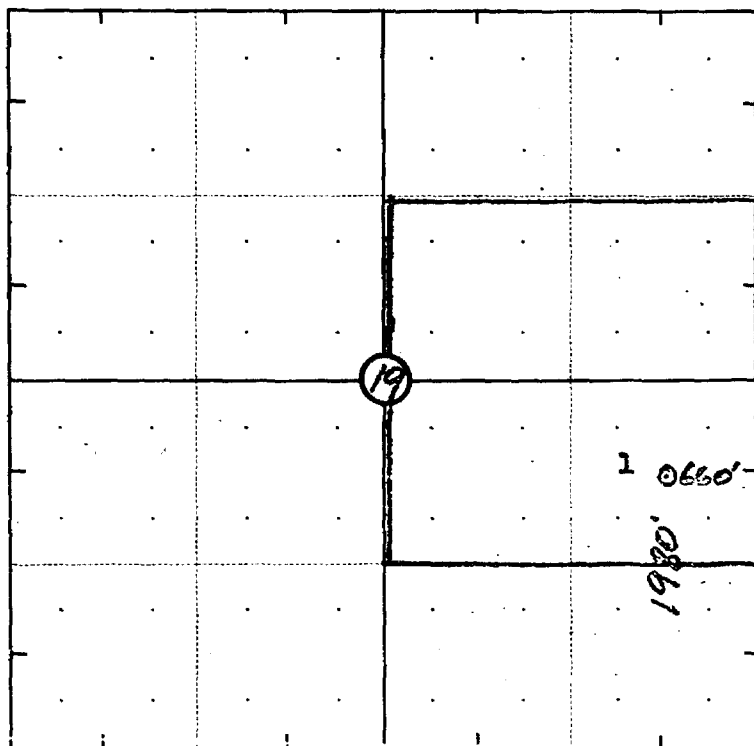
REMARKS

Estimate contract at \$4.00 per foot and day work at \$804.00 plus drill pipe rental with Contractor to furnish collar, pits, fuel and bits.

Estimated Time: 3 days rig up and tear down
30 days drilling and casing
3 days drill stem testing
3 days survey and complete

Total 39 days

SECTION PLAT



SCALE: 4 IN. = 1 MILE

LOCATION

1980' from south line and
660' from east line of
Section 19-21S-37E
Lea County, New MexicoQuadruple
Completion

TOTAL ESTIMATED COST

(DETAILS SHOWN ON REVERSE SIDE)

DRY HOLE

\$49,672

FLOWING WELL

\$102,100

PUMPING WELL

Joint interest approval:

NEVILLE G. PENROSE, INCORPORATED

By

PEERLESS OIL AND GAS COMPANY

By

JOE H. CAMPBELL

By

O. F. HEDRICK

By

DEPARTMENTAL APPROVAL:

NAME

PRODUCTION DEPT.

GEOLOGICAL DEPT.

LAND DEPT.

LEGAL DEPT.

AUTHORIZED:

VICE PRESIDENT

VICE PRESIDENT

AMERICAN PETROLEUM CORPORATION

P. O. BOX 2040

TULSA 2, OKLA.

PRODUCTION DEPARTMENT
J. O. HATHAWAY
ASST. GENERAL SUPERINTENDENT

May 11, 1962

Fearless Oil and Gas Company
441 Milam Building
San Antonio 5, Texas

Neville G. Penrose, Inc.
1815 Fair Building
Fort Worth 2, Texas

Mr. Joe H. Campbell
444 Mid America Building
Midland, Texas

Gentlemen:

Mr. O. F. Hedrick
444 Mid America Building
Midland, Texas

Brosoco Corporation
506 Mutual Savings Building
Fort Worth 2, Texas

Mr. John B. Rich
628 Mercantile Trust Building
Baltimore, Maryland

We enclose herewith three copies of Authorization For Drilling #FB-367, dated May 9, 1962, covering estimated cost to drill our jointly owned L. G. Warlick "A" Well No. 2 in Drinkard Field, Lea County, New Mexico.

If this expenditure meets with your approval, please sign and return one copy of the authorization to this office to the attention of the undersigned.

Very truly yours,

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Campbell, Inc. Exhibit No. 6
Case No. 2187-1185

J. O. Hathaway

BW:mik

*Copy of Authorization For Drilling
#FB-367, dated May 9, 1962, covering
estimated cost to drill our jointly
owned L. G. Warlick "A" Well No. 2 in
Drinkard Field, Lea County, New Mexico.*

AMERADA PETROLEUM CORPORATION

AUTHORIZATION FOR DRILLING
ESTIMATED EXPENSE.

PD-367

☒ ORIGINAL ☐ SUPPLEMENTAL

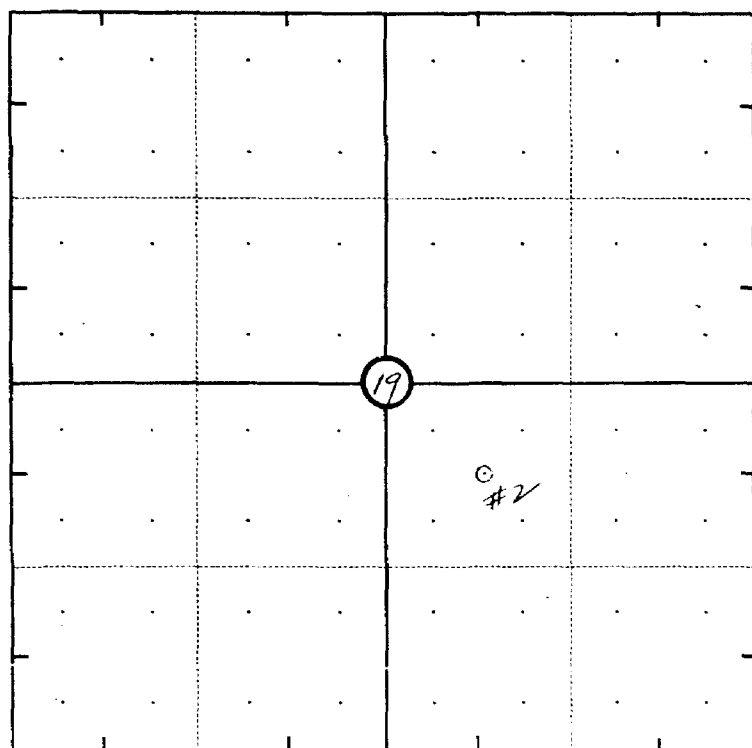
May 9, 1962

LEASE NO. W-1031 EXPIRES Held by Production ☐ COMMENCE OR ☐ COMPLETE ☒ COM L ☐ DEPT. ☐ STATE
 LEASE NAME L. G. Warlick "A" WELL NO. 2 FIELD Drinkard
 COUNTY Lea STATE New Mexico DEPTH 6,700' HORIZON Quadruple in Drinkard,
 A.W.I. See Names Below OTHER W.I. Paddek, Blinberry & Grayburg
 ADJACENT DEVELOPMENT

REMARKS Estimated footage contract at \$4.75 per foot. Daywork at \$900.00 per day with
 and \$850.00 per day without drill pipe. Contractor to furnish cellar, pits, fuel, water
 and bits.

Estimated Time: 4 Days rig up and tear down
 28 Days drilling and run surface csg.
 1 Day survey
 1 Day run 2-7/8" csg. and W.O.C.
 3 1/4 Days Rotary
 18 Days complete with pulling unit
 Total 52 Days

SECTION PLAT



LOCATION

NW/4 of SE/4
 Section 19-21S-37E
 Lea County, New Mexico

SCALE: 4 IN. = 1 MILE

Quadruple

TOTAL ESTIMATED COST (DETAILS SHOWN ON REVERSE SIDE)	DRY HOLE	FLOWING WELL	PUMPING WELL
	\$57,082	\$149,004	

JOINT INTEREST OWNERSHIP:

Neville C. Penrose, Inc.
 Peerless Oil & Gas Company
 Joe H. Campbell
 O. F. Hedrick
 Haddock Corporation
 John B. Rich

JOINT INTEREST APPROVAL:

JOE H. CAMPBELL

DEPARTMENTAL APPROVAL:

ORIGINAL SIGNED BY
 J. E. LOW

PRODUCTION DEPT.

GEOLOGICAL DEPT.

LAND DEPT.

LEGAL DEPT.

AUTHORIZED:

VICE PRESIDENT

VICE PRESIDENT

By Joe H. Campbell

				ESTIMATED COST	
				IN EVENT OF PRODUCTION	IN EVENT OF A DRY HOLE
INTANGIBLES - DRILLING					
DRILLING	6700	FT. AT \$ 4.75	PER FOOT	31,825	31,825
DAY WORK	1 Day at \$800			800	800
	1 Day at \$850			850	850
18 Days completion with pulling unit				8,820	
CONTRACTOR'S LABOR EXPENSE					
DAYS AT \$ PER DAY					
DRILL PIPE RENTAL					
BITS AND REAMERS					
TRANSPORTATION ON CONTRACTOR'S EQUIPMENT					
FUEL AND WATER: FUEL \$		WATER \$ 1,000		1,000	
CELLAR & PITS: DIG \$		WALL \$ 100	FILL \$ 125	225	225
LOCATION, ROADS, BRIDGES, CANALS, ETC.				600	600
INTANGIBLE CASING EXPENSE:					
TRUCKING CASING				1,150	650
CEMENT AND CEMENTING SERVICE				5,600	2,450
SCRATCHERS, CENTRALIZERS, SHOES, ETC.				2,200	800
MUD AND CHEMICALS				8,000	8,000
SPECIAL WELL SURVEYS				3,200	3,200
SPECIAL SERVICES:					
PERFORATING	4 zones			3,300	
ACIDIZING, SHOOTING AND FRACTURING	acid & frac 4 zones			12,000	
CORING EXPENSE					
DRILL STEM TESTING					
PREPARE FOR PRODUCTION				2,600	
SUPERVISION, LABOR AND MISCELLANEOUS TRUCKING				2,800	2,800
Swabbing expense				800	
PLUGGING EXPENSE				x x x x x	1,000
TOTAL INTANGIBLES				85,870	53,300
TANGIBLES - WELL EQUIPMENT					
CASING:	300	FT. OF 16" 42# Arisco	@ \$ 5.94 PER FT.	1,782	1,782
	2575	FT. OF 10-3/4" 40.5# J-55	@ \$ 4.66 PER FT.	12,000	12,000
	26,800	FT. OF 2-7/8" 6.2# J-55 Reg.	@ \$.84 PER FT.	22,512	
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
TUBING:		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
		FT. OF	@ \$ PER FT.		
WELL HEAD CONNECTIONS, ETC.				4,200	
LINE PIPE				1,600	
TANKS				8,500	
SEPARATORS				3,400	
2 - 400-gal.				320	
3 - 100-gal.				7,200	
3 - 100-gal.				1,500	
DEPRECIATION ON SALVAGED MATERIAL				x x x x x	
TOTAL TANGIBLES				69,132	13,782
TOTAL COST OF WELL (LESS PUMPING EQUIPMENT)				155,002	x x x x x
TOTAL COST OF DRY HOLE				x x x x x	61,082
PUMPING EQUIPMENT					
ENGINE AND UNIT					
RODS					
PUMPING OUTFIT					
INSTALLATION OF PUMPING EQUIPMENT					
TOTAL COST TO PUT WELL ON PUMP					
TOTAL COST OF PUMPING WELL					

AMERADA PETROLEUM CORPORATION

AUTHORIZATION FOR DRILLING
ESTIMATED EXPENSE

PD-367

☒ ORIGINAL ☐ SUPPLEMENTAL

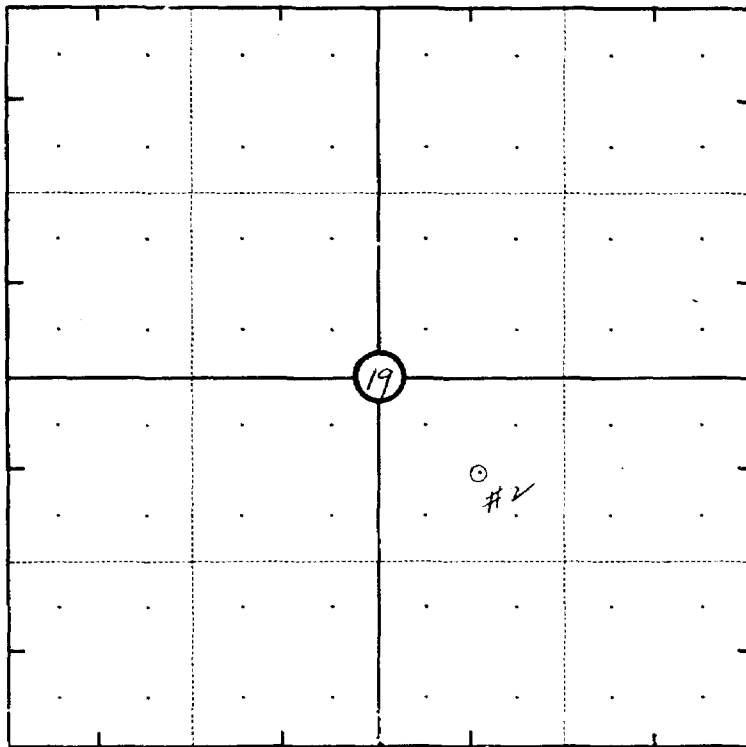
May 9, 1962

LEASE NO. EA-1031 EXPIRES Held by Production ☐ COMMENCE OR ☐ COMPLETE ☒ COM'L ☐ DEPT. ☐ STATE
 LEASE NAME L. G. Warlick "A" WELL NO. 2 FIELD Drinkard
 COUNTY Lea STATE New Mexico DEPTH 6,700' HORIZON Quadruple in Drinkard,
 A.W.I. See Names Below OTHER W.I. Paddock, Blinobry & Grayburg
 ADJACENT DEVELOPMENT

REMARKS Estimated footage contract at \$4.75 per foot. Daywork at \$900.00 per day with
 and \$850.00 per day without drill pipe. Contractor to furnish cellar, pits, fuel, water
 and bits.

Estimated Time: 4 Days rig up and tear down
 28 Days drilling and run surface csg.
 1 Day survey
 1 Day run 2-7/8" csg. and W.O.C.
 34 Days Rotary
 18 Days complete with pulling unit
 Total 52 Days

SECTION PLAT



SCALE: 4 IN. = 1 MILE

LOCATION

NW/4 of SE/4
 Section 19-21S-37E
 Lea County, New Mexico

TOTAL ESTIMATED COST
 (DETAILS SHOWN ON REVERSE SIDE)

DRY HOLE

\$67,082

Quadruple

FLOWING WELL

\$149,004

PUMPING WELL

JOINT INTEREST OWNERSHIP:

Neville G. Penrose, Inc.
 Peerless Oil & Gas Company
 Joe H. Campbell
 O. F. Hedrick
 Browne Corporation
 John B. Rich

JOINT INTEREST APPROVAL:

JOE H. CAMPBELL

DEPARTMENTAL APPROVAL:

ORIGINAL SIGNED BY
 J. E. LOW

PRODUCTION DEPT.

GEOLOGICAL DEPT.

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AUTHORIZED:

By

VICE PRESIDENT

VICE PRESIDENT

				ESTIMATED COST	
				IN EVENT OF PRODUCTION	IN EVENT OF A DRY HOLE
INTANGIBLES ~ DRILLING					
DRILLING	6700	FT. AT \$ 4.75	PER FOOT	31,825	31,825
DAY WORK	1 Day	at \$900		900	900
	1 Day	at \$850		850	850
18 Days completion with pulling unit				8,820	
CONTRACTOR'S LABOR EXPENSE _____ DAYS AT \$ _____ PER DAY					
DRILL PIPE RENTAL _____					
BITS AND REAMERS _____					
TRANSPORTATION ON CONTRACTOR'S EQUIPMENT _____					
FUEL AND WATER: FUEL \$ _____	WATER \$ 1,000			1,000	
CELLAR & PITS: DIG \$ _____	WALL \$ 100			225	225
	FILL \$ 125			600	600
LOCATION, ROADS, BRIDGES, CANALS, ETC. _____					
INTANGIBLE CASING EXPENSE:					
TRUCKING CASING _____				1,150	650
CEMENT AND CEMENTING SERVICE _____				5,600	2,450
SCRATCHERS, CENTRALIZERS, SHOES, ETC. _____				2,200	800
MUD AND CHEMICALS _____				8,000	8,000
SPECIAL WELL SURVEYS _____				3,200	3,200
SPECIAL SERVICES:					
PERFORATING 4 zones				3,300	
ACIDIZING, SHOOTING AND FRACTURING acid & frac 4 zones				12,000	
CORING EXPENSE _____					
DRILL STEM TESTING _____					
PREPARE FOR PRODUCTION _____				2,600	
SUPERVISION, LABOR AND MISCELLANEOUS TRUCKING _____				2,800	2,800
Swabbing expense				800	
PLUGGING EXPENSE _____				x x x x x	1,000
TOTAL INTANGIBLES _____				85,870	53,300
TANGIBLES ~ WELL EQUIPMENT					
CASING:	300	FT. OF 16" 42# Arisco	@ \$ 5.94 PER FT.	1,782	1,782
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		FT. OF	@ \$ _____ PER FT.		
	26,800	FT. OF 2-7/8" 6.6# J-55 Reg.	@ \$.84 PER FT.	22,512	
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
TUBING:		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
		FT. OF	@ \$ _____ PER FT.		
WELL-HEAD CONNECTIONS, ETC. _____				4,200	
LINE PIPE _____				1,600	
TANKS 2000 Gall. bolted				8,500	
SEPARATORS 4 low pressure				3,000	
2 - Sumpers				320	
2 - Fractuons				7,300	
2 - Motors				1,500	
DEPRECIATION ON SALVAGED MATERIAL _____				x x x x x	
TOTAL TANGIBLES _____				63,132	13,782
TOTAL COST OF WELL (LESS PUMPING EQUIPMENT) _____				149,002	x x x x x
TOTAL COST OF DRY HOLE _____				x x x x x	67,082
PUMPING EQUIPMENT					
ENGINE AND UNIT _____					
RODS _____					
PUMPING OUTFIT _____					
INSTALLATION OF PUMPING EQUIPMENT _____					
TOTAL COST TO PUT WELL ON PUMP _____					
TOTAL COST OF PUMPING WELL _____					

Case 2898

Blinebry Well Test Data

Well	Date of Test Data	Production	Remarks
J.W. Peery Hardy 2	Scheduled Test, May 1963	56 BOPD; 11,830 GOR	Effective GOR
J.W. Peery Hardy 5	Scheduled Test, May 1963	60 BOPD; 8,481 GOR	Effective GOR
Amerada Warlick A 1	Scheduled Test, May 1963	25 BOPD; 18,361 GOR	Effective GOR
Amerada Warlick A 2	Oct. 1962	Deliverability at 500 psig - 5,400 MCF/D	
Penrose Prod. Warlick 1		Averages 100-150 MCF/D	Low pressure connection; marginal gas well
Amerada State DC 1	Scheduled Test, May 1963	10 BOPD; 14,400 GOR	Noneffective GOR
Pan Am State CK 2	Scheduled Test, May 1963	11 BOPD; 7,364 GOR	Noneffective GOR

BEFORE THE	
OIL CONSERVATION COMMISSION	
Santa Fe, New Mexico	
<i>Campbell</i> <i>2-11-63</i>	Exhibit No. <u>7</u>
Case No. <u>2897-2898</u>	

AMERADA PETROLEUM CORPORATION
P. O. BOX 2040
TULSA 2, OKLAHOMA

AMERADA PETROLEUM CORP.

EXHIBIT -4 8

FIGURE

Total Depth: 6710
Perforation: 5752-5755
P.C. 5162-5174
5754-5755
6599-6643

L. G. WARLICK GAS UNIT "A" #2 - BLINEBRY GAS ZONE COMPLETION COSTS

Drilling and completion costs and equipment shared by all zones:

Description	Total Amount	Amount To Blinebry
Pits and cellar	\$ 99.00	\$ 24.75 ✓
Location damage	350.00	87.50 ✓
Road and location	1,691.00	422.75 ✓
16" O.D. casing:		
282' - 53.10#, new at \$7.26138 per ft.)	2,164.00	541.00 ✓
24' - 42.8#, S.H. at \$6.4550 less 25%)		
Cement and cementing service on 16" OD casing	908.00	227.00 ✓
Welding on 16" OD casing	133.00	33.25 ✓
Centralizers and shoes for 16" OD casing	298.00	74.50 ✓
13-3/8" OD and 10-3/4" OD casing:		
49' - 13-3/8" OD 61# new)		
at \$6.7078 per foot)	12,118.00	3,029.50 ✓
2538' - 10-3/4" OD 40.5# new)		
at \$4.6449 per foot)		
Cement and cementing service for 10-3/4" casing	4,903.00	1,225.75 ✓
Centralizers, shoes and scratchers for ditto	534.00	133.50 ✓
Welding on ditto	160.00	40.00 ✓
Logging expense	3,063.00	765.75 ✓
Cement and cementing service on four strings of 2-7/8" casing	7,622.00	1,905.50 ✓
Expense to test 4 strings of 2-7/8" casing	904.00	226.00 ✓
Well head equipment	5,761.00	1,440.25 ✓
Fuel and water	993.00	248.26 ✓
Mud and chemicals	6,902.00	1,725.50 ✓
Miscellaneous trucking, labor and supervision	1,421.00	355.25 ✓

BEFORE THE
OIL CONSERVATION COMMISSION

Oil & Gas, New Mexico

Amerada Petroleum Co.

Case No. 2858

L. G. WARLICK GAS UNIT "A" #2 - BLINEBRY GAS ZONE COMPLETION COSTS - Page 2

Drilling and completion costs and equipment shared by all zones (continued):

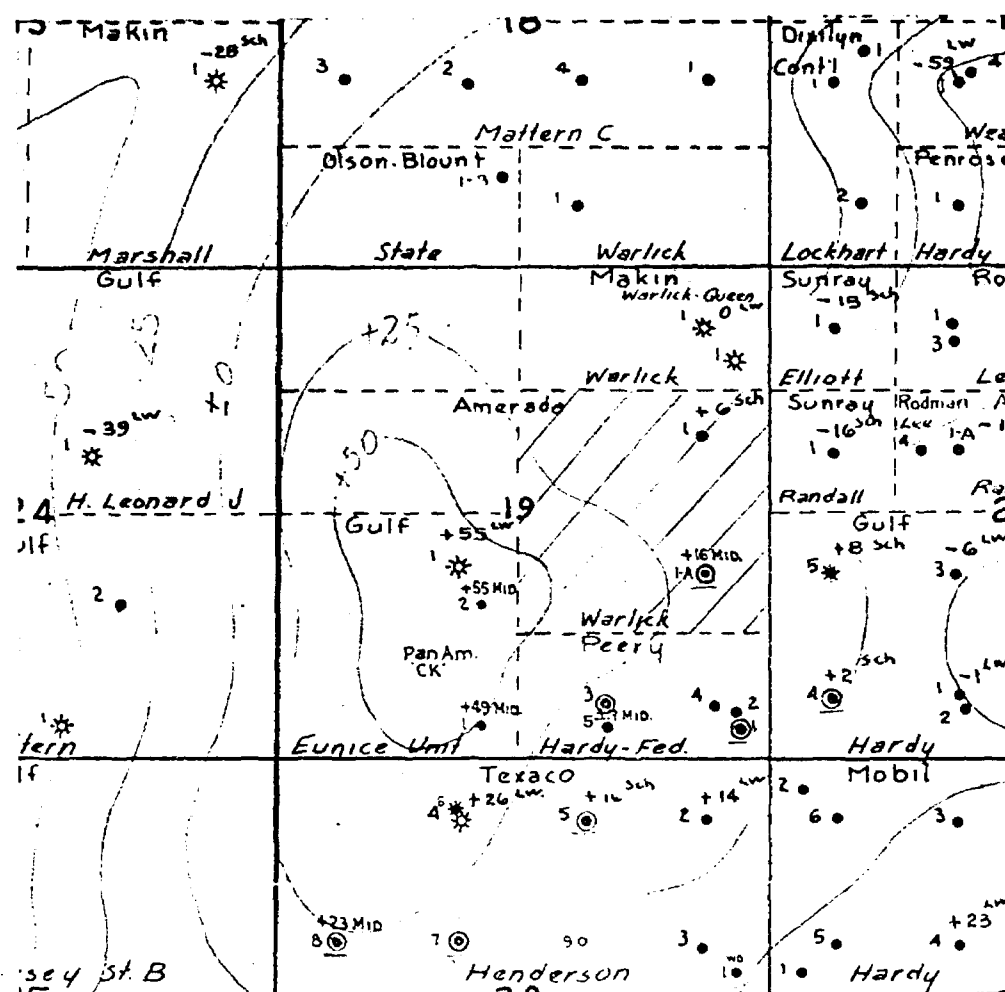
<u>Description</u>	<u>Total Amount</u>	<u>Amount To Blinebry</u>
Drilling contract - 6699' at \$5.50 per foot	\$36,845.00	\$9,211.25 ✓
Day work	<u>3,043.00</u>	<u>760.75</u> ✓
Total Drilling and Completion Costs and Equipment Shared By All Zones	\$89,912.00	\$22,478.01

Direct Charges To Blinebry Zone:

6,735' - 2-7/8" OD 6.4# tubing as casing, new at \$0.8422 per foot	\$5,672.22
Shoe, turbolizers and plug catchers for 2-7/8" casing	245.00
Perforating	1,265.00
Acidizing and frac	760.00
Pulling unit to swab	224.00
Rental tools	<u>299.00</u>
Total	<u>\$8,465.22</u>
Grand Total	<u><u>\$30,943.23</u></u>

4.1667% of \$30,943.23 = \$1,289.31 adjustment due Campbell & Hedrick.

R-37-E



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Amadea Exhibit No. 12
Case No. 222-219

© Grayburg Prod.

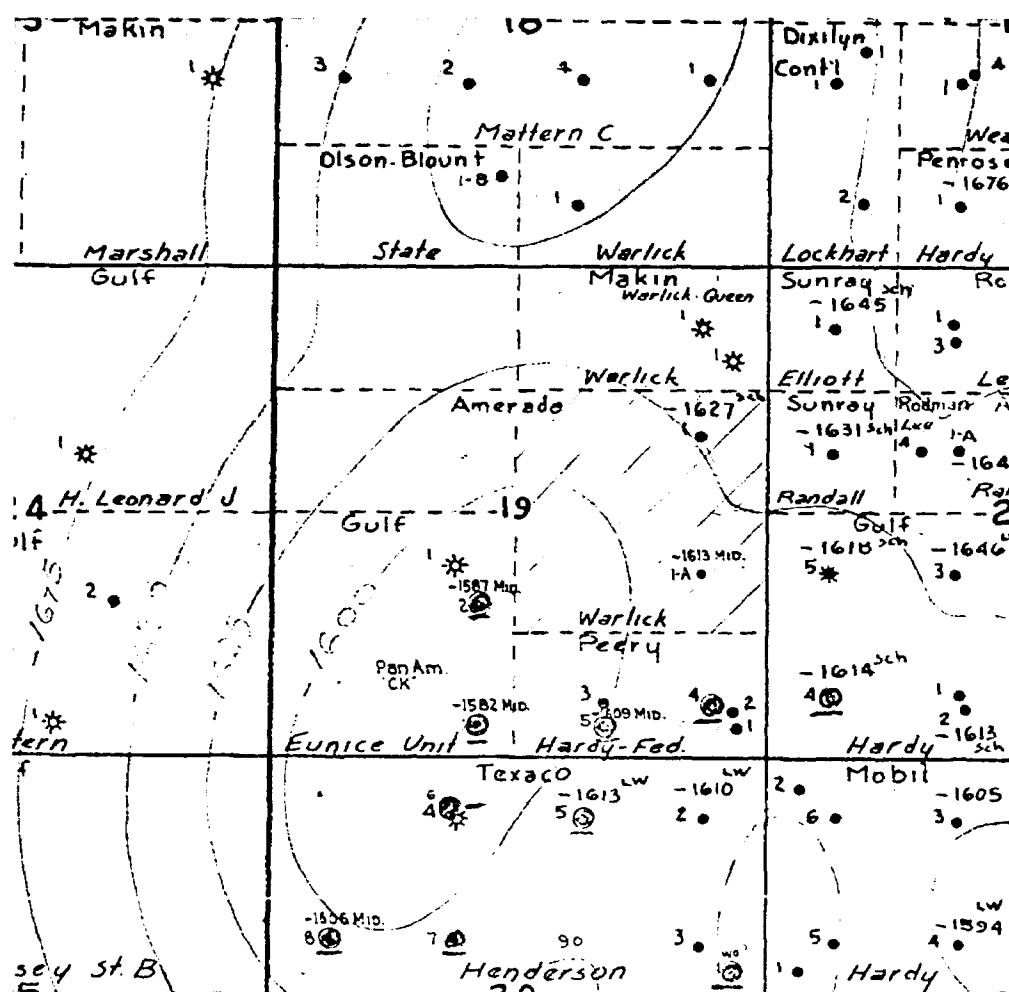
EUMONT POOL
Lea County, New Mexico
Top Penrose

Contour Interval 25 Feet
Scale: 1" = 2000'

Revised: April, 1911

R-36-E

R-37-E



AMERADA PETROLEUM CORP.

EXHIBIT 12

FIGURE 2

Paddock Prod.

PADDOCK POOL

Lea County, New Mexico

Base San Andres

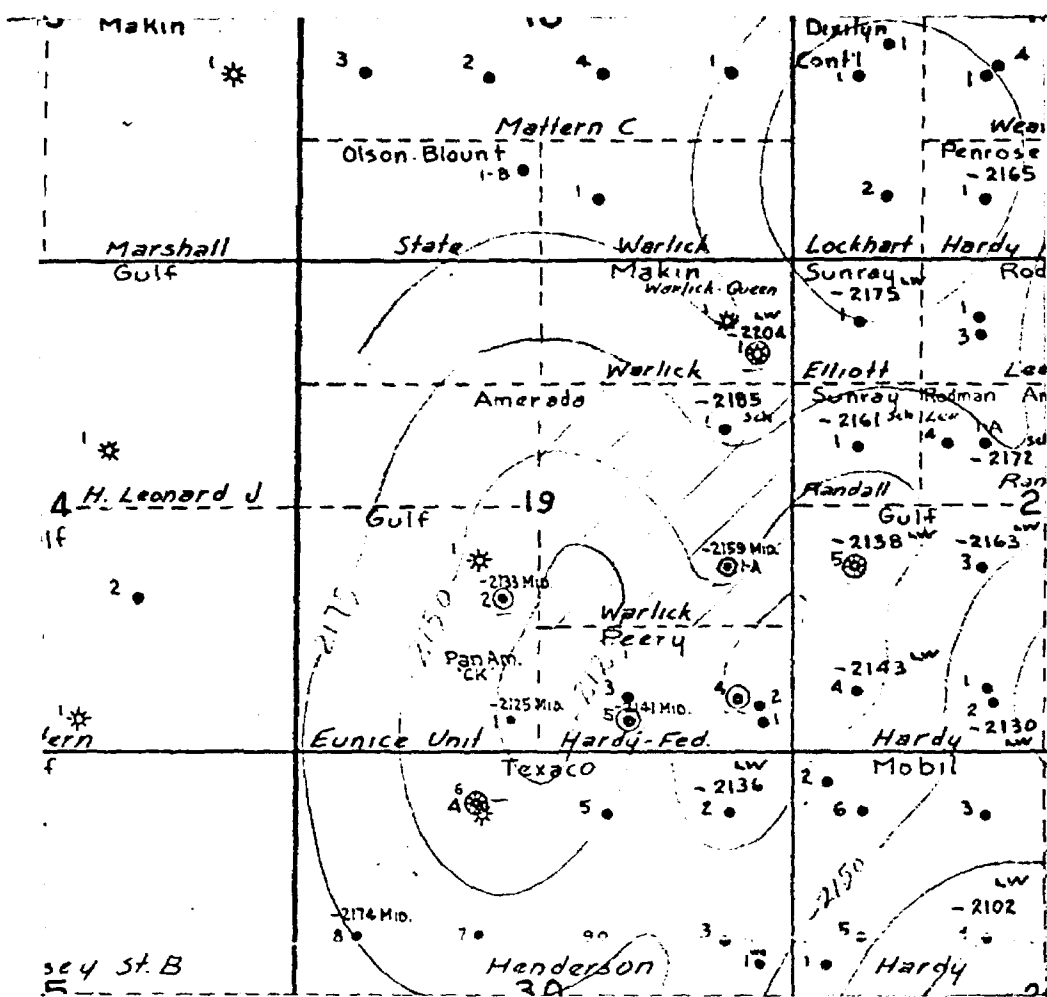
Contour Interval 25 Feet

Scale: 1" = 2000'

Revised: April 6, 1961

R-36-E

R-37-E



AMERADA PETROLEUM CORP.

EXHIBIT 12

FIGURE 3

© Blinebry Prod.

BLINEBRY POOL
Lea County, New Mexico

Top Clearfork

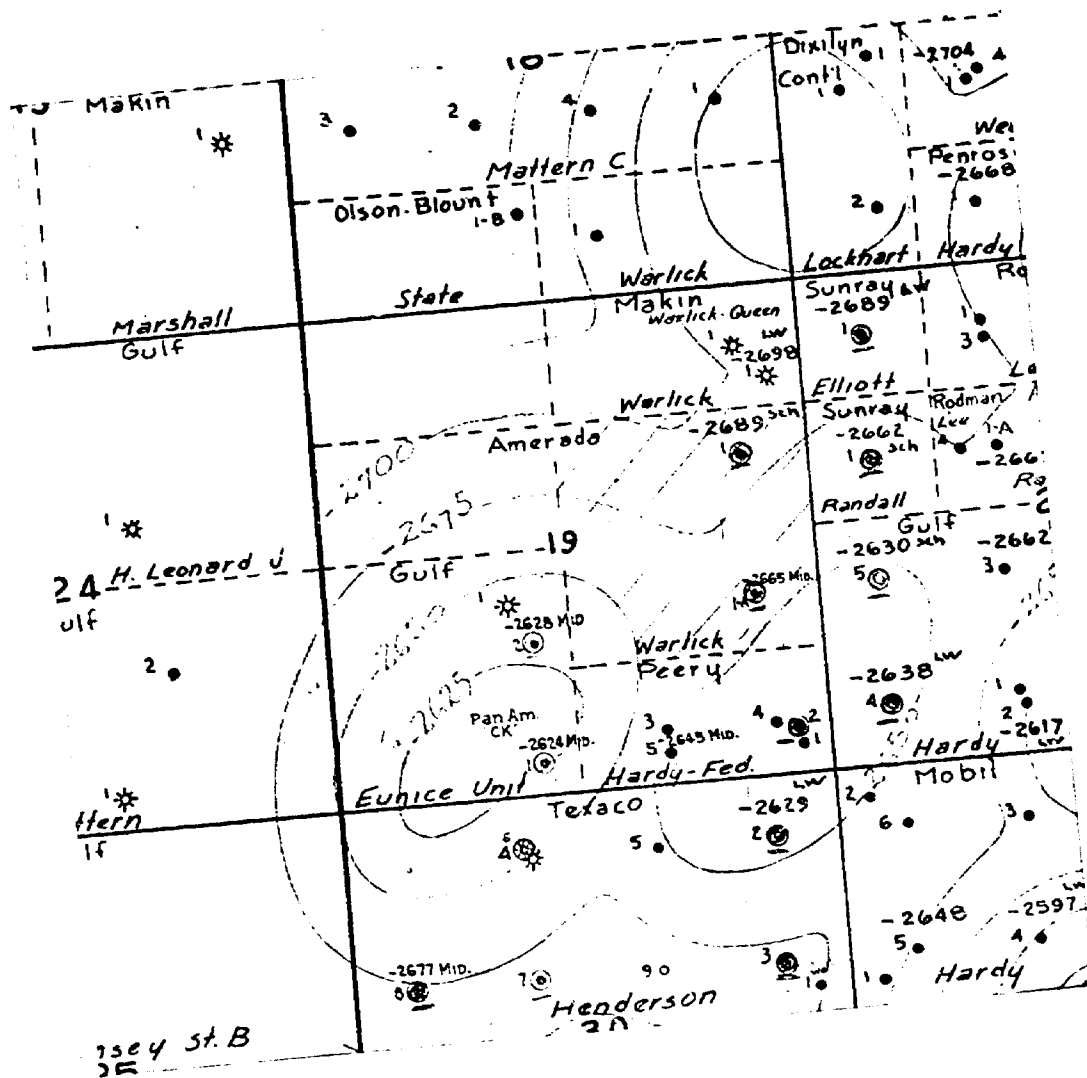
Contour Interval 25 Feet

Scale: 1" = 2000'

Revised: April 1961

R-36-E

R-37-E



AMERADA PETROLEUM CORP.
EXHIBIT 12
FIGURE 4

Drinkard Prod.

DRINKARD POOL
Lea County, New Mexico

Top Tubb

Contour Interval 25 Feet
Scale: 1" = 2000'

Lea County, New Mexico

R-37-E

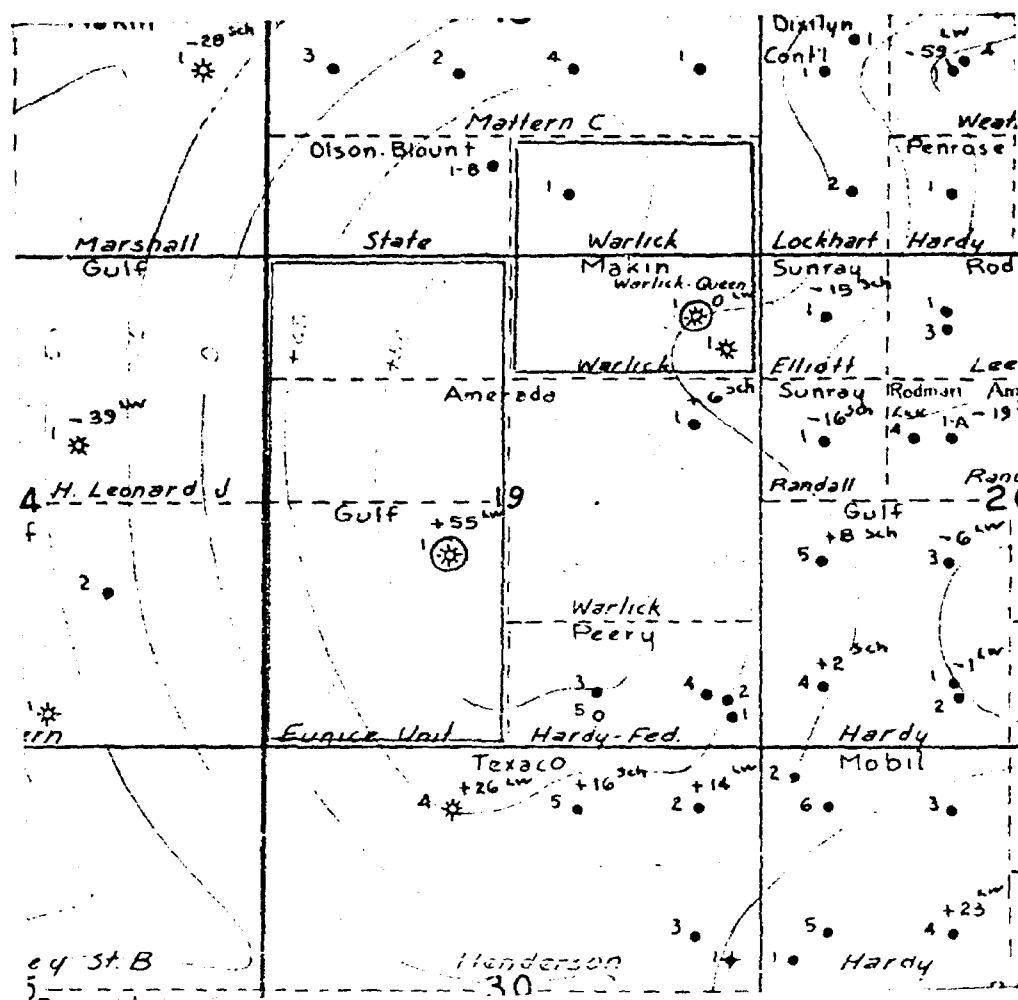


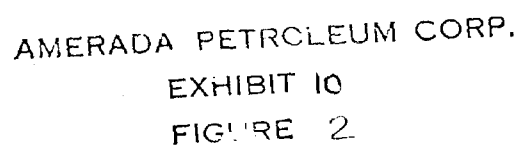
FIGURE 1

Case No. 2897-2898

Scale: 1" = 2000'

JAN-7-1961 Wilson

R-L-E



- ⊙ Paddock Oil Wells
- *BRINKLEY PRODUCTION*
- *BRINKARD PRODUCTION*

1/7/62 Nelson