

Santa Fe Energy Company



500 West Ohio
Midland, Texas 79701
915/687-3551

October 24, 1983

Mr. Richard L. Stamets
Technical Support Chief
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
P. O. Box 2088
Santa Fe, NM 87501

RE: Geologic Exhibits

Dear Mr. Stamets:

The Santa Fe Energy Exploration Department is proposing an unorthodox location (990' FNL and 990' FWL) in Section 18, T23S, R28E, Eddy County, New Mexico. Reasons for this locations are as follows:

1. Regional maps of the Morrow Sand indicate the sand was deposited in a northwest-southeast direction.
2. The productive sandstone in the Belco #1 Guitar (1980' FNL, 660' FEL Section 19, T23N, R28E) has a cumulative production of 2.7 BCF gas. The El Paso #1 Carrasco, (1980' FNL, 660' FEL, Section 19, T23S, R27E) was drilled in 1982 and had an IPCAOF of 7.1 MMCFGPD. Both wells produce from the same sand. This sand is wet and not gas productive in the Cities Service 1-A Brantley (1980' FSL and FEL Section 7, T23S, R28E) and the Amoco #1 Carter, (1980' FSL and FEL, Section 18, T23S, R28E). Therefore, it is necessary for Santa Fe's proposed location to be in the northwest quarter of Section 18, where the thickest productive Morrow sand would be encountered.
3. Isopaching of the individual Morrow sand which was productive in the Belco #1 Guitar and the El Paso #1 Carrasco wells indicates the sand deposition was in a northwest-southeast direction. (Map 1)
4. To establish production in the north half of section 18, T23S, R28E the proposed well location should be within the productive sand trend limits. Santa Fe is therefore recommending a location 990' FNL, 990' FWL.

The location Santa Fe Energy Company has proposed is the most logical one based upon knowledge of sand trends, good reservoir conditions and production data in extending gas production in North Loving Field.

Yours truly,

Bill A. Schaefer, Jr.
Exploration Manager

ccs



R28E

CITIES SERV VILLA

EL PASO BIRD

B
5

12

20

10

30

7

A

1-A

CITIES SERV BRANTLEY

CITIES SERV VILLA

8

1-A

1

EL PASO CARRASCO

10

13

35

AMOCO CARTER

18

0

1

B'

17

T
23
5

PROPOSED LOCATION
12,600'

READ-STEVENS KIMBLEY

BELCO GUITAR EST

24

A'

BELCO LAKEY

24

6
19

20

16

25

HNC NL
PARDUE

30
BELCO COCHELL



SANTA FE ENERGY COMPANY
PERMIAN BASIN DISTRICT
MIDLAND, TEXAS

CARLSBAD AREA
PECOS BEND PROSPECT
EDDY COUNTY, NEW MEXICO

ISOPACH OF THE LOWER
MORROW SAND #2
POROSITY GREATER THAN 6%

C.I.: 5"
GEOLOGY: K. H. SCHMIDTMAN
DATE: 9-83
SCALE: 1":2000'
FILE: 2-J-3

OFFSET OPERATORS TO CARRASCO #1

Amoco Production Company
P.O. Box 3092
Houston, Texas 77253
Attention: Chris Raper

Cities Service Company
P.O. Box 1919
Midland, Texas 79702
Attention: John McCartney

El Paso Exploration Company
1800 Wilco Building
Midland, Texas 79701
Attention: Don Janssen

Santa Fe Energy Company



500 West Ohio
Midland, Texas 79701
915/687-3551

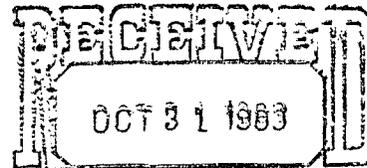
October 13, 1983

Re: Waiver Request

Cities Service Co.
P.O. Box 1919
Midland, TX 79702

Attn: John McCartney

Gentlemen:

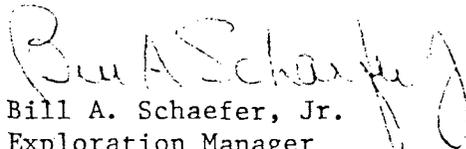


OIL CONSERVATION DIVISION
SANTA FE

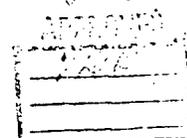
This is to inform you of our Request for Administrative Approval of Santa Fe Energy Company's unorthodox location for a well to be drilled 990' FNL and 990' FWL in Section 18, Township 23, South, Range 28 East, Eddy County, New Mexico. (Plat attached, for your convenience)

We would appreciate your responding to this Waiver as quickly as possible as we plan to spud the well on or before December 1, 1983. Please send one executed copy to: Division Director, Oil Conservation Division, Energy and Minerals Department, State of New Mexico, P.O. Box 2088, Santa Fe, New Mexico 87501, and return the copy so marked to us.

Yours truly,


Bill A. Schaefer, Jr.
Exploration Manager

BY SIGNATURE HERETO, WE DO APPROVE THIS WAIVER REQUEST:



Date _____

Attorney-in-Fact

Attchmt
/efw



Santa Fe Energy Company



500 West Ohio
Midland, Texas 79701
915/687-3551

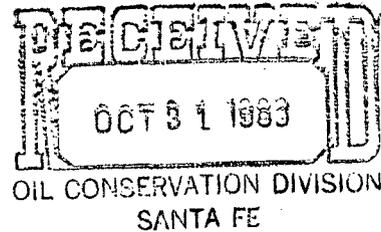
October 13, 1983

Re: Waiver Request

Amoco Production Co.
P.O. Box 3092
Houston, Texas 77253

Attn: Chris Raper

Gentlemen:



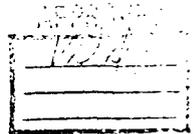
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Yours truly,


Bill A. Schaefer, Jr.
Exploration Manager

BY SIGNATURE HERETO, WE DO APPROVE THIS WAIVER REQUEST:



Attorney-in-Fact

Date

Attchmt
/efw





Santa Fe Energy Company

500 West Ohio
Midland, Texas 79701
915/687-3551

October 28, 1983

NSL-1769
Rule 104 F II
NOV. 20, 1983

RECEIVED
OCT 31 1983
OIL CONSERVATION DIVISION
SANTA FE

Mr. Richard L. Stamets
Technical Support Chief
Oil Conservation Division
Energy & Minerals Department
State of New Mexico
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Santa Fe Energy Company wishes to drill ~~the Morrow test~~ Carrasco Well No. 1 at a location 990' FNL, 990' FWL, Section 18, T23S, R28E, Eddy County, New Mexico.

North Loving Morrow Pool

Attached please find:

1. Letter requesting administrative approval of unorthodox location.
2. Form C-101
3. Form C-102 with attachments
4. Geological Data
5. Lease Map
6. List of offset operators
7. Copy of letter sent to offset operators.

Two copies of this have been sent to the District Office in Artesia. If there is anything else needed by your office in order to consider the request, please let me know.

Sincerely,

Michael R. Burton
Michael R. Burton

MRB:cc

attachments





File NSL-1769

Amoco Production Company (USA)

Houston Region-West
501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253

R. G. Smith
Regional Engineering
Manager-West

October 31, 1983

File: JCA-986.51NM-3346

Re: Unorthodox Well Location
#1 Carrasco
990' FNL & 990' FWL
Section 18, T-23-S, R-28-E
Eddy County, New Mexico

RECEIVED
NOV 2 1983
OIL CONSERVATION DIVISION
SANTA FE

RECEIVED
NOV 8 1983
OIL CONSERVATION DIVISION
SANTA FE

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Gentlemen:

Santa Fe Energy Company has filed an application for Administrative Approval of an unorthodox location for the subject well to be drilled 990' FNL and 990' FWL in Section 18, Township 23 South, Range 28 East, Eddy County, New Mexico.

As an offset operator, Amoco Production Company waives objection to the drilling of the well at the unorthodox location stated above.

Yours very truly,

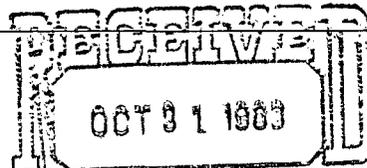
R. G. Smith
mec

MLC/agd
1039/C

cc: Santa Fe Energy Company
500 West Ohio
Midland, TX 79701

Santa Fe Energy Company

500 West Ohio
Midland, Texas 79701
915/687-3551



OIL CONSERVATION DIVISION
SANTA FE

October 28, 1983

Mr. Joe D. Ramey, Director
Oil Conservation Division
State of New Mexico
Energy & Minerals Department
P.O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Santa Fe Energy Company requests administrative approval of an unorthodox location to drill a Morrow test at 990' FNL, 990' FWL, Section 18, T23S, R28E, Eddy County, New Mexico.

The reasons for this request are geologic and are attached.

Sincerely,

A handwritten signature in cursive script that reads "Michael R. Burton".

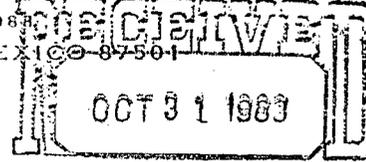
Michael R. Burton

MRB:cc

attachments



NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	



5A. Indicate Type of Lease
STATE FEE

5. State Oil & Gas Lease No.

OIL CONSERVATION DIVISION

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG **SANTA FE**

14. Type of Work a. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> GAS WELL <input type="checkbox"/> OIL WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Agreement Name
2. Name of Operator Santa Fe Energy Company		8. Farm or Lease Name Carrasco
3. Address of Operator 500 W. Ohio, Midland, Texas 79701		9. Well No. 1
4. Location of Well UNIT LETTER <u>D</u> LOCATED <u>990</u> FEET FROM THE <u>North</u> LINE AND <u>990</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>18</u> TWP. <u>23S</u> RGE. <u>28E</u> NMPM		10. Field and Pool, or Wildcat North Loving Morrow
21. Elevations (Show whether DF, KT, etc.) 3059.0		12. County Eddy
21A. Kind & Status Plug. Bond Blanket	19. Proposed Depth 12,600'	19A. Formation Morrow
21B. Drilling Contractor To be determined	20. Rotary or C.T. Rotary	
22. Approx. Date Work will start November 15, 1983		

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
24"	20"	94#	400'	582	Surface
17 1/2"	13-3/8"	54.5#	2370'	1770	Surface
12 1/4"	9-5/8"	40.0#	10670'	1790	5670'
7-7/8"	5-1/2"	20.0#	12600'	573	9700'

Move on location and rig up rotary tools. Drill 24" hole to 400'. Run 20" casing and cement from 400' back to surface. WOC 8 hours. Test casing to 600 psi. Drill 17 1/2" hole to 2370'. Run electric logs. Run 13-3/8" casing and cement from 2370' back to surface. WOC 8 hours. Nipple up BOP equipment. Test casing to 1500 psi. Drill 12 1/4" hole to 10,670'. Run electric logs. Run 9-5/8" casing and cement from 10,670' back to 5670'. WOC 8 hours. Test casing to 1500 psi. Drill 10'. Test casing seat to 13.0 ppg MWE. Drill 7-7/8" hole to 12,600'. Drill stem test zones of interest. Run electric logs. Depending upon log and drill stem test results, either run 5 1/2" casing and cement from 12,600' back to 9700' or plug and abandon as per New Mexico Oil Conservation Division Rules, Regulations, and instructions.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Michael R. Burt Title Sr. Drilling Engineer Date 10-19-83

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

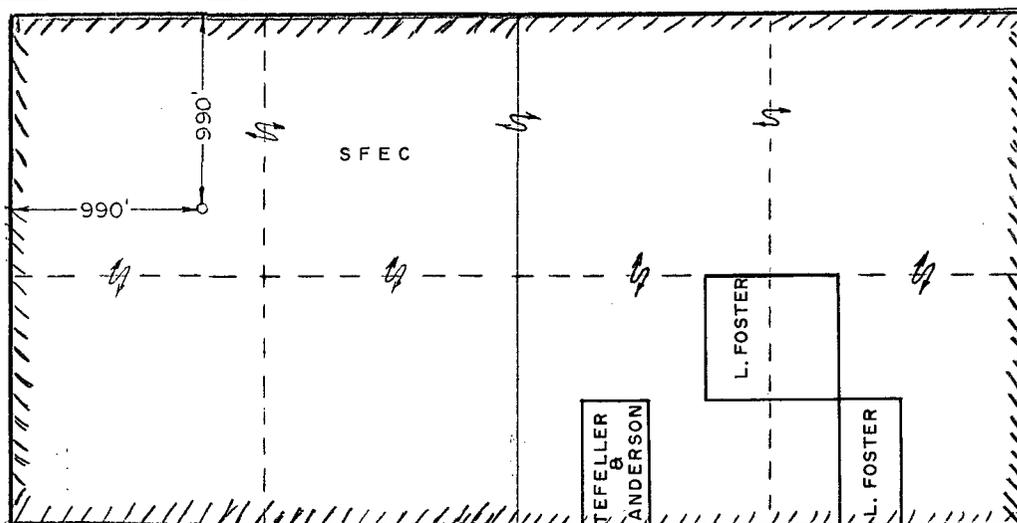
Operator SANTA FE ENERGY CO.		Lease CARRASCO			Well No. 1
Unit Letter D	Section 18	Township 23S	Range 28E	County EDDY	
Actual Footage Location of Well: 990 feet from the NORTH line and 990 feet from the WEST line					
Ground Level Elev. 3059.0	Producing Formation		Pool North Loving Morrow	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

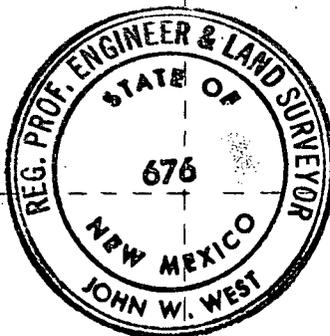
Yes No If answer is "yes," type of consolidation Designation of Consolidated Gas Leasehold Estate

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



RECEIVED
OCT 31 1983
OIL CONSERVATION DIVISION
SANTA FE



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

MICHAEL R. BURTON

Name
Michael R. Burton
Position
Sr. Drilling Engineer

Company
SANTA FE ENERGY COMPANY

Date
10-28-83

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
10/11/83

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

WORKING INTEREST OWNERS ARE SHOWN
ON FORM C-102. BELOW IS A LIST
OF THE ROYALTY OWNERS.

Malaga tract 315, being $\frac{W}{2}\frac{NW}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 316, being $\frac{E}{2}\frac{NW}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 318, being $\frac{E}{2}\frac{NE}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 319, being $\frac{NW}{4}\frac{NE}{4}\frac{NE}{4}$ (10 acres);
 Malaga tract 321, being $\frac{NE}{4}\frac{NE}{4}\frac{NE}{4}$ (10 acres);
 Malaga tract 322, being $\frac{SE}{4}\frac{NE}{4}\frac{NE}{4}$ (10 acres);
 Malaga tract 323, being $\frac{E}{2}\frac{SW}{4}\frac{NE}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 324, being $\frac{W}{2}\frac{SW}{4}\frac{NE}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 327, being $\frac{E}{2}\frac{SW}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 333, being $\frac{W}{2}\frac{NW}{4}\frac{SW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 334, being $\frac{E}{2}\frac{NW}{4}\frac{SW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 335, being $\frac{W}{2}\frac{NE}{4}\frac{SW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 341, being $\frac{W}{2}\frac{SW}{4}\frac{SW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 94, being $\frac{SE}{4}\frac{SW}{4}\frac{NE}{4}$, $\frac{W}{2}\frac{SW}{4}\frac{SE}{4}\frac{NE}{4}$ (15 acres);
 Malaga tract 345, being $\frac{E}{2}\frac{SE}{4}\frac{SE}{4}\frac{NE}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Carter Farms Company, a limited partnership 1411 Orchard Lane Carlsbad, New Mexico 88220;	8/8	3/16

Malaga tract 317, being $\frac{W}{2}\frac{NE}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres);
 Malaga tract 325, being $\frac{E}{2}\frac{SE}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Earl B. Guitar and John Guitar Jr., Agents and Attorneys-in-Fact for Ruth Guitar Alexander, a widow, et al c/o Earl B. Guitar P. O. Box 744 Abilene, Texas 79604	8/8	1/4

Malaga tract 326, being $\frac{W}{2}\frac{SE}{4}\frac{NW}{4}\frac{NE}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Lois Mae Beesing 2408 Marshall Drive Edmond, Oklahoma 73034	8/8	3/16

Malaga tract 328, being $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Phyllis Jean Peal, formerly Phyllis Jean Hummel 613 County Hills Drive St. Louis, Missouri 63119	8/8	3/16

Malaga tract 336, being $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres);
Malaga tract 337, being $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres);
Malaga tract 339, being $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres);
Malaga tract 340, being $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres);
Malaga tract 343, being $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Earl B. Guitar and John Guitar Jr., Agents and Attorneys-in-Fact for Ruth Guitar Alexander, a widow, et al c/o Earl B. Guitar P. O. Box 744 Abilene, Texas 79604	8/8	1/4

Malaga tract 338, being $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
August Linck Jr. 771 Norbert Drive Santa Barbara, California 92404	8/8	3/16

Malaga tract 342, being $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Edmund T. Anderson, IV P. O. Box 3575 Midland, Texas 79703	1/2	1/2 (fee ownership)
Ronald G. Tefteller P. O. Box 8575 Midland, Texas 79703	1/2	1/2 (fee ownership)

Ownership Under: Malaga tract 344, being $W\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}NE\frac{1}{4}$ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Ola Housouer, widow of Guy Housouer, dec.; Mary Housouer Franks and Dessa Housouer Black, being two of the three children of Ola Housouer and husband, Guy Housouer, dec.; Duane Housouer and Melvin Lee Housouer, being the only children of J. M. Housouer, dec., he being one of the three children of Ola Housouer and husband, Guy Housouer, dec.; each dealing in their sole and separate property and being all the heirs of Guy Housouer, dec. 1913 47th Street Lubbock, Texas 79412	8/8	3/16

Malaga tract 311, being $W\frac{1}{2}NW\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres) and Malaga tract 312, being $E\frac{1}{2}NW\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres), save and except a lot 125 feet North and South by 200 feet East and West (Candelario O. Carrasco, Sr. has life estate in this);

Malaga tract 313, being $W\frac{1}{2}NE\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres);
Malaga tract 329, being $E\frac{1}{2}SE\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres);
Malaga tract 330, being $W\frac{1}{2}SE\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres);
Malaga tract 331, being $E\frac{1}{2}SW\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres);
Malaga tract 332, being $W\frac{1}{2}SW\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ (5 acres);
Lot 1, being $NW\frac{1}{4}NW\frac{1}{4}$ (39.24 acres);
 $SE\frac{1}{4}NW\frac{1}{4}$ (40.00 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Candelario A. Carrasco, Jr. P. O. Box 26 Loving, New Mexico 88256	8/8	3/16

A tract out of NW¹/₄NE¹/₄NW¹/₄ described as beginning at a point on the North line of Section 18, Township 23 South, Range 28 East, N.M.P.M., 1450 feet East of the Northwest corner of said section; thence South parallel to the West line of the section a distance of 125 feet; thence East Parallel to the North line of said section a distance of 200 feet; thence North parallel to the West line of said section a distance of 125 feet; thence West a distance of 200 feet to point of beginning.

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Celia Valdez as Conservator for Candelario O. Carrasco, Sr. (life estate) P. O. Box 93 Loving, New Mexico 88256	8/8	3/16
Candelario A. Carrasco, Jr. (remainderman) P. O. Box 26 Loving, New Mexico 88256		

Malaga tract 314, being E¹/₂NE¹/₄NW¹/₄ (5 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Earl B. Guitar and John Guitar Jr., Agents and Attorneys-in-Fact for Ruth Guitar Alexander, a widow, et al c/o Earl B. Guitar P. O. Box 744 Abilene, Texas 79604	8/8	1/4

Lot 2, being SW¹/₄NW¹/₄ (39.31 acres)

<u>Owner</u>	<u>Interest</u>	<u>Royalty</u>
Earl B. Guitar and John Guitar Jr., Agents and Attorneys-in-Fact for Ruth Guitar Alexander, a widow, et al c/o Earl B. Guitar P. O. Box 744 Abilene, Texas 79604	8/8	1/4