



R. E. Irelan
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 East Michigan
Hobbs, NM 88240
(505) 393-4141

July 9, 1987

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

Attention V. T. Lyon

Case 4193

Gentlemen:

Approval for Unorthodox Location, CSF Ruby Wells, Well No. 1, Undesignated Pool, McKinley County, New Mexico

Conoco Inc. respectfully requests Administrative approval to drill its CSF Ruby Wells, Well No. 1 as an exploratory oil well at an unorthodox location 1390' FNL and 1720' FWL of Section 9, T-18N, R-10W, McKinley County, New Mexico, to test the Entrada Formation. Total depth of the well will be approximately 4300'. The 40-acre tract consisting of Unit F will be assigned to the well. No other wells in the area have penetrated the Entrada Formation.

Prior to spudding the well, Conoco Inc. and Santa Fe Energy Company will be assigned drilling rights to the 40-acre tract on which this will be located and to all offsetting 40-acre tracts designated by the shaded area on Exhibit #3. Chaco Energy Company owns the surface rights and Cerrillos Land Company owns the mineral rights to all of the shaded tracts, which are covered by one basic oil and gas lease and will be covered by one assignment. All owners are being furnished a copy of this letter by certified mail. Any objection or request for Hearing must be filed with the New Mexico Oil Conservation Division in Santa Fe within fifteen (15) days of receipt of this letter.

Attached are three copies of Exhibits #1, #2, and #3 to support this Application. Your approval is hereby requested.

Yours very truly,

HAI/tm

cc: NMOCD, Aztec

Cerrillos Land Company
2600 Security Life Building
Denver, Colorado 80202

Santa Fe Energy Company
2600 Security Life Building
Denver, Colorado 80202

Nancy Hudson, Exp., Houston

RGIII, KRB



EXHIBIT #1

Conoco Inc.
P.O. Box 2197
Houston, TX 77252

June 30, 1987

Case 9193

GEOLOGIC CONSIDERATIONS FOR RUBY WELLS WILDCAT LOCATION - MCKINLEY CO, NM

PROPOSED LOCATION: 1720' FWL 1390' FNL, section 9 - T18N - R10W
PTD: 4,300'

The Ruby Wells prospect is a test of the Jurassic Entrada Formation which was deposited as an eolian sand. It is overlain by lacustrine limestones and anhydrites of the Todilto Formation. The Entrada dunes were structurally high during Todilto deposition and a thinning Todilto occurs over the Entrada dune crests. The sand dunes can be seen on seismic data as thicks with structured tops and the thinning Todilto is visible as a seismic dimout.

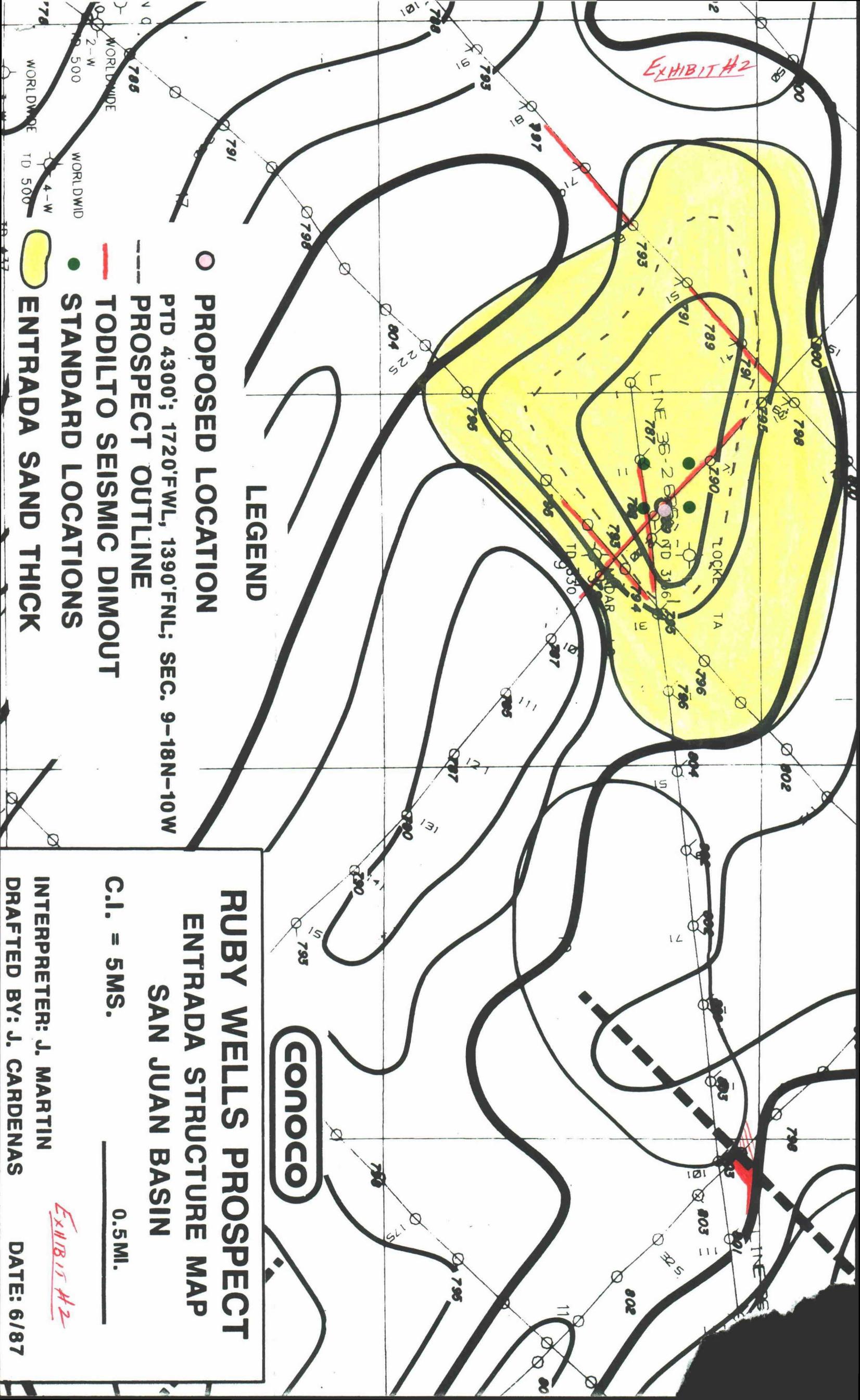
Entrada fields in the area, such as Papers Wash, Snake Eyes, Legs, and Eagle Mesa exhibit areally limited production and produce large volumes of water. As a result of these factors, it becomes very important to test the structural crests of these features. The small size of these fields also gives rise to quickly changing structural conditions at the Entrada horizon. Because of this, we feel the need to choose a location on a seismic line.

The standard locations, shown on the enclosed Entrada structure map, all possess less desirable characteristics compared to the current proposed location at shotpoint 80 of line 37-26-86. The location due north would be off the seismic line and would also project into the line downdip (shotpoint 75) from the current location. The southern location would likewise be off the line and project into the line at shotpoint 83 which is nearing a top Entrada dune-edge waveform change (shotpoint 88). The location to the northwest would be off the line and downdip. Moving southwest would keep the location on a seismic line but would be near the edge of the Todilto dimout, ie. close to the edge of the paleo dune crest.

In order to maximize our chances of drilling a successful well, we consider it imperative to place the wildcat location as close as possible to the dune crest. To ensure this we are requesting the highest location on the key seismic line. This location is also well placed on the Entrada paleohigh as shown by the seismic dimout on the attached Entrada structure map.

James Martin
Geophysicist
Conoco

EXHIBIT #2



LEGEND

- PROPOSED LOCATION
- PTD 4300'; 1720'FWL, 1390'FNL; SEC. 9-18N-10W
- - - PROSPECT OUTLINE
- TODILTO SEISMIC DIMOUT
- STANDARD LOCATIONS
- ENTRADA SAND THICK

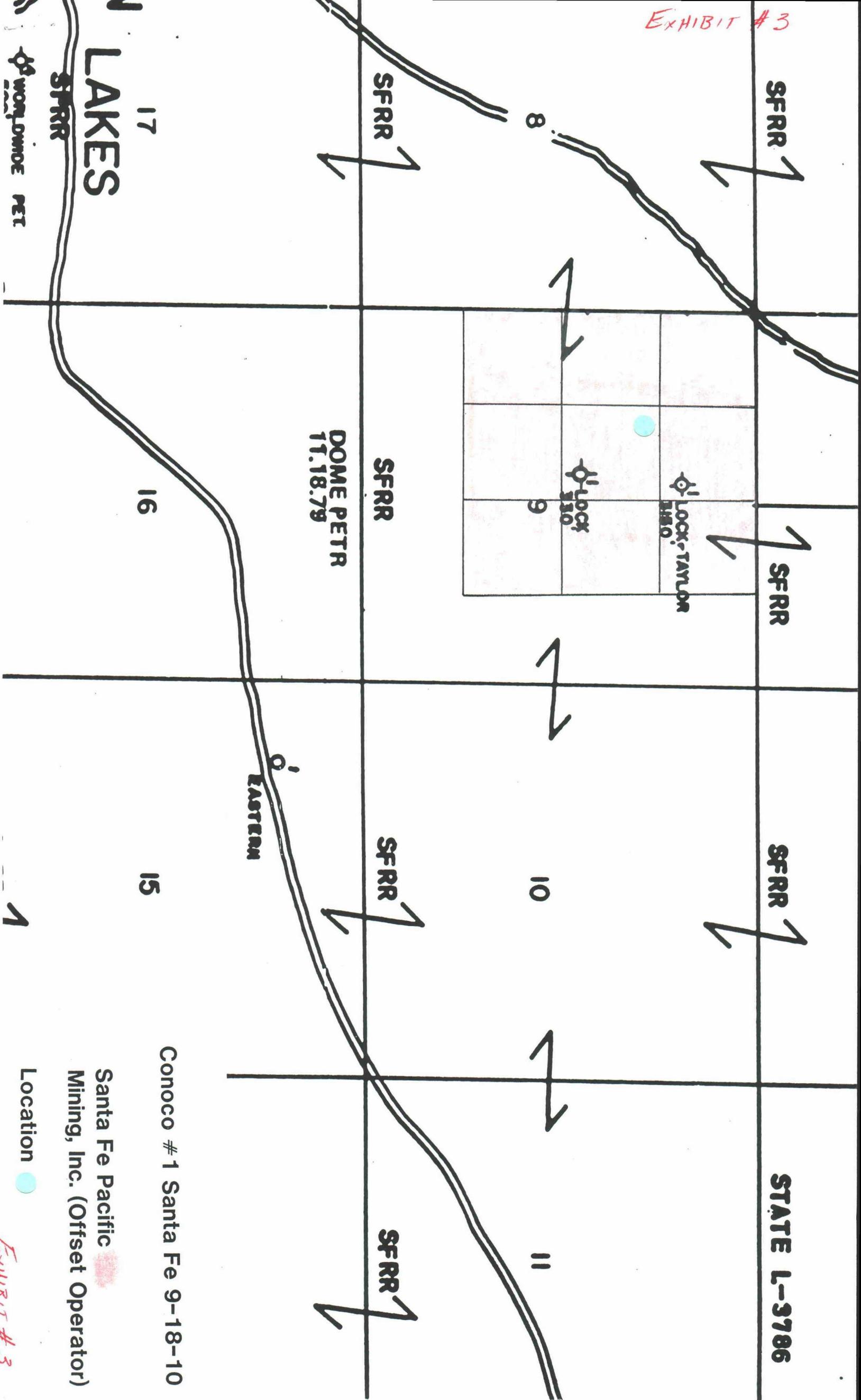
CONOCO

RUBY WELLS PROSPECT
ENTRADA STRUCTURE MAP
SAN JUAN BASIN

C.I. = 5MS. 0.5MI.

INTERPRETER: J. MARTIN
 DRAFTED BY: J. CARDENAS
 DATE: 6/87

EXHIBIT #2



SFRR
LAKES
17
16
15
11
10
9
8

DOME PETR
11.18.79

EASTERN

Lock
150

Lock-TAYLOR
1180

STATE L-3786

Conoco # 1 Santa Fe 9-18-10

Santa Fe Pacific
Mining, Inc. (Offset Operator)

Location





EXHIBIT #1

Conoco Inc.
P.O. Box 2197
Houston, TX 77252

June 30, 1987

Case 9193

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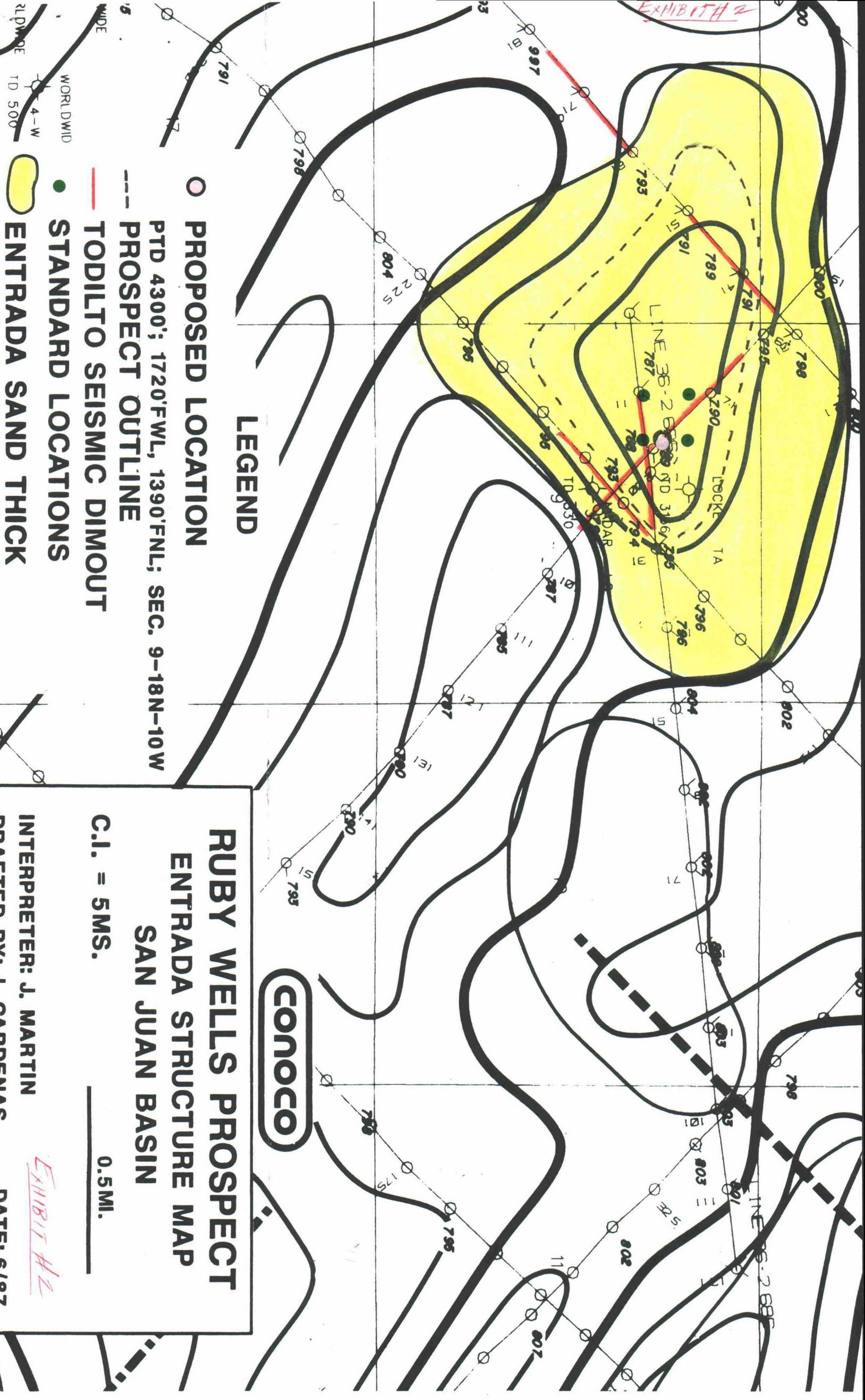
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James Martin
Geophysicist
Conoco

EXHIBIT #2



○ PROPOSED LOCATION

--- PROSPECT OUTLINE

— TODILTO SEISMIC DIMOUT

● STANDARD LOCATIONS

ENTRADA SAND THICK

LEGEND

PTD 4300'; 1720'FWL, 1390'FNL; SEC. 9-18N-10W

C.I. = 5MS.

0.5MI.

RUBY WELLS PROSPECT
ENTRADA STRUCTURE MAP
SAN JUAN BASIN

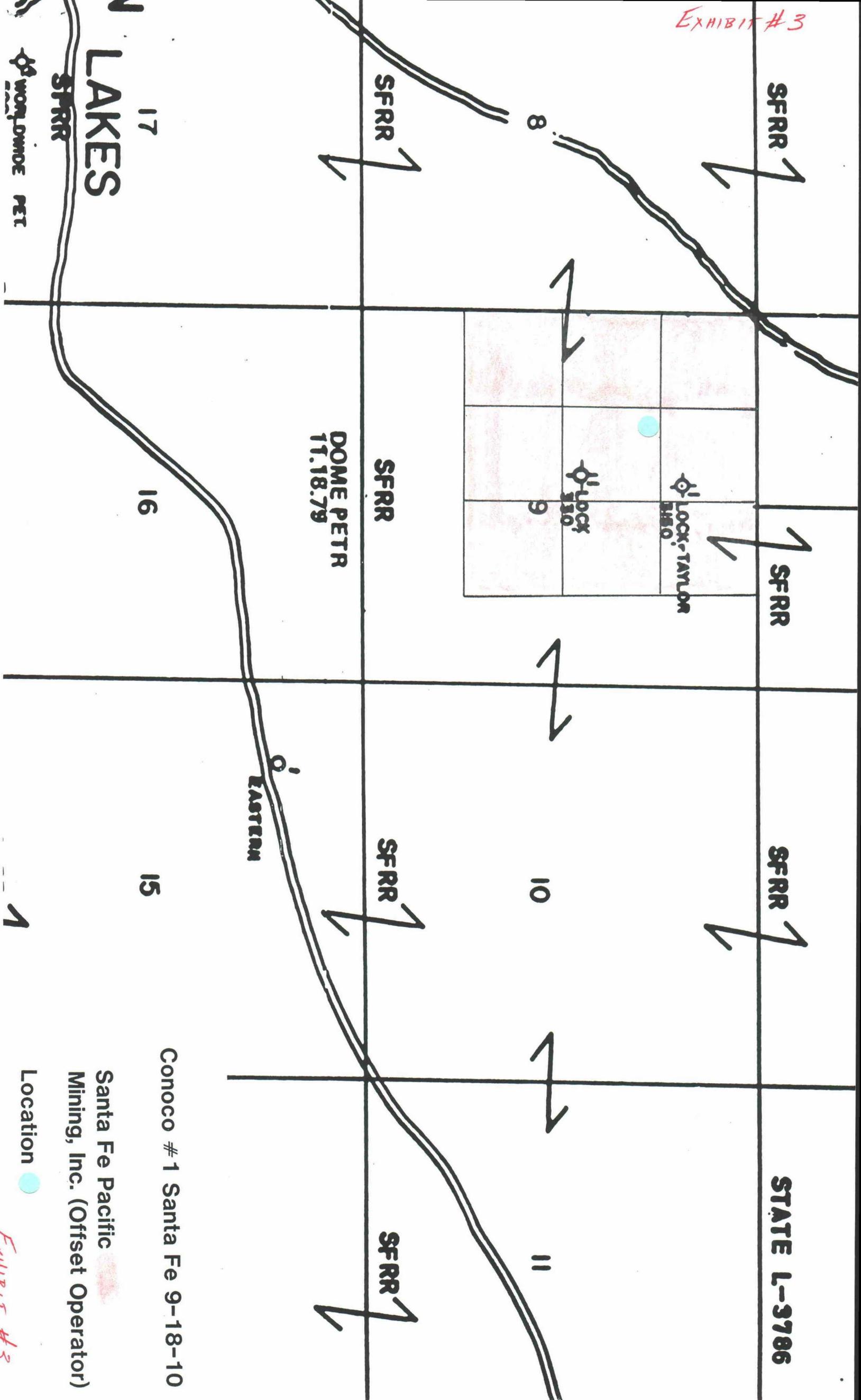
CONOCO

INTERPRETER: J. MARTIN

DRAFTED BY: J. CARDENAS

DATE: 6/87

EXHIBIT #2



WONGDWOE PET

LAKES

17

SFRR

SFRR

8

DOME PETR
11.18.79

SFRR

SFRR

9

LOCK
110

LOCK-TAYLOR

16

SFRR

10

SFRR

O' EASTERN

15

STATE L-3786

11

SFRR

Conoco # 1 Santa Fe 9-18-10

Santa Fe Pacific
Mining, Inc. (Offset Operator)

Location





EXHIBIT #1

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Houston, TX 77252

June 30, 1987

Case 9193

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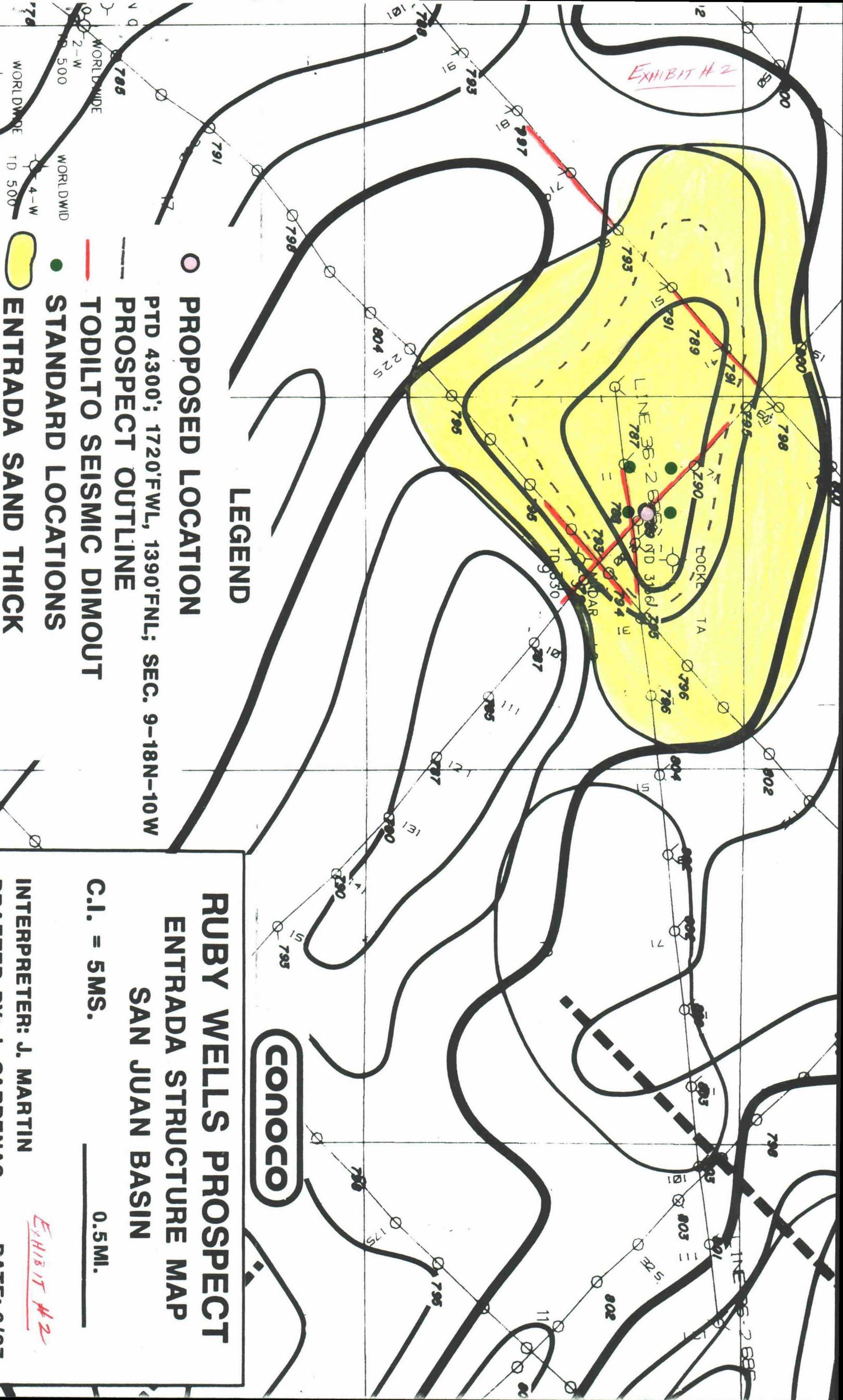
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EXHIBIT # 2



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--- PROSPECT OUTLINE

— TODILTO SEISMIC DIMOUT

● STANDARD LOCATIONS

■ ENTRADA SAND THICK

CONOCO

RUBY WELLS PROSPECT
ENTRADA STRUCTURE MAP
SAN JUAN BASIN

C.I. = 5MS.

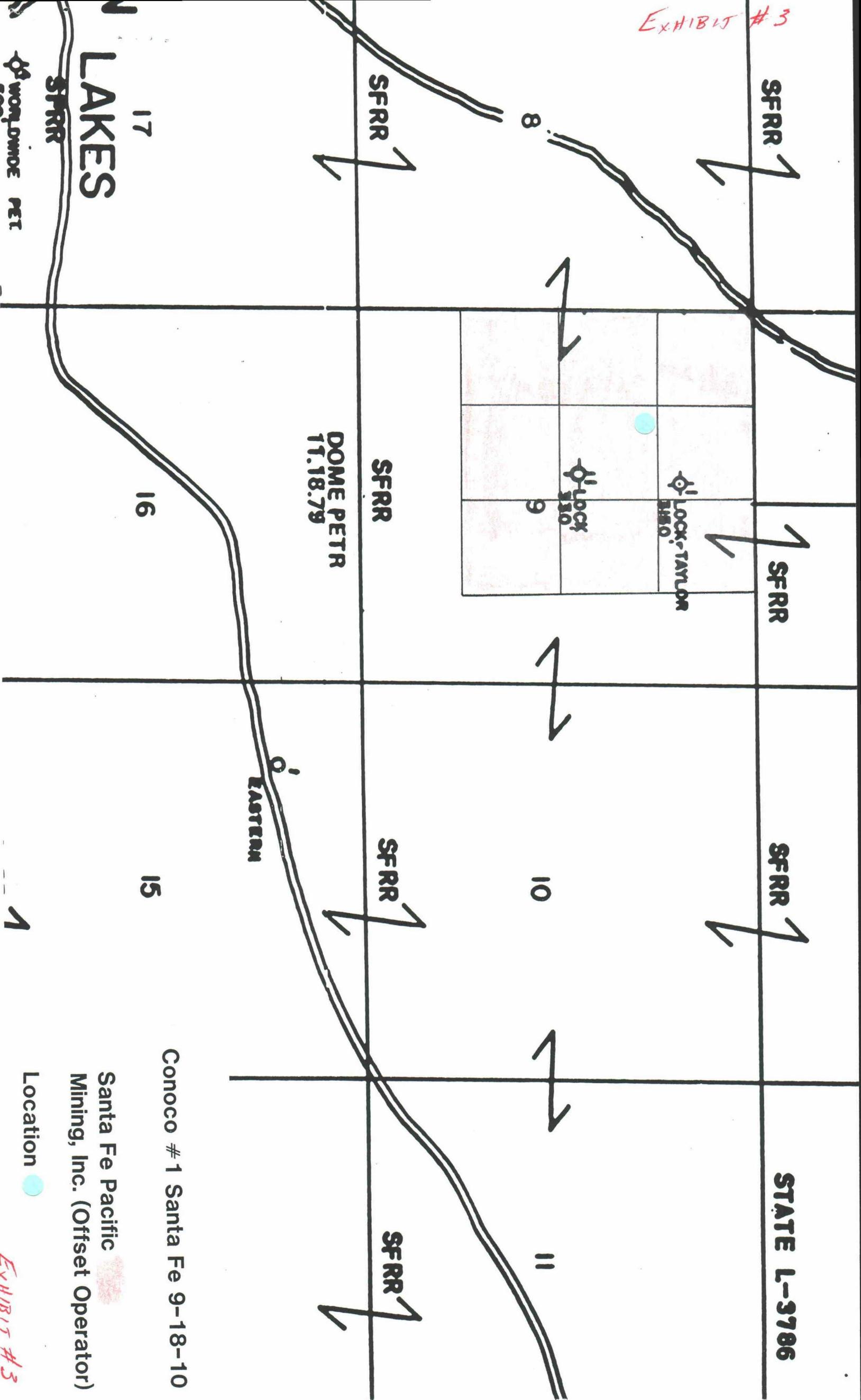
0.5 MI.

INTERPRETER: J. MARTIN

DRAFTED BY: J. CARDENAS

DATE: 6/87

EXHIBIT #2



WORLDWIDE PET

LAKES

17

SFRR

SFRR

8

DOME PETR
11.18.79

SFRR

SFRR

9

Lock
330

Lock-Taylor
218.0

16

EASTERN

SFRR

SFRR

10

15

1

11

SFRR

STATE L-3786

Conoco #1 Santa Fe 9-18-10

Santa Fe Pacific
Mining, Inc. (Offset Operator)

Location

EXHIBIT #3