



Midland Division
Exploration and Production

Conoco Inc.
10 Desta Drive West
Midland, TX 79705-4514
(915) 686-5400

June 3, 1991

Mr. Michael Stogner
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Dear Mr. Stogner:

**Request For Examiner Hearing On June 27, 1991
For Approval Of A Horizontal Directional Drilling
Pilot Project, The Barbara Federal Well No. 13,
And An Unorthodox Surface Well Location In The
North Dagger Draw Upper Pennsylvanian Pool,
Eddy County, New Mexico**

Conoco is applying for approval of a Horizontal Directional Drilling Pilot Project in the North Dagger Draw Pool with drilling to commence at an unorthodox surface location, but with the completed producing interval to begin and end at the required 660' setbacks from the 160-acre proration unit boundary. A map showing this proposed well, offsetting Cisco completions, and offset operators is attached as EXHIBIT A.

- (1) Conoco proposes to drill a horizontal directional well in the NW/4 of Section 17, T-19S, R-25E with drilling to commence at an unorthodox surface location of 760' FNL and 2630' FWL as shown in the Plan View of the proposed wellbore in EXHIBIT B. This directional wellbore will be cased from the surface to a subsurface location not to be further than 1980' FWL and the horizontal segment of the wellbore will not be drilled nearer than 660' FWL. This plan will provide for a maximum 1320 feet of lateral completion within the desired pay interval of the Cisco formation and still provide the required 660' setback from the outer boundary of this 160-acre proration unit as required by Rule 104.
- (2) It is proposed to initially drill and log a vertical wellbore through the top of the Cisco formation as shown in the Cross-sectional view of EXHIBIT C. In order to ensure that the maximum 1320' lateral section is drilled within the productive pay of the Cisco, it is essential that the exact top of the Cisco and the main pay interval be determined at this location before beginning directional drilling. A relatively small error in this information could result in a significant part of the lateral completion being outside the productive interval of the formation.
- (3) The vertical hole will then be plugged back from TD to \pm 7100 feet. At this point the well will be kicked off in a westerly direction with a build assembly that will deviate the well at \pm 10 degrees/100 feet of depth until it enters the target productive interval at an 86-88 degree angle and a subsurface location of 1980' FWL. The remaining vertical and build sections of the wellbore will then be cased down to this point at 1980' FWL.
- (4) Then a lateral section will be drilled from 1980' FWL to TD at a subsurface location of 660' FWL providing a maximum 1320 foot lateral wellbore within the pay interval. In as much as the exact distance and direction of the lateral portion of the wellbore is not known at this time, Conoco seeks approval to be allowed to drill and complete the described lateral portion anywhere within the productive interval and within a rectangle defined by 660' FNL, 1980' FNL, 660' FEL, and 660' FWL in this spacing unit.

- (5) Production from the proposed Barbara Federal No. 13 will be simultaneously dedicated to the 160-acre proration unit in the NW/4, Sec. 17, T-19S, R-25E with that from the Jenny Com. No. 1.
- (6) The low porosity matrix of this dolomitic reservoir is greatly enhanced by well developed vugular systems randomly scattered throughout the productive interval. Drilling horizontally through 1320 feet of reservoir with these randomly spaced vugular systems, will statistically encounter a larger number of systems than a vertical well through only 100-200 feet of reservoir. The greatly increased contact area of the horizontal wellbore should result in a significantly higher productivity with an increase in ultimate recovery.
- (7) In accordance with Division Notice Rule 1207, Conoco has notified by certified mail return-receipt the only offset operator to this unorthodox location and horizontal well project, which is Yates Petroleum. Since this well will be drilled on federal acreage, notice has also been provided to the Bureau of Land Management.
- (8) The granting of this Application will be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

Therefore, Conoco requests that this matter be set for hearing on June 27, 1991 before the appointed Examiner of the Oil Conservation Division and that the Division issue an order granting this application.

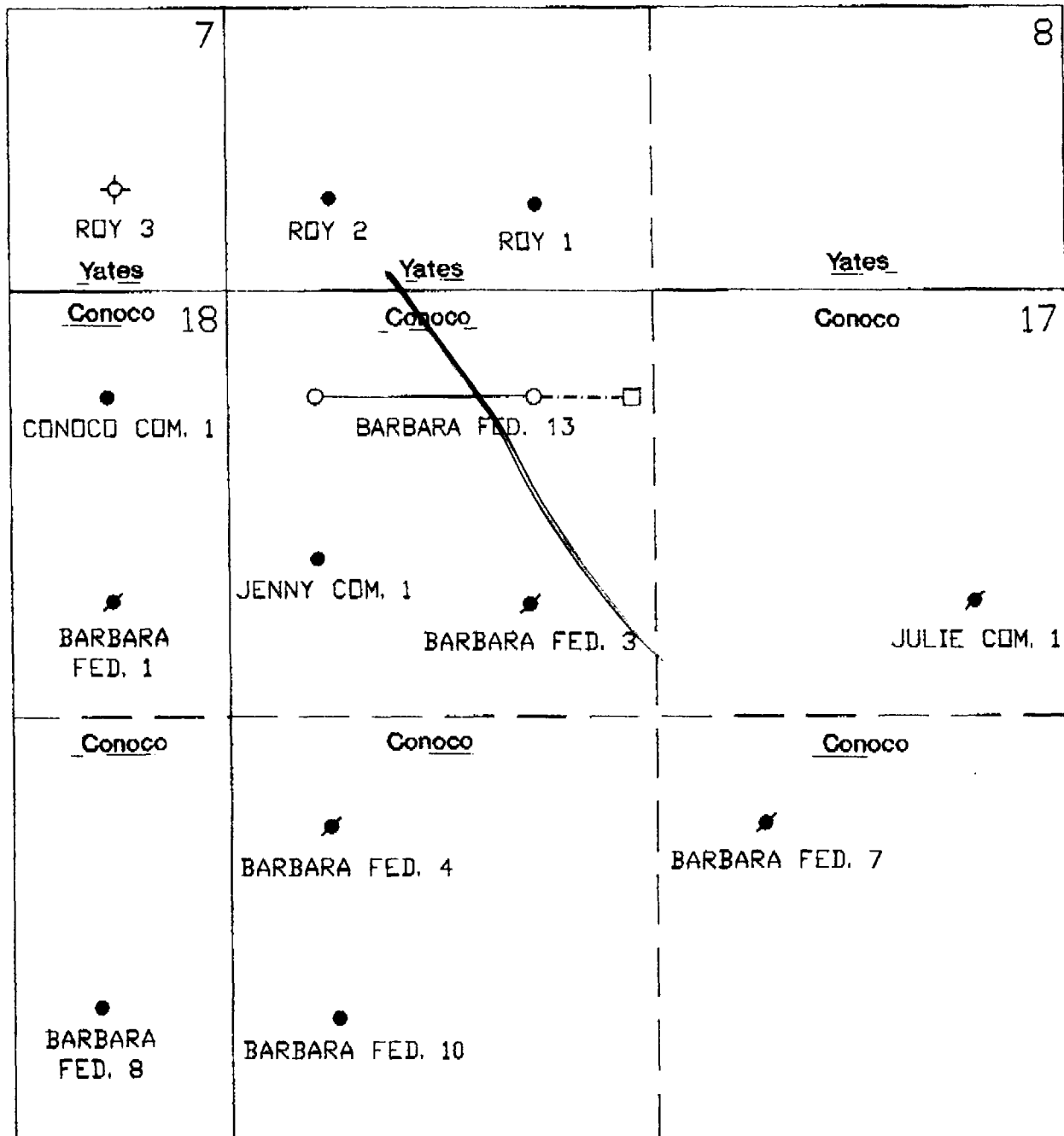
Respectfully submitted,



Jerry W. Hoover
Senior Conservation Coordinator

JWH/tm

R-25-E



□ Proposed Surface Location

○---□ Cased "Build" Section of Directional Wellbore

○—○ Subsurface Lateral Producing Section

— — 160 - Acre Proration Unit Boundaries

EPNGNA MIDLAND DIVISION		
NORTH DAGGER DRAW POOL		
PROPOSED BARBARA FED. 13 HORIZONTAL WELL PROJECT		
PROJECT:		
COUNTY:	EDDY, NEW MEXICO	C.I.:
BY:	JERRY HOOVER	DATE: 5/29/91
REVISED BY:		DATE:
DRAFTED BY:	PAT JOHNSTON	SCALE: 1"=1000'
BUDGET JOB #	10-1006A	

EXHIBIT A

**160-ACRE PRORATION UNIT FOR
BARBARA FEDERAL NO.3 AND JENNY COM NO.1
NW/4 SECT.17 T-19S R-25E**

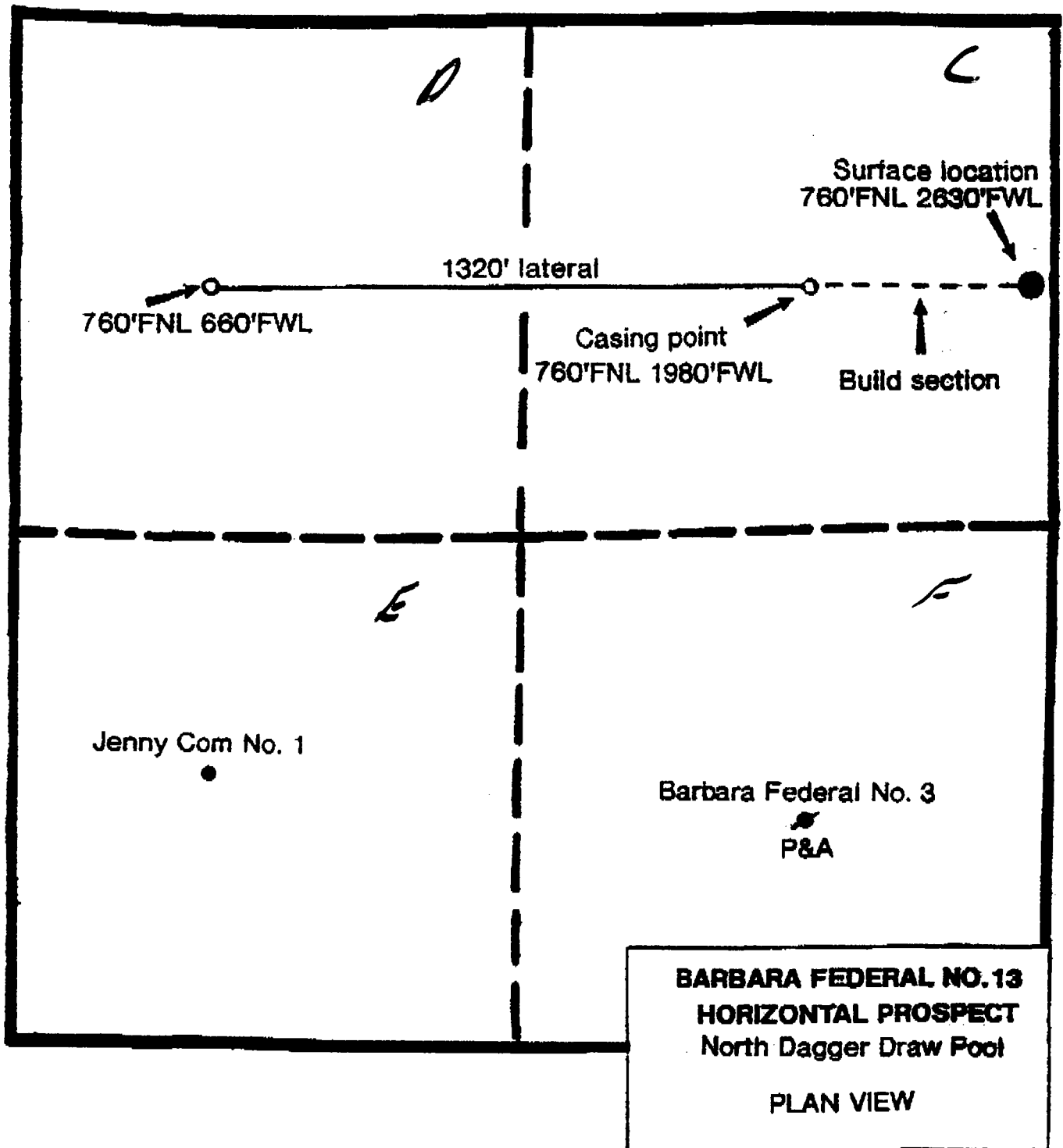


EXHIBIT B

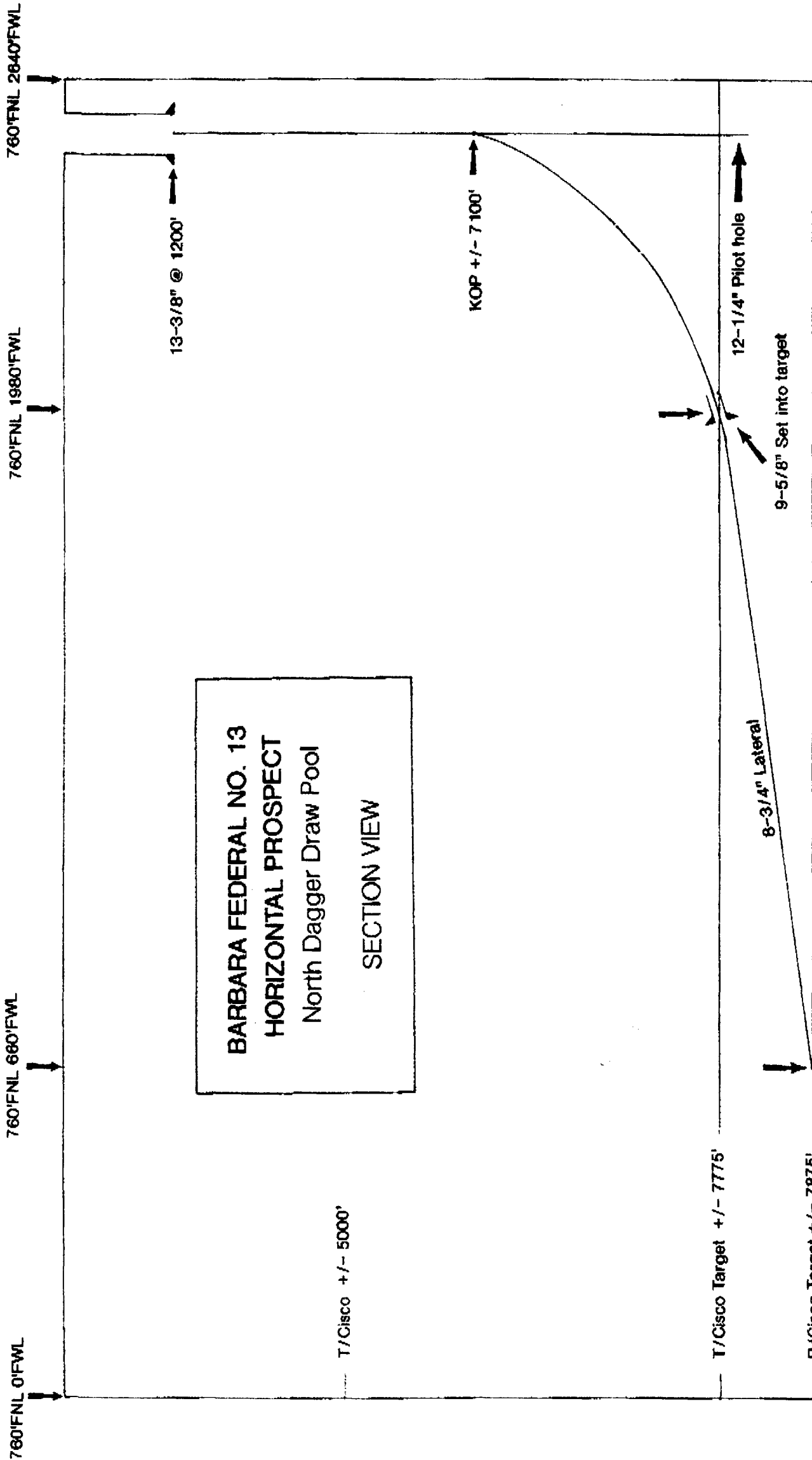


EXHIBIT C