

NSL

11/12/97

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION
RECOGNIZED SPECIALIST IN THE AREA OF
NATURAL RESOURCES-OIL AND GAS LAW

TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

October 22, 1997

HAND DELIVERED

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87501

RECEIVED

OCT 22 1997

Oil Conservation Division

RE: **Sweet Thing State "36" Well No. 1**
Administrative Application of
Stevens & Tull Inc. for Approval
of an Unorthodox Gas Well Location
and a Non-Standard Proration Unit,
Eddy County, New Mexico

Dear Mr. Stogner:

On behalf of Stevens & Tull, Inc., please find enclosed our administrative application for approval of an unorthodox gas well location for its Sweet Thing State "36" Well No. 1 to be drilled 1000 feet FEL and 1000 feet FSL (Unit H) Irregular Section 36, T20-1/2S, R21E, Eddy County, New Mexico, in and dedicated to a non-standard 266-acre gas proration and spacing unit consisting of all of said Irregular Section 36 for gas production from all 320-acre gas pools including but not limited to the Little Box Canyon-Morrow Gas Pool.

Stevens & Tull Inc. is the only offsetting operator affected by this application and therefore no notice is required by the NMOCD rules. However, it has elected to provide notice to Yates Petroleum Corporation and Great Western Drilling Company who are its offsetting working interest owners.

Very truly yours,



W. Thomas Kellahin

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE ADMINISTRATIVE
APPLICATION OF STEVENS & TULL, INC.
FOR APPROVAL OF AN UNORTHODOX GAS WELL
LOCATION AND A NON-STANDARD PRORATION UNIT
EDDY COUNTY, NEW MEXICO**

ADMINISTRATIVE APPLICATION

Comes now Stevens & Tull, Inc., by and through its attorneys, Kellahin and Kellahin, and in accordance with Division General Rule 104.F and general Rule 104.d(2) applies to the New Mexico Oil Conservation Division for administrative approval of an unorthodox gas well location and non-standard gas proration and spacing unit for its Sweet Thing State "36" Well No. 1 to be drilled 300 feet from the East line and 1,000 feet from the North line (Unit H) Section 36, T20 1/2S, R21E, Eddy County, New Mexico and dedicated to a non-standard 266-acre gas proration and spacing unit consisting of all of said Irregular Section 36 for gas production from all 320-acre gas pools including but not limited to the Morrow Gas Pool and in support states:

(1) Stevens & Tull, Inc. is the proposed operator of the subject well to be located in Section 36. **See Exhibit A.** (9 section ownership plat)

(2) Stevens & Tull, Inc. proposes to drill its Sweet Thing State "36" Well No. 1 at an unorthodox gas well location 300 feet from the East line and 1,000 feet from the North Line of Section 36, T20 1/2S, R21E, NMPM, Eddy County, New Mexico. **See Exhibit B.** (Division Form C-102)

(3) The subject well is to be drilled to test, among other things, the Morrow formation in the Little Box Canyon-Morrow Gas Pool which is subject to the statewide Rule 104 providing for standard well locations not closer than 1650 feet to the end nor closer than 600 feet to the side boundary of the spacing unit.

(4) The subject well is offset by spacing units operated by Stevens & Tull. **See Exhibit A.**

**Administrative Application of
Stevens & Tull Inc.**

Page 2

(5) For geologic reasons, the subject well is to be drilled at an unorthodox well location so that it is located at the point of greatest potential for Morrow sand with reservoir characteristics or favorable structure not available at the closest standard location:

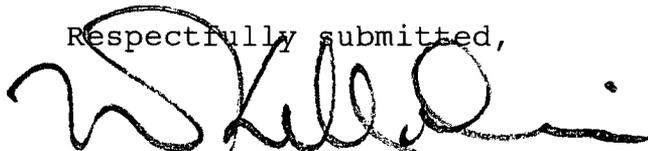
- (a) geologic narrative, Exhibit C
- (b) geologic structure map and geologic cross section, Exhibit D

(6) Stevens & Tull's geologic conclusion is that a well drilled at the closet standard location would place the well in an unfavorable position in the Morrow formation which will substantially increase the risk of a non-commercial well while the proposed unorthodox well location has the best opportunity of encountering a productive reservoir.

(7) As a result of governmental survey this Irregular Section contains only 266 acres and there is no standard location in the section which is available to the applicant.

WHEREFORE, Stevens & Tull requests that this matter be approved administratively by the Division

Respectfully submitted,



W. Thomas Kellahin
Kellahin and Kellahin
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
(505) 982-4285
Attorneys for Applicant

f:\docs\unorthdx.loc

EXHIBIT C

GEOLOGIC REPORT

By

George J. Ulmo

**Stevens & Tull, Inc.
Sweet Thing State 36 #1
1,000' FNL & 300' FEL Sec. 36
T-20 1/2 S, R-21 E, N.M.P.M.,
Eddy County, New Mexico**

PROPOSAL

Stevens & Tull, Inc. proposes to drill the captioned well in the Little Box Canyon Field to a depth of 8,250 feet in order to test the Cisco and Morrow formations. The well is to be drilled late in the fourth quarter of 1997 in order to save a lease which expires in the first quarter of 1998. In order to minimize the structural and stratigraphic risks associated with both objective reservoirs, it is necessary to drill the well at the captioned unorthodox location in the extreme eastern portion of section 36.

STRUCTURE

The accompanying structure map, prepared by Richard K. Barr, drawn on the top of the lower Morrow Formation (shown as the Index Map on Cross Section A-A') depicts the Little Box Canyon Field as a structural anticline which has been segmented by two parallel north-south trending faults such that the original structural crest (located in section 35, T-20 S, R-21 E and the west half of section 36, T-20 1/2 S, R-21 E) is now in a graben between the two faults. The Faults are subparallel to the Huapache Fault Trend which is approximately four miles west of the Little Box Canyon Field. Based on isopach mapping, the formation of the graben is believed to have occurred in late Pennsylvanian or Wolfcampian time. The structure map is based solely on subsurface data and has not been verified by seismic.

MORROW RESERVOIR ANALYSIS

Isopach mapping of the lower and middle Morrow intervals, and of the sands contained within them, suggests that the original structural crest was a structural high during Morrow depositional time. Typically the Morrow is thin over such paleotopographic highs and rarely contains thick reservoir quality channel sands. In the prospect area four such wells have been drilled on the paleostructural high but all of them failed to find the lower Morrow channel sand. These four wells are:

Yates Pet.	Deer Canyon ACK #1	35, T-20S,	R-21E
Exxon	Crooked Canyon "B" #1	35, T-20S,	R-21E
Yates Pet.	El Paso #1	35, T-20 1/2S,	R-21E
S & T (Exxon)	Nasser Fed. #1	1, T-21S,	R-21E

The Stevens & Tull, Inc. #1 Sweet Thing Federal, in section 6, T-21 S, R-22 E, was drilled on the eastern flank of the paleostructure and encountered a significantly thicker Morrow section than the wells listed above. The well did not encounter the prolific lower Morrow channel sand but did penetrate a productive channel sand in the middle Morrow and a productive basal Morrow sand. The well was completed in the basal Morrow sand flowing 2,100,000 MCF gas per day on 11-21-94. On 11-25-96 the middle Morrow was added and was potentialed flowing 1,700,000 MCF gas per day. Together the two sands have produced more than 661,000 MCF gas and are currently producing 170 MCF gas per day.

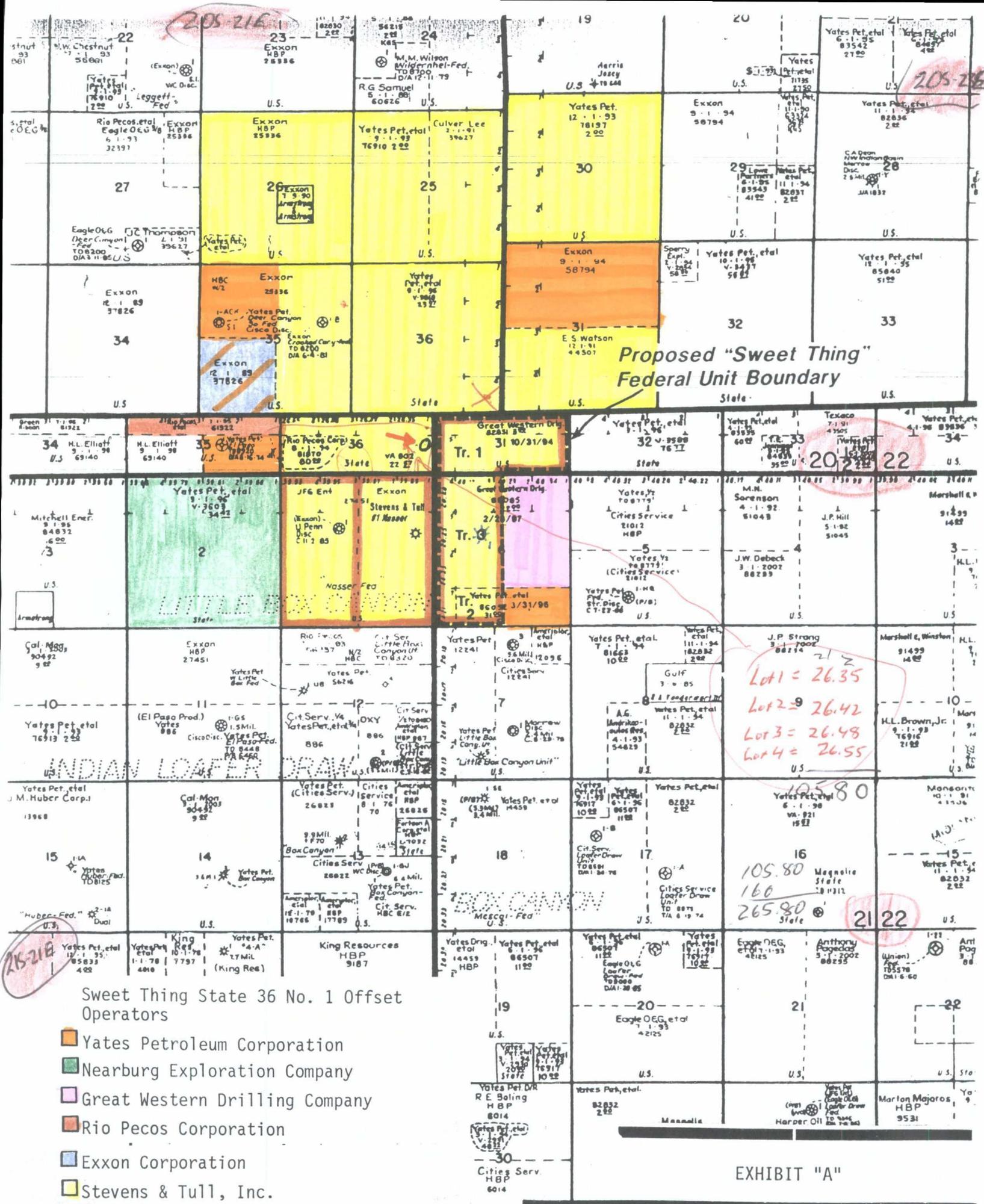
Although the proposed location may not be located far enough down the flank of the paleostructure to be prospective for the lower Morrow channel sand, it may be far enough down dip that a productive middle Morrow or basal Morrow sand may be encountered.

CISCO RESERVOIR ANALYSIS

The Stevens & Tull, Inc. #1 Nasser Federal (Sec. 1, T-21 S, R-21E) is situated directly between the Exxon #1 Nasser Federal and the Stevens & Tull, Inc. #1 Sweet Thing Federal. Porosity in these two offset wells is poorly developed within the Cisco interval. However, in the Cisco, the Stevens & Tull, Inc. #1 Nasser Federal encountered multiple porous gas-bearing carbonate intervals. In January, 1995 it was completed in the Cisco, Strawn, and middle Morrow as a gas well flowing 2,015,000 MCF gas and 5 barrels of oil per day. The well has produced more than 1,100,000 MCF gas and is currently flowing at the rate of 972 MCF gas per day. The well is the highest well on the present day structure and is located on the high side of the fault which bounds the aforementioned graben on the east. Reservoir development in the Cisco is believed to be the result of the growth of patch reefs (or high energy shoals) on structurally high areas. The formation of the present structural graben created one such structural high on the upthrown side of the east bounding fault. As mapped, the fault creates a north-south trending platform, ideal for the development of carbonate reefs or shoals, on trend with the Stevens & Tull, Inc. #1 Nasser Federal well. In order to stay on trend with that well, it is necessary to drill on the east side of that fault.

SUMMARY

A well must be drilled in section 36, T-20 1/2 S, R-21 E in order to save an expiring lease. A location which minimizes the geologic risk for both the Cisco and the Morrow must be located east of the mapped north-south fault (passing through the center of section 36 and between the Exxon and Stevens & Tull Nasser Federal wells) and as far down the paleostructural dip as possible. Section 36 is not a standard 640 acre section, but only covers approximately 240 acres. It is one mile wide (west-east) but only approximately 2,000 feet in its north-south dimension. Therefore, in order to most efficiently produce gas reserves under this lease and for the geologic concerns stated above, Stevens & Tull, Inc. proposes to drill the #1 Sweet Thing State 36 at the unorthodox location of 1,000 feet FNL and 300 feet FEL of the section to a depth of 8,250 feet, sufficient to test the Cisco and Morrow Formations.



Proposed "Sweet Thing" Federal Unit Boundary

Lot 1 = 26.35
 Lot 2 = 26.42
 Lot 3 = 26.48
 Lot 4 = 26.55

105.80
 160
 265.80
 State

Sweet Thing State 36 No. 1 Offset Operators

- Yates Petroleum Corporation
- Nearburg Exploration Company
- Great Western Drilling Company
- Rio Pecos Corporation
- Exxon Corporation
- Stevens & Tull, Inc.

10/6/97

EXHIBIT "A"

STEVENS & TULL, INC.

Yates Pet. et al 7-1-93 71721
 Yates Pet. et al 6-1-89 71721
 Mitchell Ener. 10-1-93 80040
 Yates Pet. et al 1-1-93 76914
 Mitchell Ener. 7-1-98 VA-924
 Cities S HBP

OFFSET OPERATORS

**STEVENS & TULL, INC.
SWEET THING STATE 36 #1 WELL**

Nearburg Exploration Company
3300 North "A" Street
Building 2, Suite 120
Midland, Texas 79705

Yates Petroleum Corporation
Myco Industries Inc.
ABO Petroleum Corporation
Yates Drilling Company
105 S. 4th Street,
Artesia, New Mexico 88210

Great Western Drilling Company
P.O. Box 1659
Midland, Texas 79702

Exxon Corporation
P.O. Box 4697
Houston, Texas 77210-4697

Rio Pecos Corporation
4501 Green Tree Blvd.
Midland, Texas 79707

f:\docs\swthst36.off

county Eddy pool Little Box Canyon - Morrow Gas

TOWNSHIP 21 South

Range 22 East

NMPM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Description: $\frac{S}{2}$ Sec 7 (R-5131, 1-1-76) Ext: $\frac{W}{2}$ Sec 18 (R-5361, 3-1-77)
 EXT: $\frac{E}{2}$ sec 18 (R-6994, 5-28-82) Ext: $\frac{N}{2}$ Sec. 7 (R-8179, 3-14-86)

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TELEPHONE (505) 982-4285
TELEFAX (505) 982-2047

JASON KELLAHIN (RETIRED 1991)

November 10, 1997

VIA FACSIMILE

(505) 827-8177

Mr. Michael E. Stogner
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87501

RE: Sweet Thing State "36" Well No. 1
Administrative Application of
Stevens & Tull Inc. for Approval
of an Unorthodox Gas Well Location
and a Non-Standard Proration Unit,
Eddy County, New Mexico

Dear Mr. Stogner:

In response to your request of November 6, 1997 concerning the interest owners in the proposed "Sweet Thing" Federal Unit towards whom this well location encroaches,, I have verified with Jerry Weant, landman for Stevens & Tull, Inc., (915) 699-1410, the following:

(1) the same working interest owners who have approved the drilling of this well (see attached AFEs) are also the same working interest owners in the subject unit.

(2) Those owners are as follows:

Stevens & Tull, Inc.
Great Western Drilling Company
Yates Petroleum Corporation
Myco Industries, Inc.
ABO Petroleum Corporation
Yates Drilling Company
Scott E. Wilson
Richard K. Barr

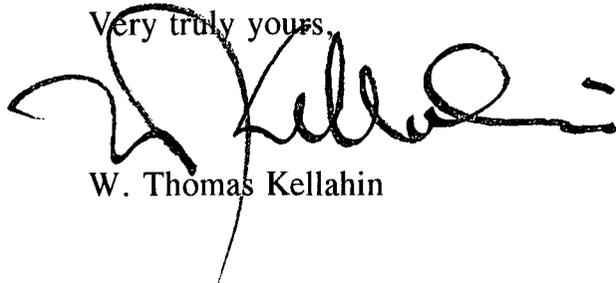
Mr. Michael E. Stogner
Oil Conservation Division
November 10, 1997

(3) Except for Wilson and Barr, all the other working interest owners were sent a copy of the administrative application on October 22, 1997.

(4) Wilson and Barr are faxing me a waiver of objection which I will forward to you upon receipt.

Please let me know if you need anything further in order to approve this request. Because I will be on vacation and because Stevens & Tull, Inc. have rig availability problems, I would appreciate you sending any approval directly to Mr. Weant at Stevens & Tull, Inc., 3316 Andrews Highway, Midland, Texas 79703 (fax (915) 699-1113).

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Thomas Kellahin', with a long horizontal flourish extending to the right.

W. Thomas Kellahin

cfx: Jerry Weant

AUTHORITY FOR EXPENDITURE

DATE 2/16/97

LEASE NAME Sweet Thing State 36 WELL NO. 1

WELL LOCATION Section 36, T-20MS, R-21-E COUNTY Edm STATE NM

DRY HOLE COMPLETED WELL

DRILLING INTANGIBLES:

LAND DAMAGES	3,000	3,000
LOCATION, ROADS, PITS CLEANUP	24,000	24,000
FOOTAGE 8,400' @ \$21.45 / FT.	180,180	180,180
DAYWORK \$5,150.00 / DAY	15,450	15,450
SURF. CSG. 250' OF 1 3/8" @ \$18.10 / FT.	4,525	4,525
INT. CSG. 1200' OF 2 5/8" @ \$11.65 / FT.	13,980	13,980
CEMENTING	41,000	41,000
MUD & CHEMICALS	23,000	23,000
WATER	50,000	50,000
LOGGING	20,000	20,000
TESTING & CORING	-0-	-0-
TECHNICAL & LEGAL SERVICES	1,800	1,800
SUPERVISION & LABOR	16,000	16,000
EQUIPMENT RENTAL/TRUCKING	3,900	3,900
DRILLED OVERHEAD	3,900	3,900
Conductor Pipe 100" @ 39.00/ft	3,900	3,900
TOTAL DRILLING INTANGIBLES	\$ 409,735	\$ 409,735

COMPLETION INTANGIBLES:

COMPLETION UNIT <u>5</u> DAYS @ \$ <u>1,400</u> / DAY	7,000
CEMENTING, PIPE PREPARATION	14,300
LOGGING & PERFORATING	9,100
ACID (Morrow Completion)	2,200
FRACTURE (Morrow Completion)	-0-
WATER	1,000
TECHNICAL AND LEGAL SERVICES	-0-
SUPERVISION & LABOR (Misc)	10,000
EQUIPMENT RENTAL/TRUCKING <u>Totco, PV, etc.</u>	5,000
ELECTRICAL HOOKUP	-0-

TOTAL COMPLETION INTANGIBLES \$ 48,600

COMPLETION TANGIBLES

PROD. CSG. 8,400' OF 5 1/2" @ \$ 5.20 / FT	43,680
PROD. TBG. 8,400' OF 2 7/8" @ \$ 3.30 / FT	27,720
RODS " OF " @ " / FT	-0-
WELLHEAD	12,200
ELECTRICAL EQUIPMENT	-0-
BOTTOM HOLE ASSEMBLY (PKR'S, on/off Tool, Profile Nipple)	4,500
TANK BATTERY AND TREATER W/CONNECTIONS	15,000
PUMPING UNIT W/POWER (Meter Run, etc.)	4,000

TOTAL COMPLETION TANGIBLES \$ 107,100

TOTAL DRY HOLE COST \$ 409,735
TOTAL COMPLETED WELL COST \$ 565,435

Yates Petroleum Corporation

[Signature]
STEVENS & TULL, INC.

AGREED TO and ACCEPTED this 17th day of October, 19 97.

YATES PETROLEUM CORPORATION 0.1936%
YATES DRILLING COMPANY 1.5482%
[Signature] Date 10-17-97

ABO PETROLEUM CORPORATION 1.5482%
By: *[Signature]* Date 10-17-97

MYCO INDUSTRIES, INC. 1.5482%
By: *[Signature]* Date 10-17-97

RECEIVED OCT 16 1997

AUTHORITY FOR EXPENDITURE

DATE 9/16/97

LEASE NAME Sweet Thing State 36 WELL NO. 1

WELL LOCATION Section 36, T-204S, R-24-E COUNTY Eddy STATE NM

DRILLING INTANGIBLES:

	<u>DRY HOLE</u>	<u>COMPLETED WELL</u>
LAND DAMAGES	3,000	3,000
LOCATION, ROADS, PITS CLEANUP	24,000	24,000
FOOTAGE 8,400' @ \$21.45 /FT.	180,180	180,180
DAYWORK \$ 5,150.00 /DAY	15,450	15,450
SURF. CSG. 250' OF 13 3/8" @ \$18.10 /FT.	4,525	4,525
INT. CSG. 4200' OF 9 5/8" @ \$11.65 /FT.	13,980	13,980
CEMENTING	41,000	41,000
MUD & CHEMICALS	23,000	23,000
WATER	50,000	50,000
LOGGING	20,000	20,000
TESTING & CORING	-0-	-0-
TECHNICAL & LEGAL SERVICES	1,800	1,800
SUPERVISION & LABOR	16,000	16,000
EQUIPMENT RENTAL/TRUCKING	3,000	3,000
DRILLED OVERHEAD	3,900	3,900
Conductor Pipe 100" @ 39.00/ft	3,900	3,900
TOTAL DRILLING INTANGIBLES	\$ 409,735	\$ 409,735

COMPLETION INTANGIBLES:

COMPLETION UNIT 5 DAYS @ \$ 1,400 /DAY	7,000
CEMENTING, PIPE PREPARATION	14,300
LOGGING & PERFORATING	9,100
ACID (Morning Completion)	2,200
FRAC TURE (Morning Completion)	-0-
WATER	1,000
TECHNICAL AND LEGAL SERVICES	-0-
SUPERVISION & LABOR (Misc)	10,000
EQUIPMENT RENTAL/TRUCKING (Torce, PV, etc.)	5,000
ELECTRICAL HOOKUP	-0-
TOTAL COMPLETION INTANGIBLES	\$ 48,600

COMPLETION TANGIBLES

PROD. CSG. 8,400' OF 5 1/2" @ \$ 5.20 /FT	43,680
PROD. TBG. 8,400' OF 2 7/8" @ \$ 3.30 /FT	27,720
RODS " OF " @ " /FT	-0-
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TANK BATTERY AND TREATER W/CONNECTIONS	15,000
PUMPING UNIT W/POWER (Marrt Run, etc.)	4,000
TOTAL COMPLETION TANGIBLES	\$ 107,100
TOTAL DRY HOLE COST	\$ 409,735
TOTAL COMPLETED WELL COST	\$ 565,435

Great Western Drilling Company *[Signature]*
STEVENS & TULL, INC.

AGREED TO and ACCEPTED this 14 day of October, 19 97

[Signature]
Print Name: Dennis Hendrix
Operations Manager

PLEASE RETURN TO
STEVENS & TULL, INC.

afe.txt/ss

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

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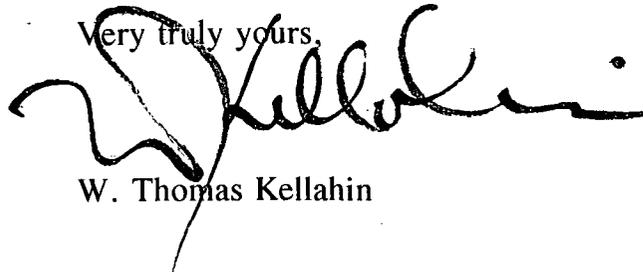
RE: Sweet Thing State "36" Well No. 1
Administrative Application of
Stevens & Tull Inc. for Approval
of an Unorthodox Gas Well Location
and a Non-Standard Proration Unit,
Eddy County, New Mexico

Dear Mr. Stogner:

In accordance with my prior letter today, please find enclosed a copy of the waiver of objection signed by Wilson and Barr.

Please call me if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Thomas Kellahin', written over the typed name below.

W. Thomas Kellahin

cfx: Jerry Weant

WILSON & BARR
OIL & GAS EXPLORATION
500 NORTH LORAIN, SUITE 1070
MIDLAND, TEXAS 79701
(915) 683-1616

Kellahin & Kellahin
117 N. Guadalupe
Santa Fe, New Mexico 87501

Attn: Mr. Thomas W. Kellahin

Gentlemen:

We are working interest owners in Stevens & Tull, Inc.'s Sweet Thing Federal Unit and proposed Sweet Thing State 36 #1 well. We participated in the selection process for the proposed unorthodox location and are agreeable with same.

We have been properly noticed of this well and waive any objections to it.

Yours very truly,



Scott E. Wilson, Partner