

NSL 2/10/00

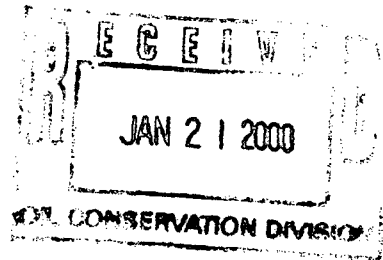


Cross Timbers Oil Company

January 19, 2000

CERTIFIED MAIL:

Michael E. Stogner
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505



RE: Request for Administrative Approval of an Unorthodox Location
Cross Timbers Operating Company's R.B. Sullivan #1R Well
1,400' FNL and 2,500' FEL (SW/4 NE/4)
Unit G, Section 11-T27N-R10W
San Juan, New Mexico
Fulcher Kutz Pictured Cliffs

Dear Mr. Stogner:

Cross Timbers Operating Company hereby request administrative approval of an unorthodox gas well location for the above referenced well. Attached for your reference are the following exhibits:

1. Well Location plat (NMOCD Form C-102).
2. Topographic Map.
3. Ownership Map with Offset Operators for the Pictured Cliffs formation.
4. Geologic discussion.
5. EUR Isopach Map of the Fruitland Coal and Pictured Cliffs Production
6. EUR Isopach Map of the Pictured Cliffs Sandstone.

For geological and topographic reasons, the optimal placement of a Pictured Cliffs well in the NE/4 spacing unit is the above requested location. Our objective in placement at this location is to drill as far as possible from the radius of any pre-existing or currently producing Pictured Cliffs wells, while at the same time maintaining maximum pay thickness and reservoir quality to justify the drilling of the well. Pool rules state that a well will be no closer than 660' to the outer boundary of the well unit and 10' to a quarter-quarter section line. Surface topography to the west and southwest of the R.B. Sullivan #1 well severely limit the option on placement of the well. To drill the well as a deviated hole would be cost prohibitive. The requested location provides the best location for the protection of waste and correlative rights.

Please note that the EUR Isopach maps provided show the original operator of the well drilled and do not necessarily represent the current operator.

By certified mail, a copy of this application and request for administrative approval has been sent to all Pictured Cliffs offsetting operators.

We look forward to your approval and should you have any questions, please contact me at (817) 885-2454.

Sincerely,
CROSS TIMBERS OPERATING COMPANY

A handwritten signature in black ink, appearing to read "George A. Cox".

George A. Cox, CPL
Landman

cc: Gary Markestad - Farmington
Bobby Smith - CTOC Midland
Tom DeLong - Farmington
Gary Burch
Offset Operators/Owners

OFFSET OPERATORS/OWNERS
R. B. SULLIVAN #1R WELL

Burlington Resources
P.O. Box 4289
Farmington, NM 87499-4289
Attention: Shannon Nichols

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

**Burlington Resources
Attention: Shannon Nichols
P.O. Box 4289
Farmington, NM 87499-4289**

2. Article Number (Copy from service label)

Z 137 270174

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

X

☐ Agent
☐ Addressee

D. Is delivery address different from item 1? ☐ Yes

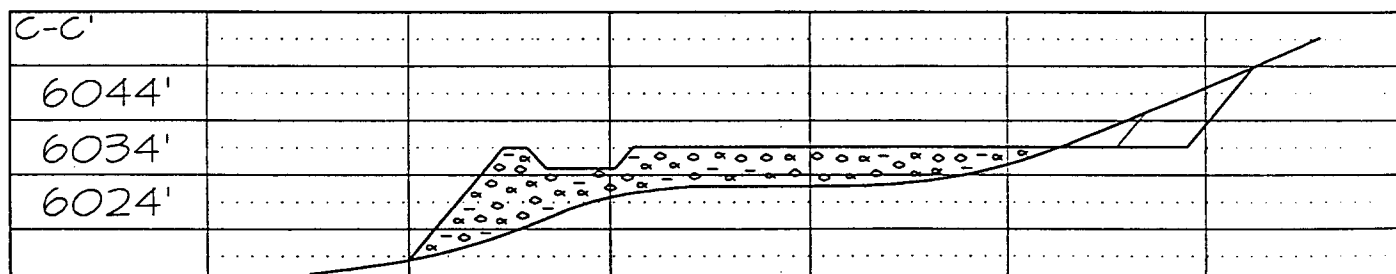
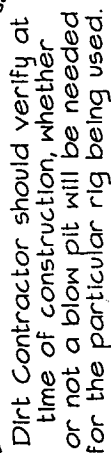
If YES, enter delivery address below: ☐ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

GROUND ELEVATION: 6034' DATE: AUGUST 27, 1999



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on wellpad and/or access road at least two (2) working days prior to construction.

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

REC'D / SAN JUAN ☐ AMENDED REPORT

SEP 08 1999

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code 77200	Pool Name FULCHER KUTZ PICTURED CLIFFS
Property Code	Property Name R. B. SULLIVAN		Well Number 1R
GRID No. 167067	Operator Name CROSS TIMBERS OPERATING COMPANY		Elevation 6034'

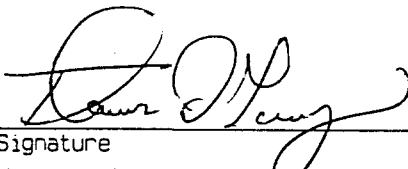
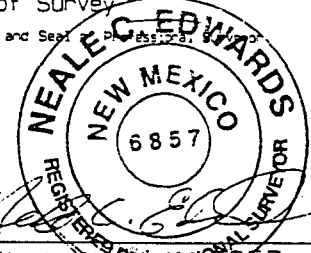
¹⁰ Surface Location

UL or lot no. G	Section 11	Township 27N	Range 10W	Lot Idn	Feet from the 1400	North/South line NORTH	Feet from the 2500	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

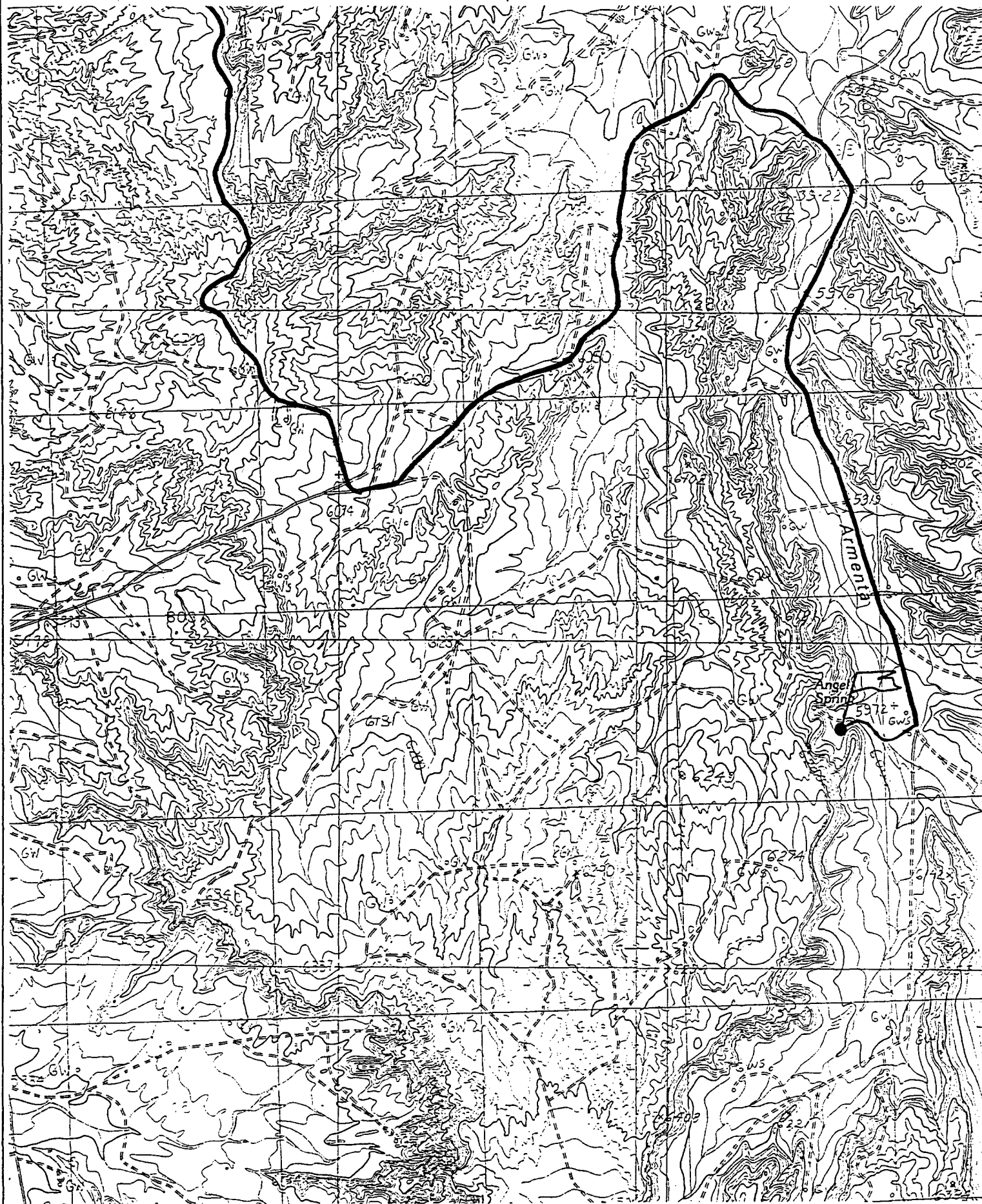
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁵	5274.06'	1400'	2500'	5280.00'	11	5280.00'	5277.36'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Tom DeLong Printed Name Production Engineer Title 9-8-99 Date
	¹⁸ SURVEYOR CERTIFICATION 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 belief.							
	AUGUST 27, 1999 Date of Survey Signature and Seal  Certificate Number 6857							

CROSS TIMBERS OPERATING COMPANY R. B. SULLIVAN #1R

1400' FNL & 2500' FEL, SECTION II, T27N, R10W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO





Cross Timbers Oil Company

SECTION PLAT OF 4 SQUARE MILES

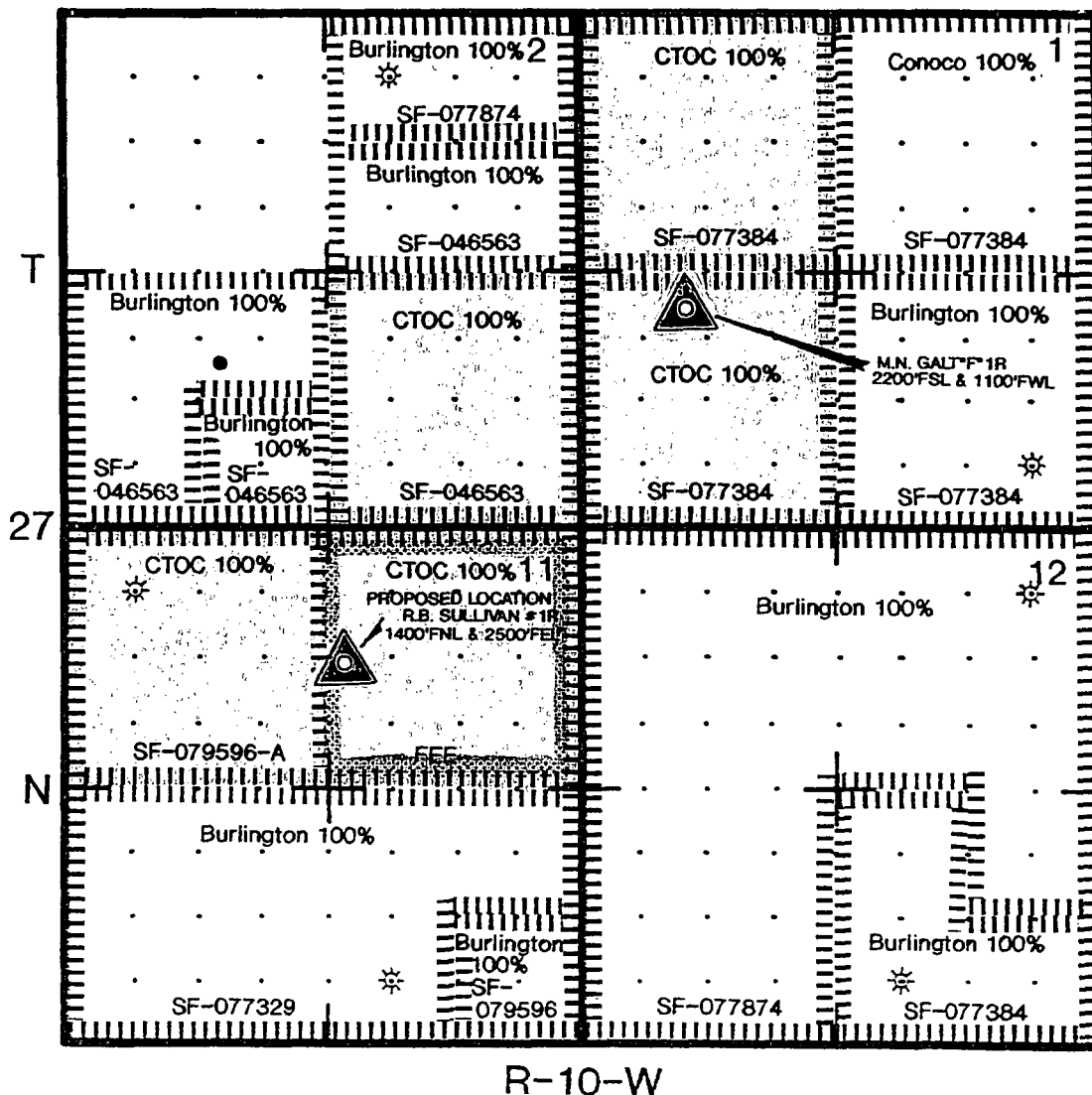
STATE: NEW MEXICO COUNTY: SAN JUAN

PROSPECT: _____ DATE: _____

SECTIONS: _____ BLOCK: _____ SURVEY: _____

ACRES: _____ TOWNSHIP: 27N RANGE: 10W

SCALE: 1"=2,000'



R.B. Sullivan #1R
NE/4 Sec.11-27N - 10W

Ownership Map for Pictured Cliffs Formations

R.B. Sullivan #1R
1400' FNL, 2500' FEL
Section 11-T27N-R10W
San Juan County, New Mexico

GEOLOGIC SUMMARY

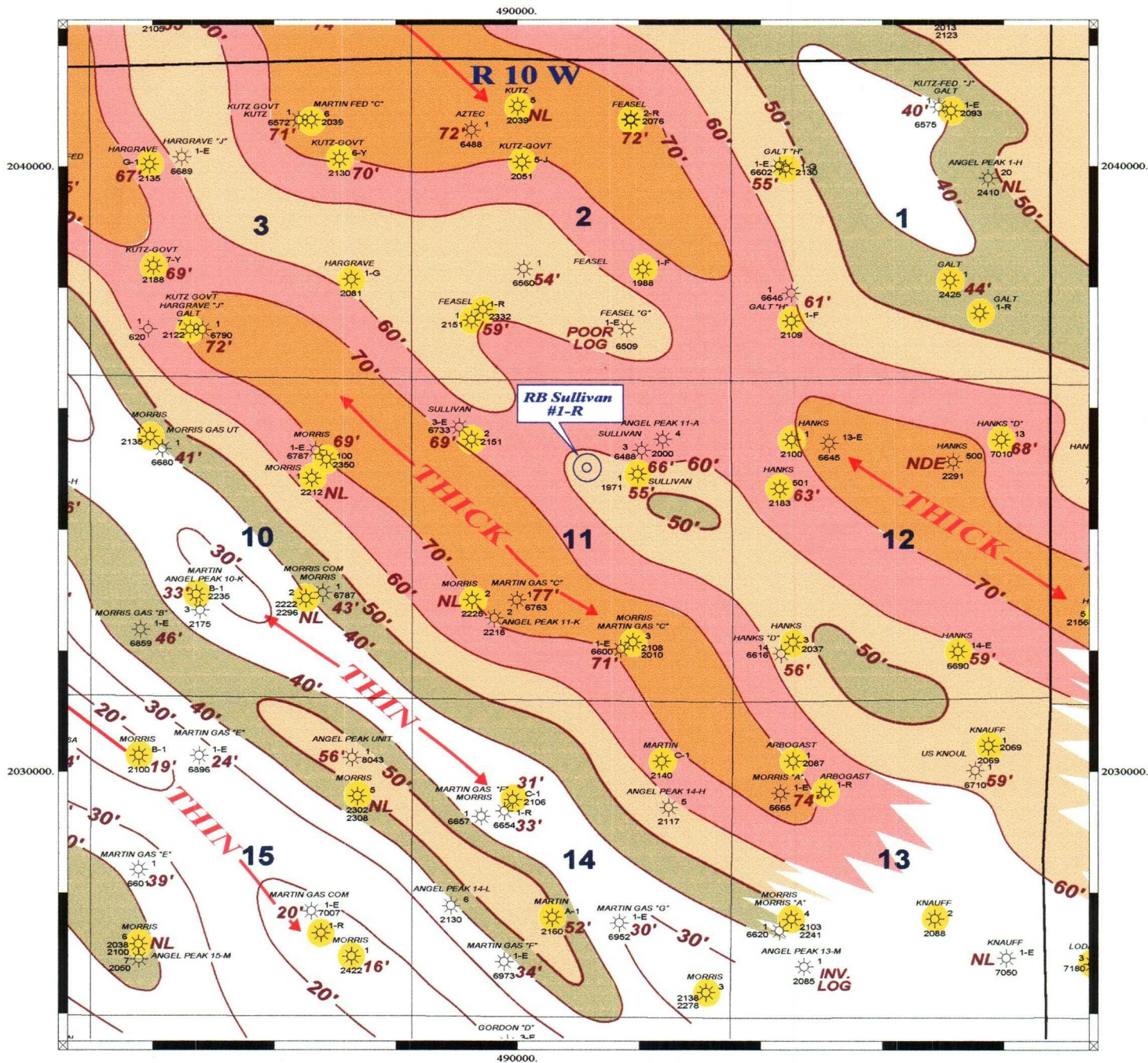
The Cross Timbers R.B. Sullivan #1R is a proposed 2130' Pictured Cliffs test designed to be a redrill of the R.B. Sullivan #1 which produced approximately 2274 MMCFG from 12/50 through 8/95. The proposed location is approximately 950' WNW of the R.B. Sullivan #1 and 1850' ESE of the Cross Timbers R.B. Sullivan #2 in the NW $\frac{1}{4}$, section 11, which has produced 3696 MMCFG from 12/50 through 9/98 and is producing approximately 82 MCFD as of 7/99. The nearest Pictured Cliffs well operated by a company other than Cross Timbers is the Burlington C.M. Morris #3 in the SE $\frac{1}{4}$, section 11, 3000 ft. from the proposed location. The requested unorthodox location will be moving towards a spacing unit (NW $\frac{1}{4}$) in which Cross Timbers owns and operates the rights to the Pictured Cliffs Ss.

Cross Timbers' objective in the placement of the well is to drill as far as possible from the radius of influence of any pre-existing or currently producing Pictured Cliffs wells, while at the same time maintaining maximum pay thickness and reservoir quality to justify the drilling of the well.

The Pictured Cliffs Sandstone was deposited as NW-SE trending marine coastal barrier sands oriented parallel to the Late Cretaceous shoreline. Sand deposition gradually shifted northeastward as the shoreline regressed. Periodic stillstands resulted in thicker and cleaner sand buildups, which directly correlate to NW-SE trends of prolific gas production.

Approximately 60 ft. of pay based on SP log cutoffs is expected at the proposed location. By moving west or south from the original R.B. Sullivan #1 well, thicker and better quality reservoir rock can be accessed, as evidenced by the 4+ BCF ultimate recovery projections for the west and south offsets (see EUR isopach map). This will allow the proposed well to most efficiently drain the remaining reserves underlying the NE $\frac{1}{4}$ spacing unit.

Surface topography to the west and southwest of the R.B. Sullivan #1 severely limits the options on the placement of the well. The surface location of 1400' FNL and 2500' FEL best meets the requirements of both geology and drilling. Therefore, an unorthodox location is necessary for the drilling of this well.



= Pictured Cliffs Production



= Proposed (CTOC)
drill well location



1000. 0. 1000. 2000. 3000. 4000. 5000. feet



Cross Timbers Oil Company

SAN JUAN COUNTY, NEW MEXICO

RB Sullivan #1-R

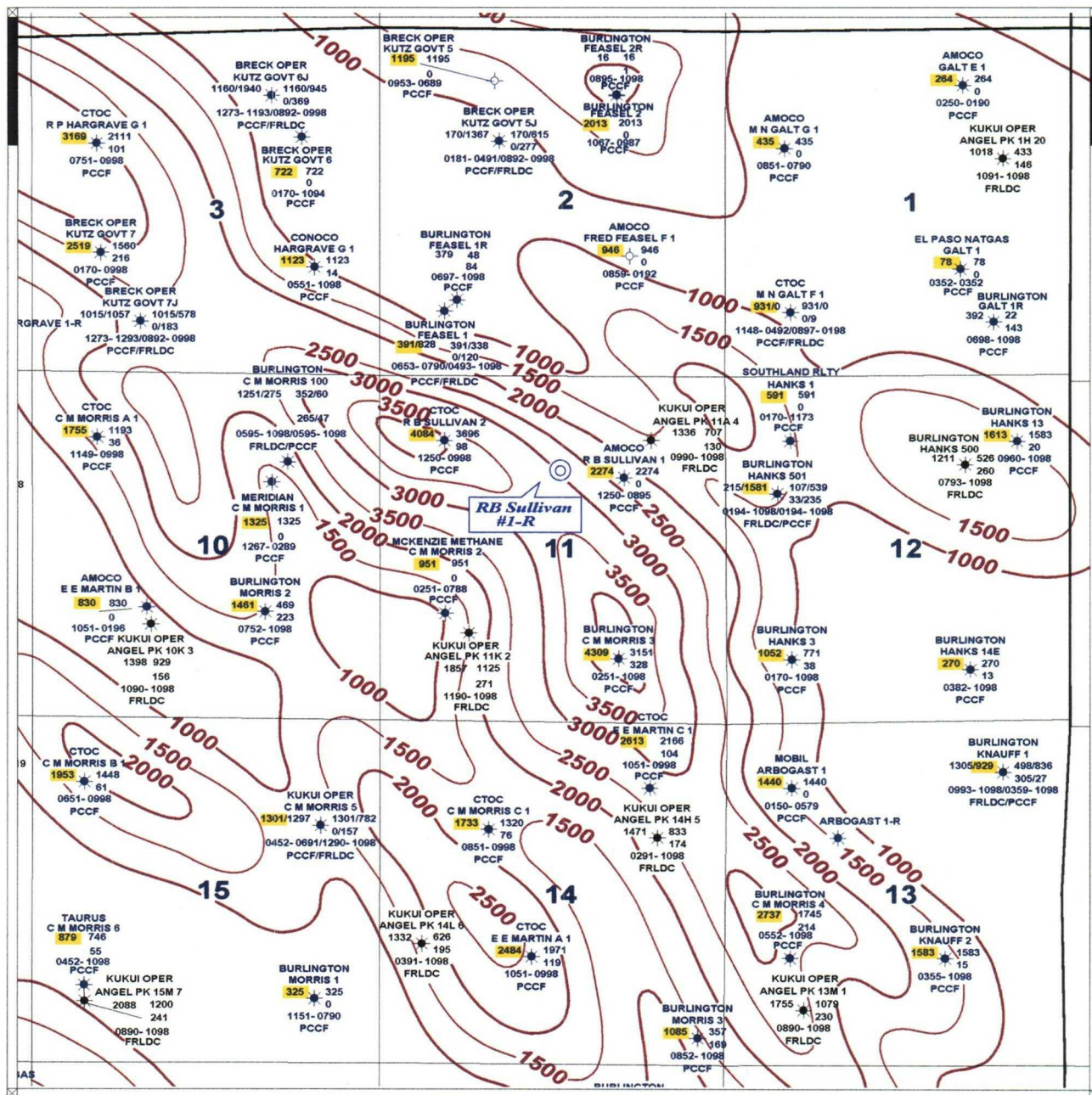
ISOPACH MAP

**PICTURED CLIFFS SANDSTONE
ESTIMATED FT. OF PERMEABILITY
FROM SP LOG CUTOFFS**

Contour Interval: 10 feet

Geologist: Gary Burch

January 2000



OPERATOR
 WELL NAME & NUMBER
 GAS EUR ○ CUM GAS MMCF
 CURR RATE MCFF/D
 START / END DATE
 FORMATION

○ = Proposed (CTOC)
 drill well location



1000. 0. 1000. 2000. 3000. 4000. 5000. feet



Cross Timbers Oil Company

SAN JUAN COUNTY, NEW MEXICO

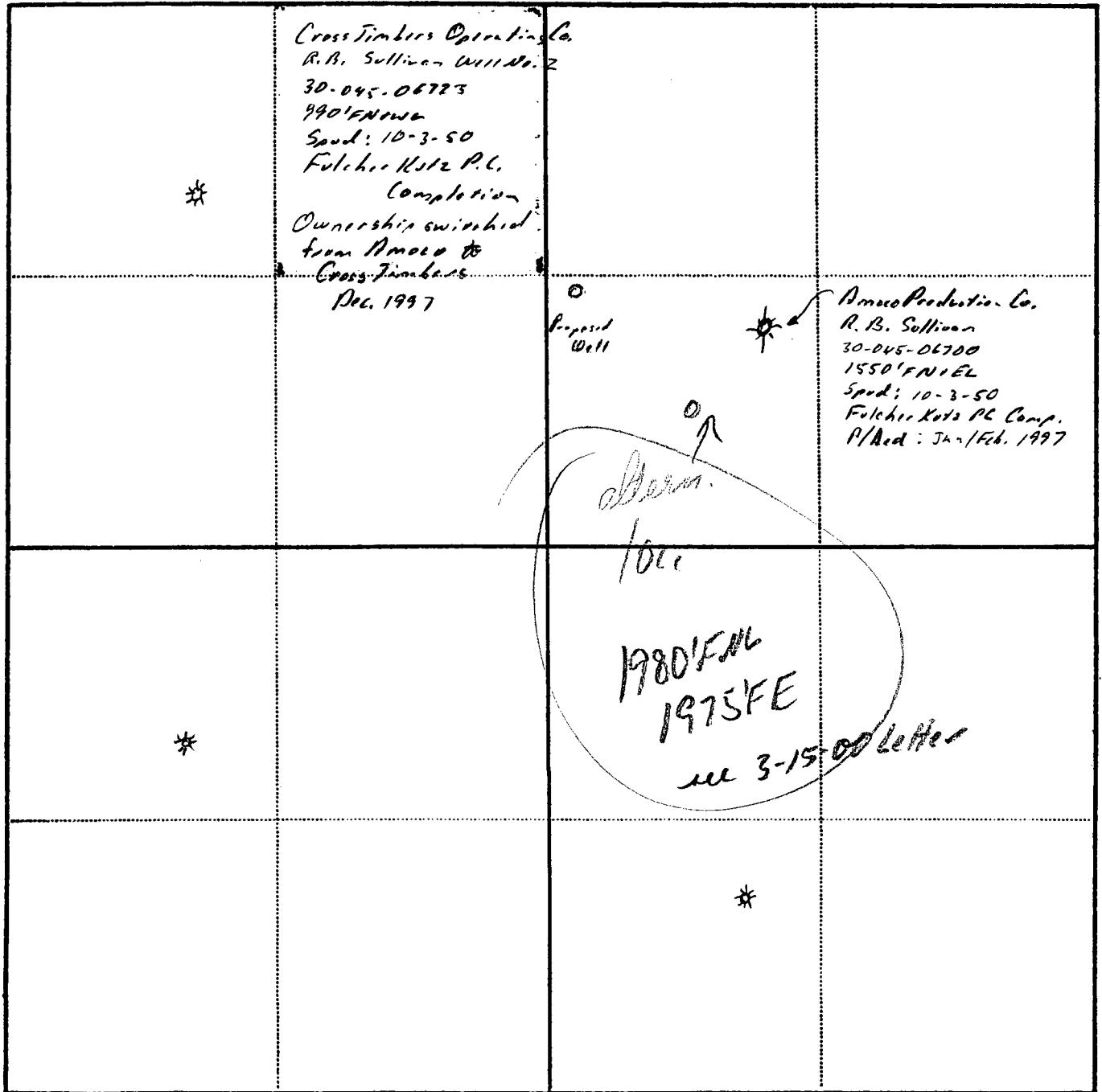
RB Sullivan #1-R EUR ISOPACH MAP

FRUITLAND COAL and
PICTURED CLIFFS PRODUCTION

Contour Interval: 500

Geologist: Gary Burch

January 2000



CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/22/00 10:35:21
OGOMES -TPEF
PAGE NO: 2

Sec : 11 Twp : 27N Rng : 10W Section Type : NORMAL

L 40.00	K 40.00	J 40.00	I 40.00
Federal owned	Federal owned	Federal owned	Federal owned
A	A A		
M 40.00	N 40.00	O 40.00	P 40.00
Federal owned	Federal owned	Federal owned	Federal owned
		A A	

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD : ONGARD 01/22/00 10:38:10
OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TPEF

API Well No : 30 45 6700 Eff Date : 02-03-1997 WC Status : P
Pool Idn : 77200 FULCHER KUTZ PICTURED CLIFFS (GAS)
OGRID Idn : 778 AMOCO PRODUCTION CO
Prop Idn : 1156 R B SULLIVAN

Well No : 001
GL Elevation: 5799

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/A)
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B.H. Locn : G	11	27N	10W	FTG 1550 F N	FTG 1550 F E		P

Lot Identifier:

Dedicated Acre:

Lease Type : P

Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD :
OG5SECT

ONGARD
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Fee owned	Fee owned	Fee owned	Fee owned
A A		A	A
E 40.00	F 40.00	G 40.00	H 40.00
Fee owned	Fee owned	Fee owned	Fee owned
		A	

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

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OGOMES -TPEF
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A	A A		
M 40.00	N 40.00	O 40.00	P 40.00
Federal owned	Federal owned	Federal owned	Federal owned
		A A	

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/22/00 10:35:14
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A A		A	A
E 40.00	F 40.00	G 40.00	H 40.00
Fee owned	Fee owned	Fee owned	Fee owned
		A	

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12