



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

September 24, 2001

Lori Wrotenbery
Director
Oil Conservation Division

XTO Energy, Inc.
810 Houston Street
Fort Worth, Texas 76102-6298
Attention: Tim Welsh

Telefax No. (817) 885-2224

Administrative Order NSL-4645(NSBHL)

Dear Mr. Welsh:

Reference is made to the following: (i) your application dated August 13, 2001 (*application reference No. pKRV0-122730120*); (ii) a request for additional information by letter dated September 17, 2001 from Mr. Michael E. Stogner, Chief Hearing Officer/Engineer, with the New Mexico Oil Conservation Division ("Division") in Santa Fe; (iii) your telefaxed response with the required information on September 20, 2001; and (iv) the records of the Division in Aztec and Santa Fe, including the file on Division Administrative Order DD-98: all concerning XTO Energy, Inc.'s ("XTO") request for an unorthodox subsurface Nocimiento gas well location for the existing Carson Federal "G" Well No. 1 (API No. 30-039-25444), located at the surface 1540 feet from the North line and 2630 feet from the East line (Unit G) of Section 25, Township 28 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.

By Division Administrative Order DD-98, dated August 22, 1994, Amoco Production Company received authorization, which was required at that time, to directionally drill the Carson Federal "G" Well No. 1 to the Choza Mesa-Pictured Cliffs pool in such a manner that the resulting subsurface location would be "standard" for a gas well within a standard 160-acre gas spacing and proration unit comprising the NE/4 of Section 25.

It is our understanding that XTO now intends to abandon the Pictured Cliffs interval and recomplete up-hole into the Nocimiento formation through the perforated interval from 3,225 feet to 3,232 feet. From the directional survey the actual subsurface location of this wellbore at a depth of 3,225 feet is 1662 feet from the North line 2253 feet from the East line (Unit G) of Section 25, which pursuant to Division Rules 104.C (3) and 111.A (13) is considered to be "unorthodox" within a standard 160-acre gas spacing and proration unit for the wildcat Nocimiento formation comprising the NE/4 of Section 25.

This application has been duly filed under the provisions of Division Rules 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, and 111.C (2).

Administrative Order NSL-4645(NSBHL)

XTO Energy, Inc.

September 24, 2001

Page 2

By the authority granted me under the provisions of Division Rule 104.F (2), the above-described unorthodox subsurface Nocimiento gas well location for the Carson federal "G" Well No. 1, is hereby approved.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Wrottenberg". The signature is written in black ink and is positioned above the printed name and title.

Lori Wrottenberg
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Aztec
U. S. Bureau of Land Management - Farmington
File: DD-98 /



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



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 22, 1994

Amoco Production Company
P.o. Box 800
Denver, CO 80201

Attention: J.W. Hawkins

Administrative Order DD-98

Dear Mr. Hawkins:

Under the provisions of General Rule 111 (c), (d) and (e), Amoco Production Company made application to the New Mexico Oil Conservation Division on July 15, 1994, for authorization to directionally drill its proposed Carson Federal "G" Well No. 1, Rio Arriba County, New Mexico.

The Division Director Finds That:

- (1) The application has been duly filed under the provisions of Rule 111(d) and (e) of the Division General Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in General Rule 111 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Amoco Production Company, is hereby authorized to directionally drill its Carson Federal "G" Well No. 1, the surface location of which shall be 1540 feet from the North line and 2630 feet from the East line (Unit G) of Section 25, Township 28 North, Range 4 West, NMPM, San Juan County, New Mexico, by kicking off from the vertical at a depth of approximately 2162 feet, and drilling in such a manner as to bottom in the Choza Mesa-Pictured Cliffs Pool at a standard gas well location within the SW/4 NE/4 of said Section 25.

PROVIDED HOWEVER THAT prior to commencing directional drilling operations into said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED HOWEVER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.

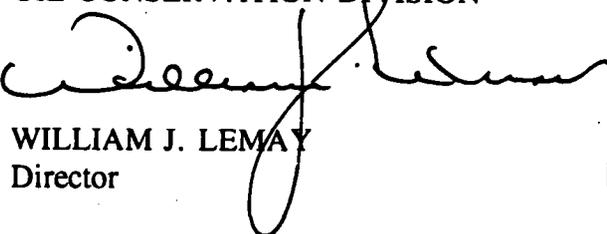
(3) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(4) The NE/4 of said Section 25 shall be dedicated to the well forming a standard 160-acre gas spacing and proration unit for the subject pool.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

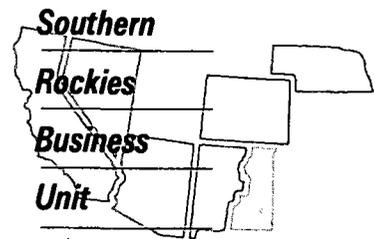
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

S E A L

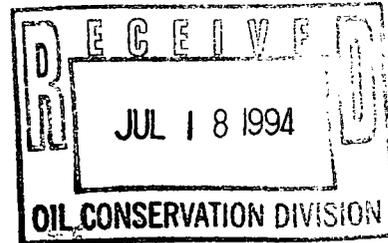
WJL/MES/amg

cc: Oil Conservation Division - Aztec
US Bureau of Land Management - Farmington



July 15, 1994

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, NM 87504



**Application for Directional Drilling
Carson Federal G No.1 Well
NE/4 Section 25, T28N-R4W
Choza Mesa Pictured Cliffs Pool
Rio Arriba County, New Mexico**

Amoco Production Company hereby requests administrative approval to directionally drill the Carson Federal G No.1 well referenced above. The well is planned to be drilled from a surface location 1540' FNL and 2630' FEL of Section 25 to a bottomhole location of 1782' FNL and 1651' FEL of Section 25 T28N-R4W. The surface location is necessary due to the topography in this area. The well is planned to intercept the top of the Pictured Cliffs formation within the legal drilling window at 1750' FNL and 1797' FEL of Section 25 T28N-R4W. Attached are plats and directional plan for the well.

All offset operators will receive a copy of this application by certified mail with a request for a waiver of objection.

Sincerely,

J. W. Hawkins
J. W. Hawkins

cc: Andy Logan
Julie Talbot

WAIVER

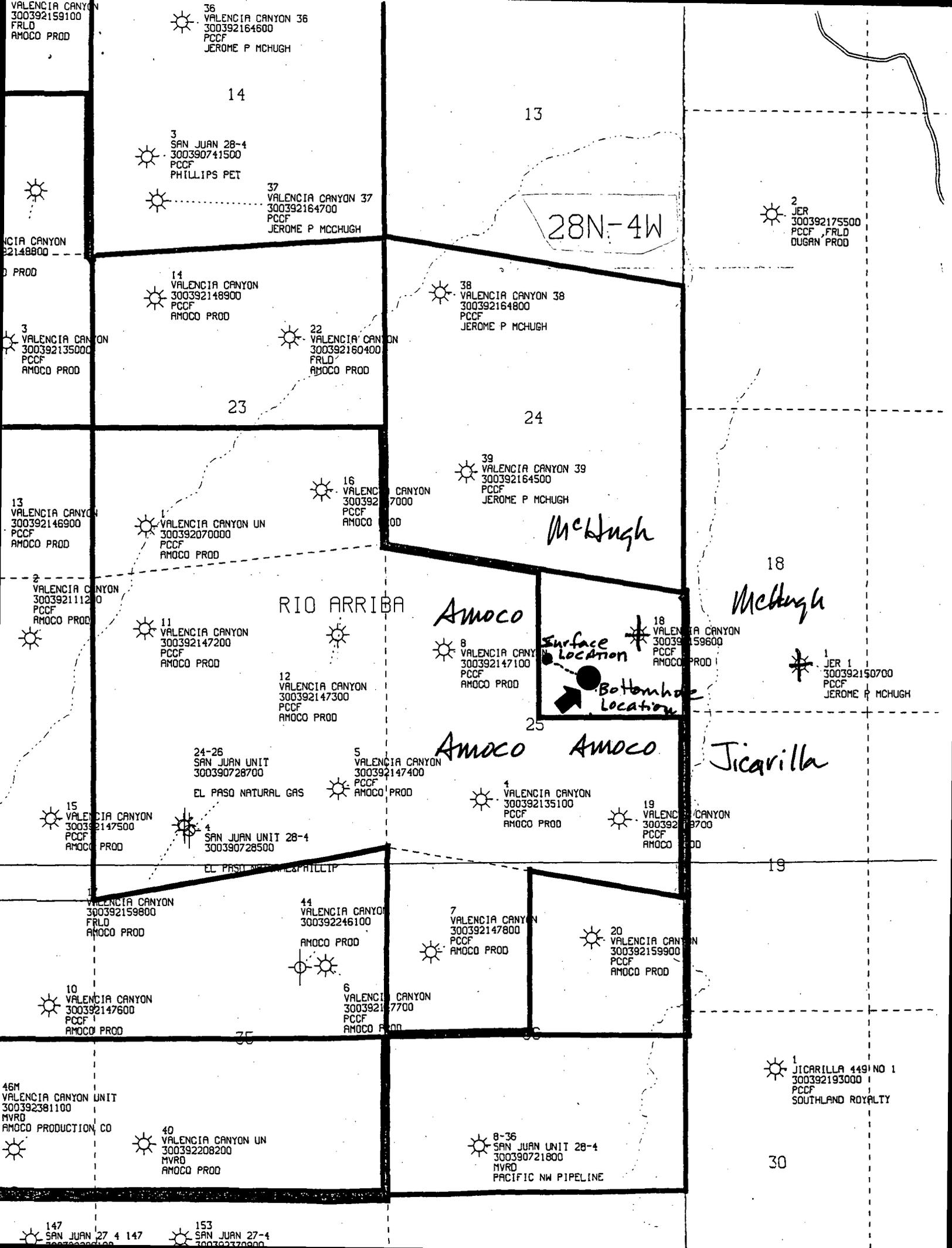
_____ hereby waives objection to Amoco's application to directionally drill the Carson Federal G No.1 well as proposed above.

By: _____ Date: _____

Offset Operators

**Jerome P McHugh
650 S. Cherry St., Suite 1225
Denver, CO 80222-1894**

**Bureau of Indian Affairs
Jicarilla Agency
PO Box 167
Dulce NM 87528-0167**



VALENCIA CANYON
300392159100
FRLO
AMOCO PROD

36 VALENCIA CANYON 36
300392164500
PCCF
JEROME P MCHUGH

14

13

3 SAN JUAN 28-4
300390741500
PCCF
PHILLIPS PET

37 VALENCIA CANYON 37
300392164700
PCCF
JEROME P MCHUGH

28N-4W

2 JER
300392175500
PCCF, FRLO
DUGAN PROD

14 VALENCIA CANYON
300392148900
PCCF
AMOCO PROD

38 VALENCIA CANYON 38
300392164800
PCCF
JEROME P MCHUGH

3 VALENCIA CANYON
300392135000
PCCF
AMOCO PROD

22 VALENCIA CANYON
300392160400
FRLO
AMOCO PROD

23

24

13 VALENCIA CANYON
300392146900
PCCF
AMOCO PROD

VALENCIA CANYON UN
300392070000
PCCF
AMOCO PROD

16 VALENCIA CANYON
300392170000
PCCF
AMOCO PROD

39 VALENCIA CANYON 39
300392164500
PCCF
JEROME P MCHUGH

McHugh

2 VALENCIA CANYON
300392111200
PCCF
AMOCO PROD

11 VALENCIA CANYON
300392147200
PCCF
AMOCO PROD

12 VALENCIA CANYON
300392147300
PCCF
AMOCO PROD

RIO ARRIBA

Amoco

8 VALENCIA CANYON
300392147100
PCCF
AMOCO PROD

Surface Location

Bottomhole Location

18 VALENCIA CANYON
300392159600
PCCF
AMOCO PROD

McHugh

1 JER 1
300392150700
PCCF
JEROME P MCHUGH

Amoco Amoco

Jicarilla

24-26 SAN JUAN UNIT
300390728700
EL PASO NATURAL GAS

5 VALENCIA CANYON
300392147400
PCCF
AMOCO PROD

1 VALENCIA CANYON
300392135100
PCCF
AMOCO PROD

19 VALENCIA CANYON
300392139700
PCCF
AMOCO PROD

15 VALENCIA CANYON
300392147500
PCCF
AMOCO PROD

4 SAN JUAN UNIT 28-4
300390728500

EL PASO NATURAL GAS & PHILLIPS

19

17 VALENCIA CANYON
300392159800
FRLO
AMOCO PROD

44 VALENCIA CANYON
300392246100
AMOCO PROD

7 VALENCIA CANYON
300392147800
PCCF
AMOCO PROD

20 VALENCIA CANYON
300392159900
PCCF
AMOCO PROD

10 VALENCIA CANYON
300392147600
PCCF
AMOCO PROD

6 VALENCIA CANYON
300392137700
PCCF
AMOCO PROD

8-36 SAN JUAN UNIT 28-4
300390721800
MVRD
PACIFIC NW PIPELINE

1 JICARILLA 449 NO 1
300392193000
PCCF
SOUTHLAND ROYALTY

30

40 VALENCIA CANYON UN
300392208200
MVRD
AMOCO PROD

46M VALENCIA CANYON UNIT
300392381100
MVRD
AMOCO PRODUCTION CO

147 SAN JUAN 27 4 147
300392381100

153 SAN JUAN 27-4
300392378900

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator AMOCO PRODUCTION COMPANY		Lease Carson Federal G		Well No. #1
Unit Letter G	Section 25	Township 28 NORTH	Range 4 WEST	County NMPM RIO ARRIBA
Actual Footage Location of Well: 1540 feet from the NORTH line and 2630 feet from the EAST line				
Ground level Elev. 7337	Producing Formation Pictured Cliffs	Pool Choza Mesa Pictured Cliffs	Dedicated Acreage: N 3/4 160 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
 - Yes No If answer is "yes" type of consolidation _____
 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 interest, has been approved by the Division.



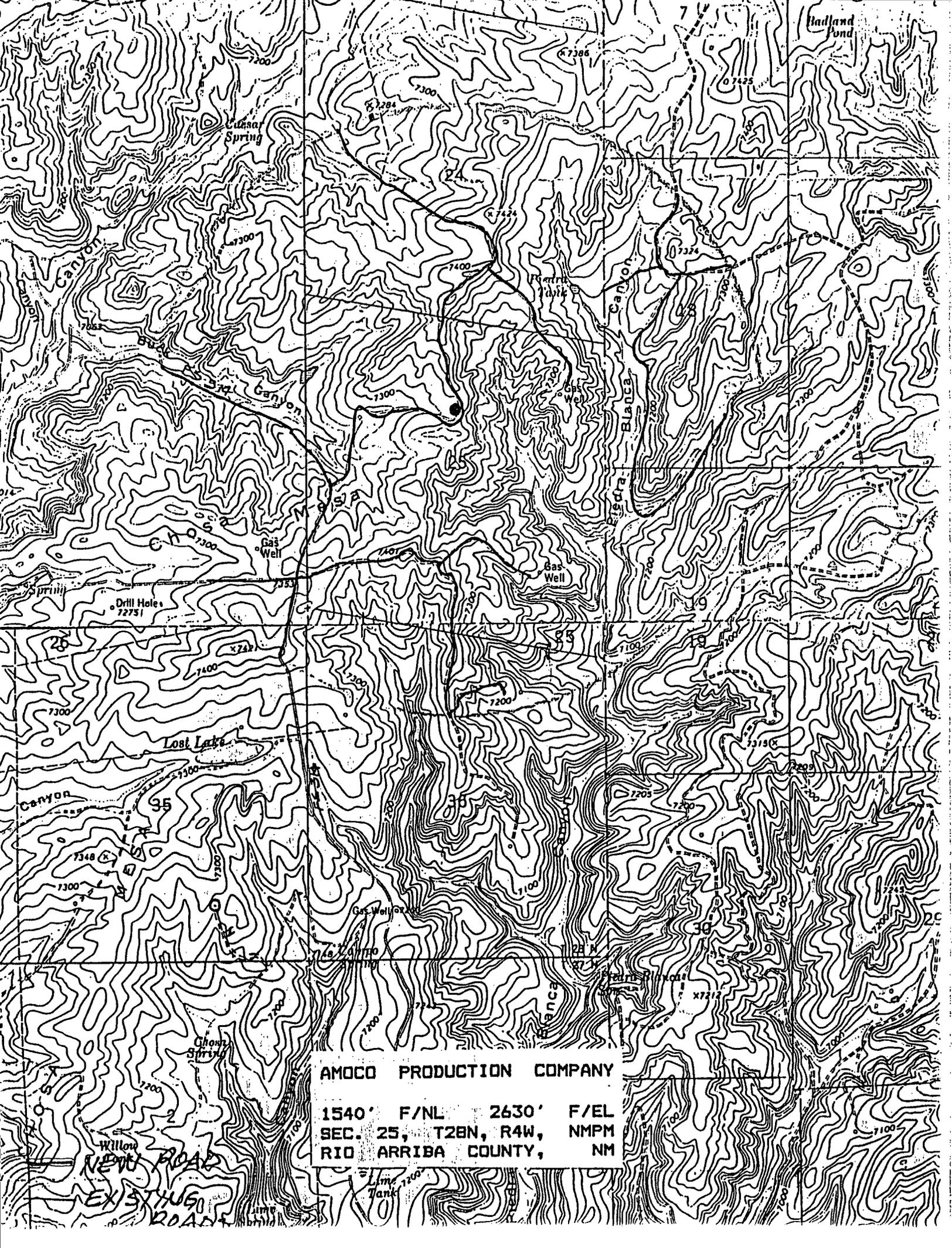
OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Julie L. Acevedo*
 Printed Name: **Julie L. Acevedo**
 Position: **Sr. Staff Assistant**
 Company: **Amoco Production Company**
 Date: **6/9/94**

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 knowledge and belief.

Date Surveyed: **June 1, 1994**

Signature & Seal of Professional Surveyor: **GARY D. VANN**
 Registered Professional Land Surveyor
 New Mexico
 7016
 Gary D. Vann
 7016



AMOCO PRODUCTION COMPANY

1540' F/NL 2630' F/EL
SEC. 25, T28N, R4W, NMPM
RIO ARRIBA COUNTY, NM

NEW ROAD
EXISTING ROAD

Lime Tank

Amoco Production Company

ENGINEERING CHART

Sheet No _____ of _____

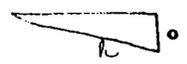
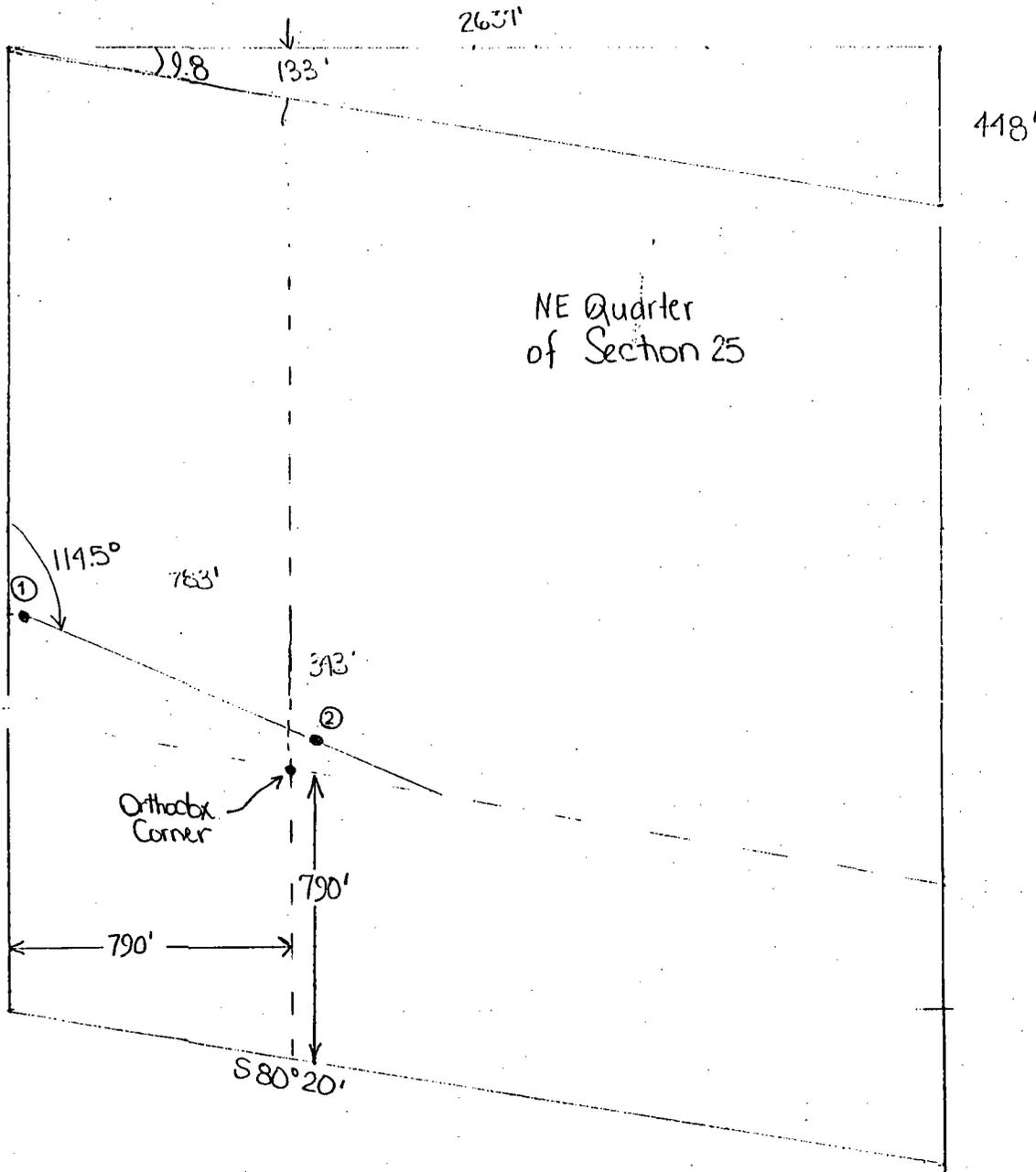
File _____

App'd _____

Date 6 Jul 94

By _____

SUBJECT Carson Federal G #1
Directional Plan



① Surface Location

1540' FNL & 2630' FEL Sec 25, T28N, R4W Rio Arriba Co

② Point we cross legal lines at top of Picture Cliffs

1750' FNL & 1,797' FEL (100' North of legal corner & 50' East)

③ End of build MD $\approx 2735'$ TVD $\approx 2762'$ (MD) ($\approx 30^\circ$) KOP $\approx 2162'$ MD
1574' FNL & 2488' FEL

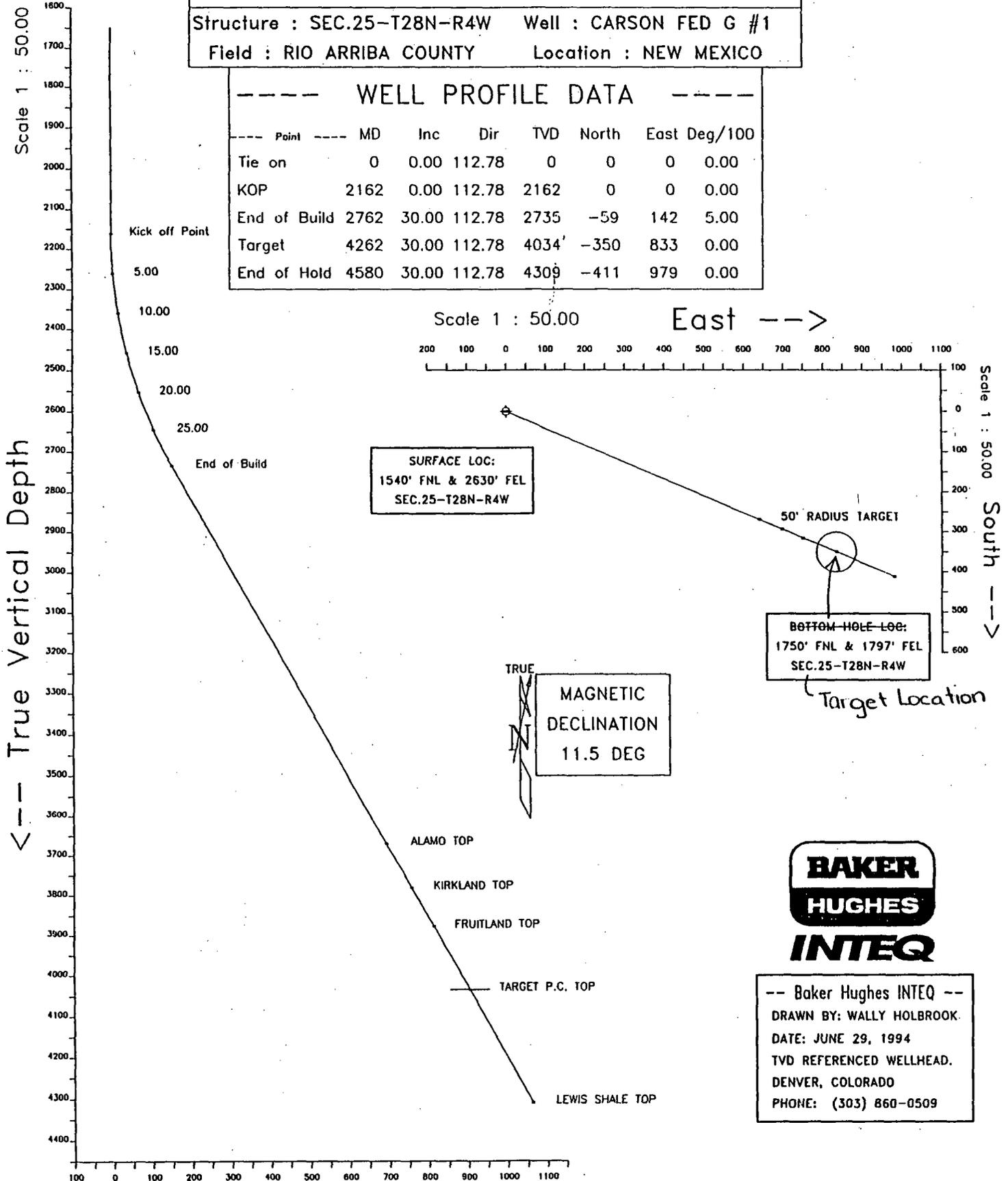
④ Anticipated B/L @ $\approx 4309'$ TVD $\approx 1782'$ FNL & 1651' FEL

AMOCO PRODUCTION COMPANY

Structure : SEC.25-T28N-R4W Well : CARSON FED G #1
 Field : RIO ARRIBA COUNTY Location : NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	Deg/100
Tie on	0	0.00	112.78	0	0	0	0.00
KOP	2162	0.00	112.78	2162	0	0	0.00
End of Build	2762	30.00	112.78	2735	-59	142	5.00
Target	4262	30.00	112.78	4034	-350	833	0.00
End of Hold	4580	30.00	112.78	4309	-411	979	0.00



-- Baker Hughes INTEQ --
 DRAWN BY: WALLY HOLBROOK
 DATE: JUNE 29, 1994
 TVD REFERENCED WELLHEAD.
 DENVER, COLORADO
 PHONE: (303) 860-0509

Scale 1 : 50.00
 Vertical Section on 112.78 azimuth with reference 0.00 N, 0.00 E from SLOT #1



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

Rec. 7/18/94
Released 8/18/94

GARREY CARRUTHERS
 GOVERNOR

POST OFFICE BOX 2088
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87504
 (505) 827-5800

July 26, 1990

Union Oil Company of California
 3300 North Butler Avenue
 Suite 200
 Farmington, NM 87401

Amoco Production Company
Southern Rockies Business Unit
P.O. Box 800
Denver, Colorado 80201

Attention: ~~Bill Hering, District Petroleum Engineer~~ *J.W. Hawkins*

98
 Administrative Order DD-~~98~~

Dear Mr. ~~Hering~~: *Hawkins*

July 15, 1994
 Under the provisions of General Rule 111 (c), (d) and (e), Unocal made application to the New Mexico Oil Conservation Division on ~~July 5, 1990~~, for authorization to directionally drill its proposed ~~Day "B"~~ Well No. 8, ~~San Juan County~~, New Mexico.

Carson Federal "G" Rio Arriba

The Division Director Finds That:

- (1) The application has been duly filed under the provisions of Rule 111(d) and (e) of the Division General Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in General Rule 111 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

Microsoft Mail v3.0 IPM.Microsoft Mail.Note

From: Ernie Busch

To: David Catanach

Subject: UNOCAL (NSL)

Date: 1994-07-12 08:36

Priority:

Message ID: 277E2A0A

Conversation ID: 277E2A0A

WELL NAME: RINCON #183E
LOCATION: J-31-27N-06W
FOOTAGE: 1880' FSL; 2080' FEL
RECOMMEND: APPROVAL

Carson Federal "G"

IT IS THEREFORE ORDERED THAT:

(1) The applicant, ^{Amoco Production} Union Oil Company of California ~~d/b/a Unocal~~ is hereby authorized to directionally drill its Day "B" Well No. ~~1~~, the surface location of which shall be ¹⁵⁴⁰ 734 feet from the North line and ²³³⁰ 1233 feet from the East line (Unit ~~A~~) of Section ²⁵ 7, Township ²⁸ 27 North, Range ⁴ 8 West, NMPM, San Juan County, New Mexico, by kicking off from the vertical at a depth of approximately ²¹⁶⁰ 325 feet, and drilling in such a manner as to bottom in the ~~Basin Fruitland Coal Gas Pool~~ at a standard coal gas well location within the ^{sw/4} NE/4 of said Section ²⁵ 7. ^{Choza Mesa Refined Cliffs}

PROVIDED HOWEVER THAT prior to commencing directional drilling operations into said wellbore, the applicant shall establish the location of the kick-off point by means of a directional survey acceptable to the Division.

PROVIDED FURTHER THAT during or upon completion of directional drilling operations, the applicant shall conduct an accurate wellbore survey from the kick-off point to total depth in order that the subsurface bottomhole location, as well as the wellbore's true depth and course, may be determined.

(2) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time said wellbore surveys are to be conducted so that they may be witnessed. The applicant shall further provide a copy of said wellbore surveys to the Santa Fe and Aztec offices of the Division upon completion.

(3) Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depth in addition to measured depths.

(4) The ^{NE/4} ~~E/2~~ of said Section ²⁵ 7 shall be dedicated to the well forming a standard ¹⁶⁰ 320-acre gas spacing and proration unit for said pool.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

3. Tubing requirements:

- (a) Oil Wells: Yes. Rule R12-7-111.
- (b) Gas Wells: Yes. Rule R12-7-111.

Tubing set as close to bottom as practical and tubing perforations not more than 250 feet above top of pay. Wells may be completed with small diameter casing in lieu of tubing. Rule R12-7-111.

Completion

1. Completion report required: Yes. Rule R12-7-121.

- (a) Time limit: 30 days following completion. Rule R12-7-121.
- (b) Where submitted: Oil and Gas Conservation Commission, 3110 N. 19th Ave., Suite 190, Phoenix, AZ 85015.

2. Well logs required to be filed: Yes. Rule R12-7-121.

- (a) Time limit: 30 days following completion. Rule R12-7-121.
- (b) Where submitted: Same as (b) in question 1 above.
- (c) Confidential time period Yes. Rule R12-7-121B. Six months.
- (d) Available for public use: Yes, after confidentiality period.
- (e) Log catalog available: No.

3. Multiple completion regulation: Yes. Rule R12-7-116.

- (a) Approval obtained: For first well in each field following notice and hearing. Other wells in same field may be approved administratively. Rule R12-7-116.

4. Commingling in well bore: May be authorized by Commission upon application and hearing. Rule 12-7-137.

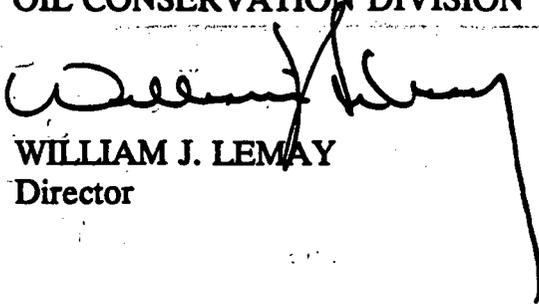
Oil Production

1. Definition of an oil well: Any well producing hydrocarbons in a liquid state that is not the result of condensation of gas, with a gas-oil ratio below 50,000 to 1, or any well classed as an oil well by the Commission.
2. Potential tests required: Yes. Rule R12-7-135.
 - (a) Time interval: Immediately after test.
 - (b) Witnesses required: In some instances.

*Administrative Order DD-38
Union Oil Company of California
July 26, 1990
Page No. 3*

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



**WILLIAM J. LEMAY
Director**

S E A L

**cc: Oil Conservation Division - Aztec
US Bureau of Land Management - Farmington**



GOVERNMENT ACCOUNT STATEMENT
FINA OIL AND CHEMICAL COMPANY

P.O. BOX 2986 AMARILLO, TEXAS 79105-2986
PHONE-806/378-3519

SOLD TO:

EMNRD OCD
PO BOX 2088

SANTE FE

NM 87504

ACCOUNT NO. 001 311 523 3

STATEMENT DATE 07/26/94

TAX ID # 75-0990483

DLA # 600-92-D-1041

Amount of Invoices Attached \$ 49.20

Description of Exempt Taxes:

Federal

.1840 on	46.0 Gallons of Gasoline	\$ 4.46
.0000 on	0.0 Gallons of Diesel	0.00

Less Total Federal Tax \$ 8.46

State

State	Gallons	Rate	Amount
-------	---------	------	--------

*** PAYMENT DUE UPON RECEIPT OF STATEMENT *** Less Total State Tax \$ 0.00
TAX CERTIFICATE SF1094 OR RV-5 NOT REQUIRED *****
 PLEASE RETURN COPY OF STATEMENT WITH YOUR REMITTANCE
 ALL CHARGE ACCOUNTS ARE PAYABLE AT OFFICE OF COMPANY IN
 AMARILLO, POTTER COUNTY, TEXAS 0013115233 ** NET CURRENT BILLING \$ 40.74

001 311 523 3 0002 1102800

EMNRD OCD
P O BOX 2088
SANTA FE NM 87504 2088

FINA OIL AND CHEMICAL COMPANY

DRIVER'S LICENSE NUMBER & STATE: 39700883026 070794
 AUTH CODE: 070794
 COMPANY SALES CARD: 3825122

FINA 1393 (12-86)
070794100
070794100

711 S MAIN
ROSELL NM

PRODUCT	QUAN	PRICE	AMOUNT
GAS			28.00
MOTOR OIL			
UNLEADED REGULAR			
SALES TAX			
TOTAL			28.00

PRICES INCLUDE APPLICABLE FEDERAL & STATE EXCISE TAXES
 PRINTED AMOUNT MUST BE SAME AS THIS TOTAL

BUYER'S SIGNATURE: [Signature]

001 311 523 3 0006 0002120

EMNRD/OCD S F
P O BOX 2088
SANTA FE NM 87504 2088

FINA OIL AND CHEMICAL COMPANY

DRIVER'S LICENSE NUMBER & STATE: 15328069016 061594
 AUTH CODE: 07010100
 COMPANY SALES CARD: 5838315

FINA 1393 (12-86)
07010100
07010100

HMV 85 NORTH
LAS VEGAS NM

PRODUCT	QUAN	PRICE	AMOUNT
MOTOR OIL			
UNLEADED REGULAR			
SALES TAX			
TOTAL			21.20

PRICES INCLUDE APPLICABLE FEDERAL & STATE EXCISE TAXES
 PRINTED AMOUNT MUST BE SAME AS THIS TOTAL

BUYER'S SIGNATURE: [Signature]



Southern

Rockies

Business

Unit

July 15, 1994

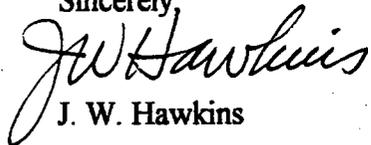
Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, NM 87504

**Application for Directional Drilling
Carson Federal G No.1 Well
NE/4 Section 25, T28N-R4W
Choza Mesa Pictured Cliffs Pool
Rio Arriba County, New Mexico**

Amoco Production Company hereby requests administrative approval to directionally drill the Carson Federal G No.1 well referenced above. The well is planned to be drilled from a surface location 1540' FNL and 2630' FEL of Section 25 to a bottomhole location of 1782' FNL and 1651' FEL of Section 25 T28N-R4W. The surface location is necessary due to the topography in this area. The well is planned to intercept the top of the Pictured Cliffs formation within the legal drilling window at 1750' FNL and 1797' FEL of Section 25 T28N-R4W. Attached are plats and directional plan for the well.

All offset operators will receive a copy of this application by certified mail with a request for a waiver of objection.

Sincerely,


J. W. Hawkins

cc: Andy Logan
Julie Talbot

WAIVER

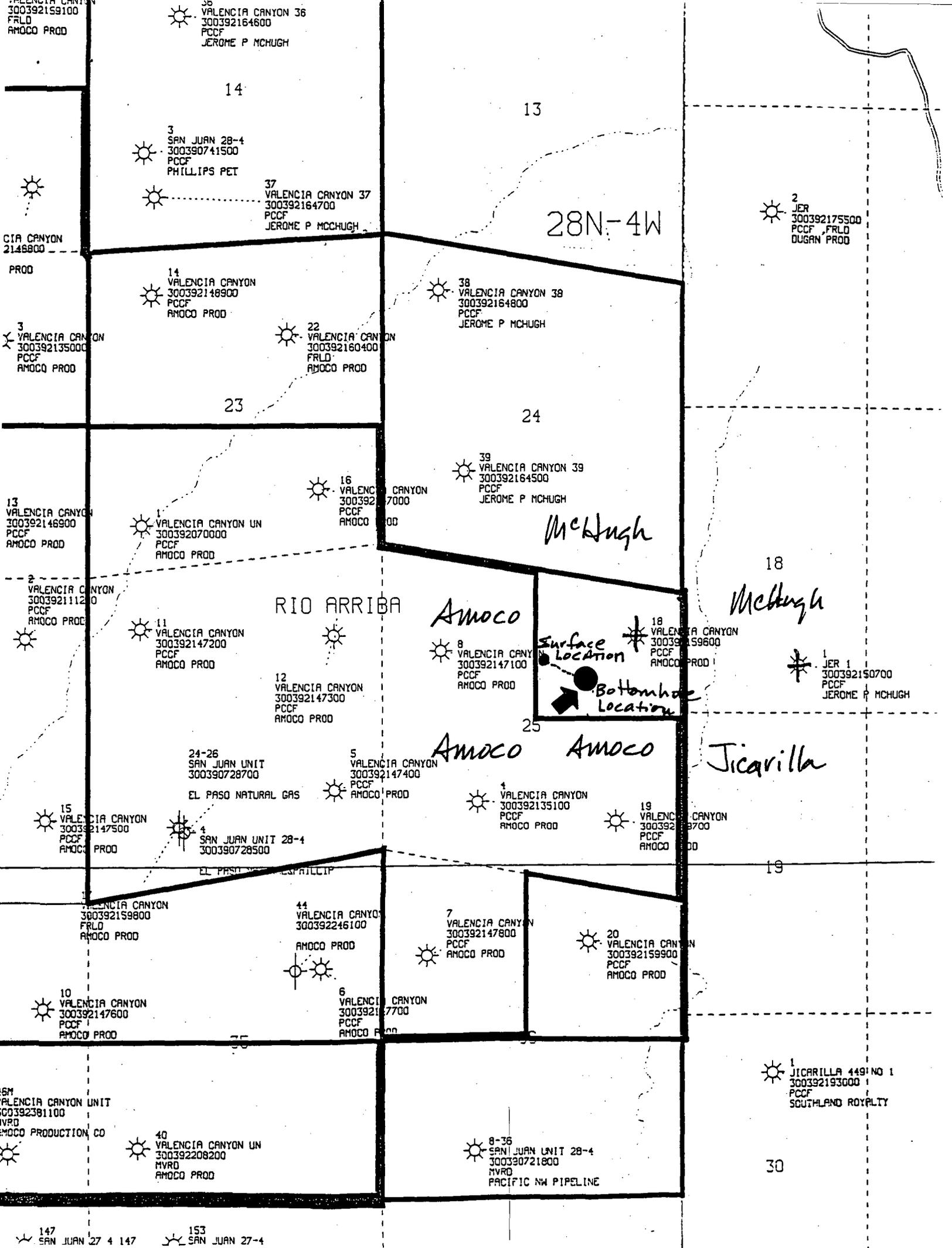
_____ hereby waives objection to Amoco's application to directionally drill the Carson Federal G No.1 well as proposed above.

By: _____ Date: _____

Offset Operators

Jerome P McHugh
650 S. Cherry St., Suite 1225
Denver, CO 80222-1894

Bureau of Indian Affairs
Jicarilla Agency
PO Box 167
Dulce NM 87528-0167



VALENCIA CANYON
300392159100
FRLO
AMOCO PROD

36 VALENCIA CANYON 36
300392164600
PCCF
JEROME P MCHUGH

14

13

3 SAN JUAN 28-4
300390741500
PCCF
PHILLIPS PET

37 VALENCIA CANYON 37
300392164700
PCCF
JEROME P MCHUGH

2 JER
300392175500
PCCF, FRLO
DUGAN PROD

28N-4W

CIA CANYON
2146800

PROD

14 VALENCIA CANYON
300392148900
PCCF
AMOCO PROD

38 VALENCIA CANYON 38
300392164800
PCCF
JEROME P MCHUGH

3 VALENCIA CANYON
300392135000
PCCF
AMOCO PROD

22 VALENCIA CANYON
300392160400
FRLO
AMOCO PROD

23

24

39 VALENCIA CANYON 39
300392164500
PCCF
JEROME P MCHUGH

13 VALENCIA CANYON
300392146900
PCCF
AMOCO PROD

1 VALENCIA CANYON UN
300392070000
PCCF
AMOCO PROD

16 VALENCIA CANYON
300392170000
PCCF
AMOCO PROD

McHugh

18

McHugh

2 VALENCIA CANYON
300392111200
PCCF
AMOCO PROD

RIO ARRIBA

Amoco

11 VALENCIA CANYON
300392147200
PCCF
AMOCO PROD

8 VALENCIA CANYON
300392147100
PCCF
AMOCO PROD

18 VALENCIA CANYON
300392159600
PCCF
AMOCO PROD

1 JER 1
300392150700
PCCF
JEROME P MCHUGH

12 VALENCIA CANYON
300392147300
PCCF
AMOCO PROD

Surface Location
Bottomhole Location

Amoco Amoco

Jicarilla

24-26 SAN JUAN UNIT
300390728700
EL PASO NATURAL GAS

5 VALENCIA CANYON
300392147400
PCCF
AMOCO PROD

4 VALENCIA CANYON
300392135100
PCCF
AMOCO PROD

19 VALENCIA CANYON
300392137000
PCCF
AMOCO PROD

15 VALENCIA CANYON
300392147500
PCCF
AMOCO PROD

4 SAN JUAN UNIT 28-4
300390728500

19

VALENCIA CANYON
300392159800
FRLO
AMOCO PROD

44 VALENCIA CANYON
300392246100
AMOCO PROD

7 VALENCIA CANYON
300392147800
PCCF
AMOCO PROD

20 VALENCIA CANYON
300392159900
PCCF
AMOCO PROD

10 VALENCIA CANYON
300392147600
PCCF
AMOCO PROD

6 VALENCIA CANYON
300392147700
PCCF
AMOCO PROD

SM VALENCIA CANYON UNIT
300392381100
FRLO
MVRD
AMOCO PRODUCTION CO

40 VALENCIA CANYON UN
300392208200
MVRD
AMOCO PROD

8-36 SAN JUAN UNIT 28-4
300390721800
MVRD
PACIFIC NW PIPELINE

1 JICARILLA 449 NO 1
300392193000
PCCF
SOUTHLAND ROYALTY

30

147 SAN JUAN 27 4 147

153 SAN JUAN 27-4

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

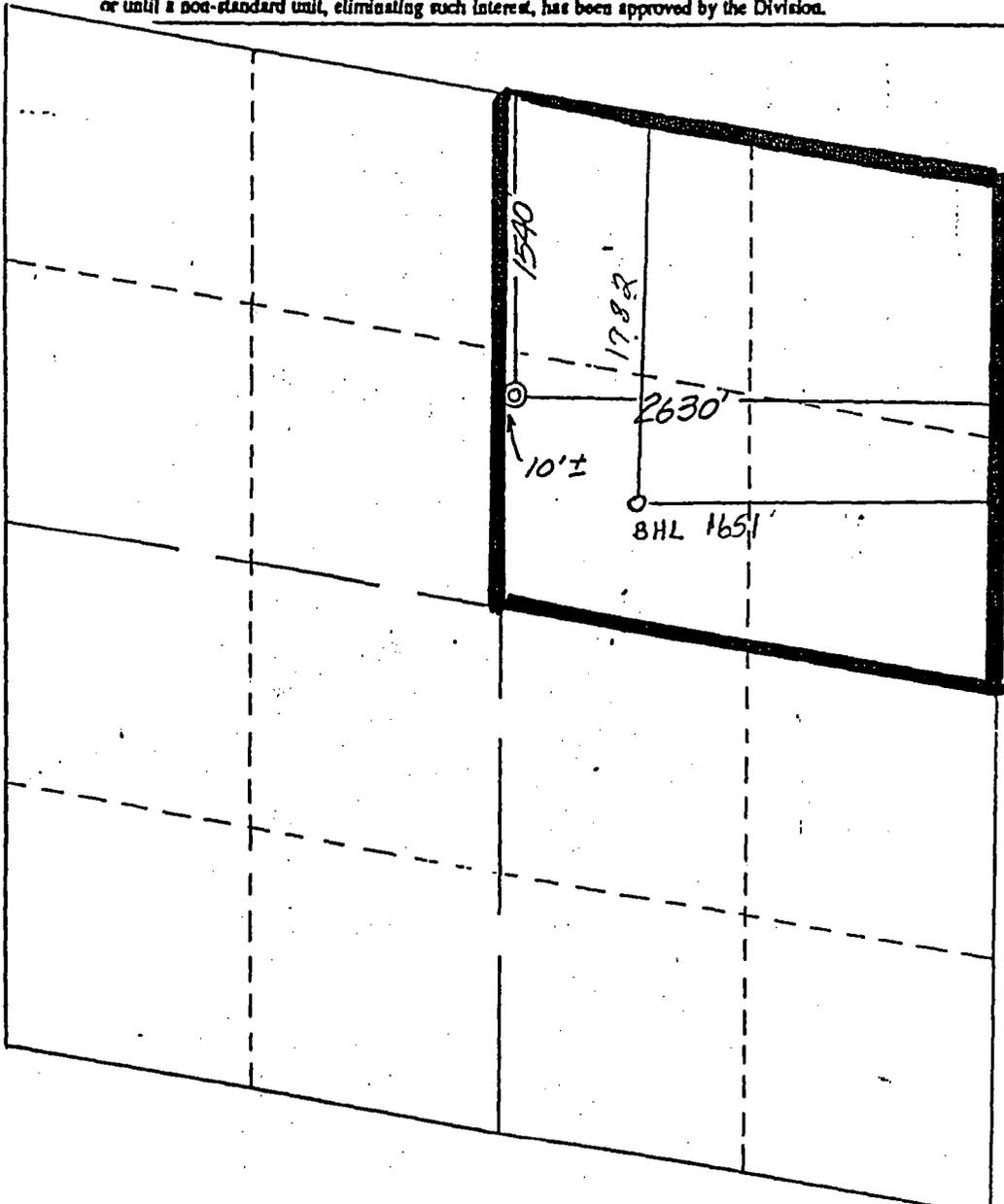
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator AMOCO PRODUCTION COMPANY		Lease Carson Federal G		Well No. #1	
Unit Letter G	Section 25	Township 28 NORTH	Range 4 WEST	County NMPM RIO ARRIBA	
Actual Footage Location of Well: 1540 feet from the NORTH line and 2630 feet from the EAST line					
Ground level Elev. 7337	Producing Formation Pictured Cliffs		Pool Choza Mesa Pictured Cliffs		Dedicated Acreage: N$\frac{3}{4}$ 160 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
 Yes No If answer is "yes" type of consolidation _____
 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature
Julie L. Acevedo

Printed Name
Julie L. Acevedo

Position
Sr. Staff Assistant

Company
Amoco Production Company

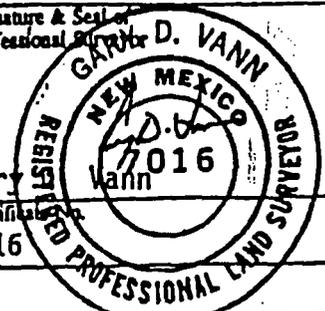
Date
6/9/94

SURVEYOR CERTIFICATION

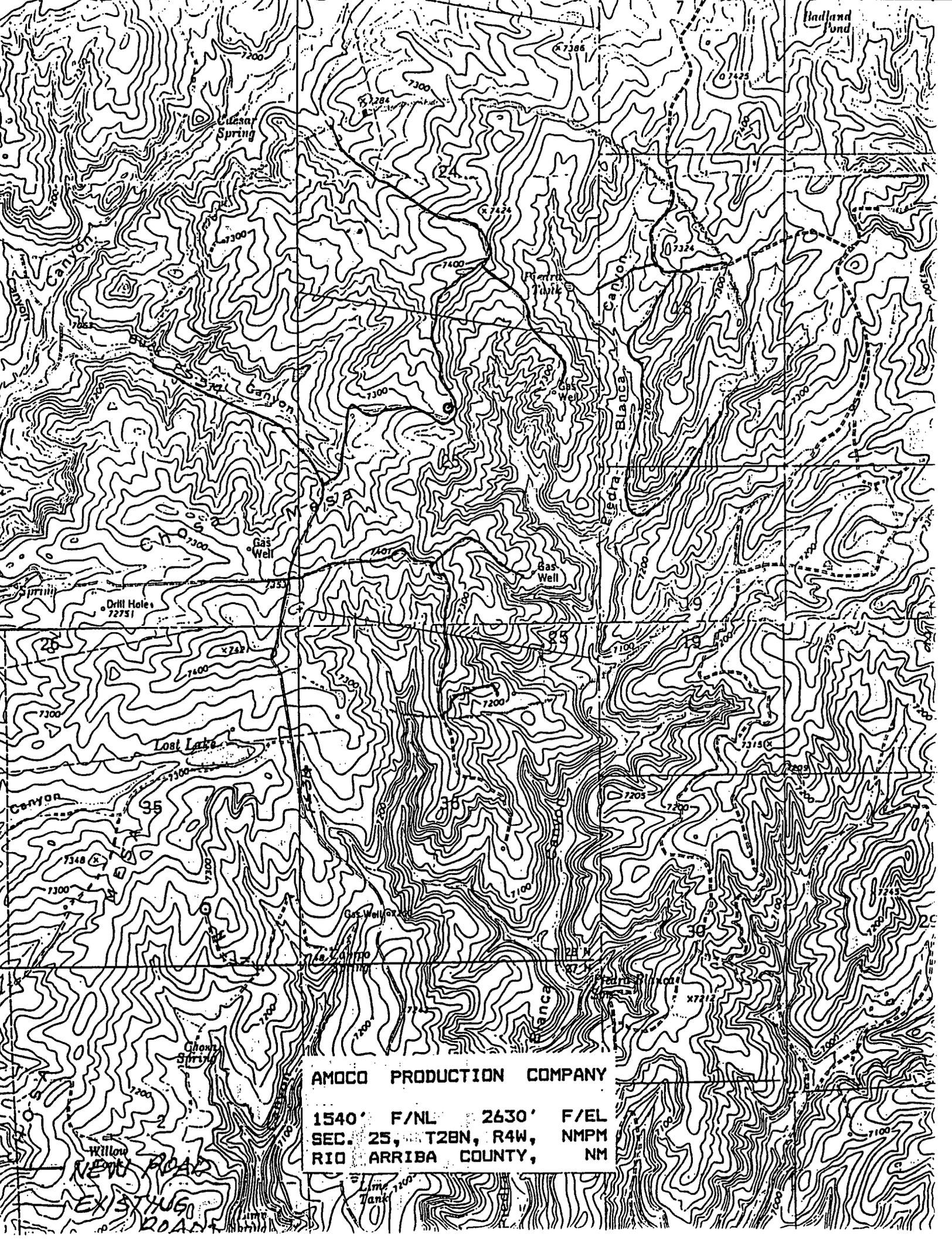
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
June 1, 1994

Signature & Seal of Professional Surveyor



Gary
 Certified
 7016



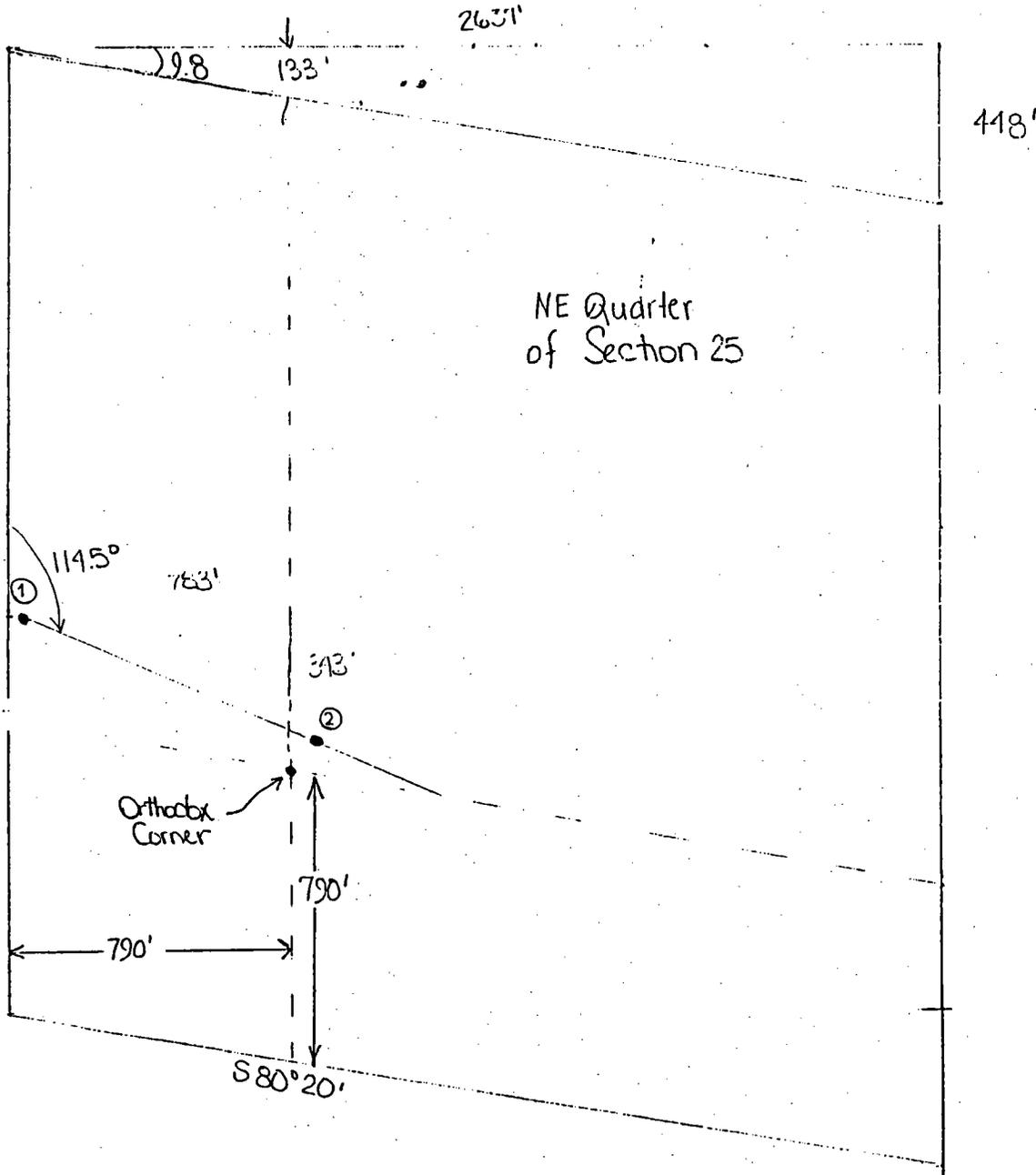
AMOCO PRODUCTION COMPANY

1540' F/NL 2630' F/EL
SEC. 25, T28N, R4W, NMPM
RIO ARRIBA COUNTY, NM

WILLOW ROAD
EXISTING ROAD

Lime Tank

SUBJECT Carson Federal G #11
Directional Plan



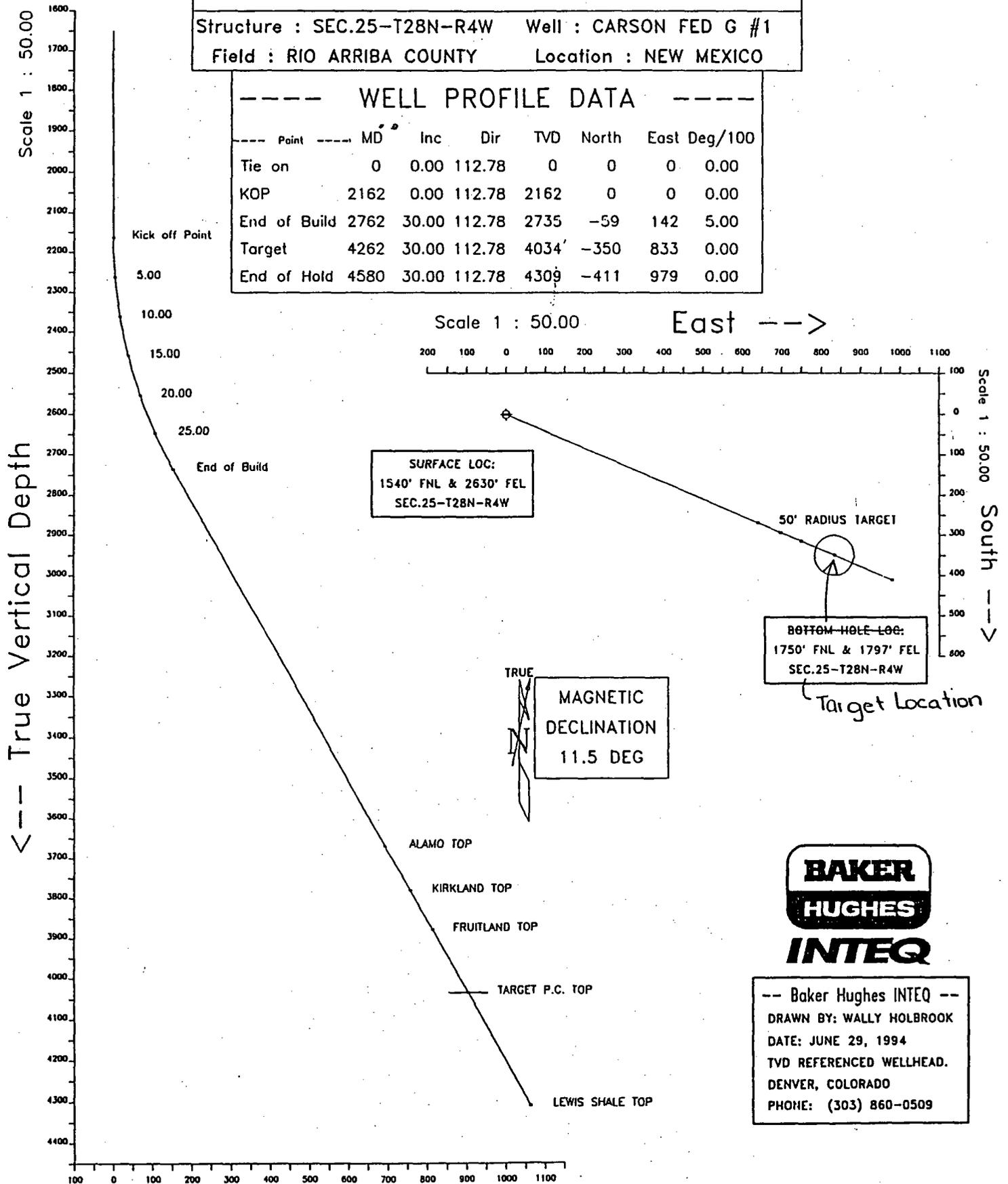
- ① Surface Location
 1540' FNL & 2630' FEL Sec 25, T28N, R4W Rio Arriba Co
- ② Point we cross legal lines at top of Picture Cliffs
 1750' FNL & 1,797' FEL (100' North of legal corner & 50' East)
- ③ End of build MD $\approx 2735'$ TVD $\approx 2762'$ MD ($\approx 30^\circ$) KOP $\approx 2162'$ MD
 1574' FNL & 2488' FEL
- ④ Anticipated BHL @ $\approx 580'$ MD $\approx 1782'$ FNL & 1651' FEL

AMOCO PRODUCTION COMPANY

Structure : SEC.25-T28N-R4W Well : CARSON FED G #1
 Field : RIO ARRIBA COUNTY Location : NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	Deg/100
Tie on	0	0.00	112.78	0	0	0	0.00
KOP	2162	0.00	112.78	2162	0	0	0.00
End of Build	2762	30.00	112.78	2735	-59	142	5.00
Target	4262	30.00	112.78	4034	-350	833	0.00
End of Hold	4580	30.00	112.78	4309	-411	979	0.00



SURFACE LOC:
 1540' FNL & 2630' FEL
 SEC.25-T28N-R4W

BOTTOM HOLE LOG:
 1750' FNL & 1797' FEL
 SEC.25-T28N-R4W

MAGNETIC DECLINATION
 11.5 DEG



-- Baker Hughes INTEQ --
 DRAWN BY: WALLY HOLBROOK
 DATE: JUNE 29, 1994
 TVD REFERENCED WELLHEAD.
 DENVER, COLORADO
 PHONE: (303) 860-0509

Scale 1 : 50.00
 Vertical Section on 112.78 azimuth with reference 0.00 N, 0.00 E from SLOT #1



Southern

Rockies

Business

Unit

July 15, 1994

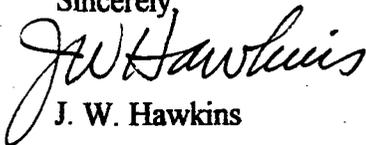
Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, NM 87504

**Application for Directional Drilling
Carson Federal G No.1 Well
NE/4 Section 25, T28N-R4W
Choza Mesa Pictured Cliffs Pool
Rio Arriba County, New Mexico**

Amoco Production Company hereby requests administrative approval to directionally drill the Carson Federal G No.1 well referenced above. The well is planned to be drilled from a surface location 1540' FNL and 2630' FEL of Section 25 to a bottomhole location of 1782' FNL and 1651' FEL of Section 25 T28N-R4W. The surface location is necessary due to the topography in this area. The well is planned to intercept the top of the Pictured Cliffs formation within the legal drilling window at 1750' FNL and 1797' FEL of Section 25 T28N-R4W. Attached are plats and directional plan for the well.

All offset operators will receive a copy of this application by certified mail with a request for a waiver of objection.

Sincerely,


J. W. Hawkins

cc: Andy Logan
Julie Talbot

WAIVER

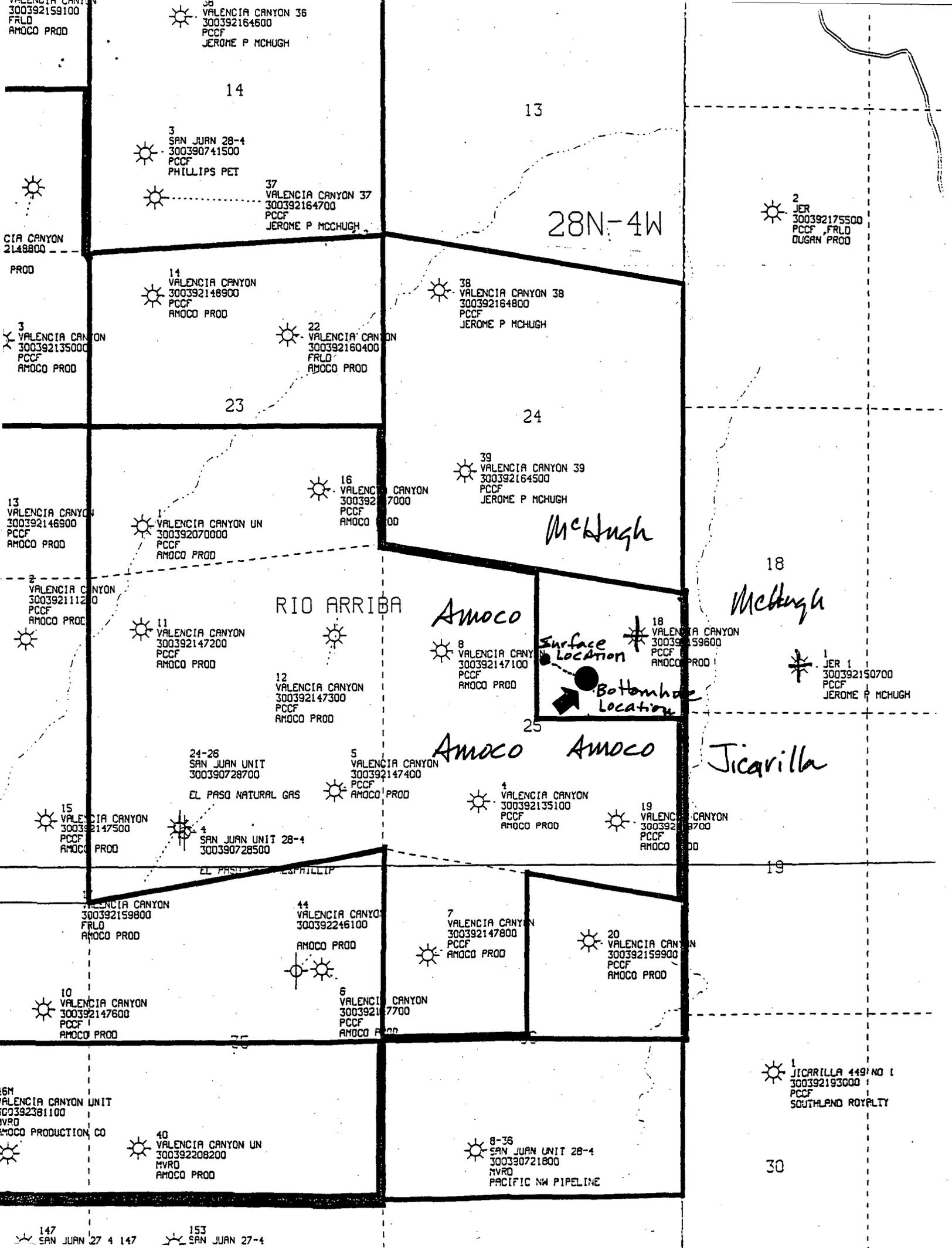
_____ hereby waives objection to Amoco's application to directionally drill the Carson Federal G No.1 well as proposed above.

By: _____ Date: _____

Offset Operators

Jerome P McHugh
650 S. Cherry St., Suite 1225
Denver, CO 80222-1894

Bureau of Indian Affairs
Jicarilla Agency
PO Box 167
Dulce NM 87528-0167



VALENCIA CANYON
300392159100
FRLO
AMOCO PROD

36
VALENCIA CANYON 36
300392164600
PCCF
JEROME P MCHUGH

14

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SAN JUAN 28-4
300390741500
PCCF
PHILLIPS PET

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VALENCIA CANYON 37
300392164700
PCCF
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300392175500
PCCF ,FRLO
DUGAN PROD

28N-4W

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PROD

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VALENCIA CANYON 38
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VALENCIA CANYON 39
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JEROME P MCHUGH

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VALENCIA CANYON
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AMOCO PROD

VALENCIA CANYON UN
300392070000
PCCF
AMOCO PROD

16
VALENCIA CANYON
300392170000
PCCF
AMOCO PROD

McHugh

18

McHugh

2
VALENCIA CANYON
300392111200
PCCF
AMOCO PROD

11
VALENCIA CANYON
300392147200
PCCF
AMOCO PROD

RIO ARRIBA

Amoco

8
VALENCIA CANYON
300392147100
PCCF
AMOCO PROD

Surface Location

18
VALENCIA CANYON
300392159600
PCCF
AMOCO PROD

1
JER 1
300392150700
PCCF
JEROME P MCHUGH

12
VALENCIA CANYON
300392147300
PCCF
AMOCO PROD

12
VALENCIA CANYON
300392147300
PCCF
AMOCO PROD

25

Amoco Amoco

Jicarilla

24-26
SAN JUAN UNIT
300390728700
EL PASO NATURAL GAS

5
VALENCIA CANYON
300392147400
PCCF
AMOCO PROD

4
VALENCIA CANYON
300392135100
PCCF
AMOCO PROD

19
VALENCIA CANYON
300392137000
PCCF
AMOCO PROD

15
VALENCIA CANYON
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AMOCO PROD

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SAN JUAN UNIT 28-4
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EL PASO NATURAL GAS

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VALENCIA CANYON
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VALENCIA CANYON
300392147800
PCCF
AMOCO PROD

20
VALENCIA CANYON
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PCCF
AMOCO PROD

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VALENCIA CANYON
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PCCF
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6
VALENCIA CANYON
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16M
VALENCIA CANYON UNIT
300392381100
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AMOCO PRODUCTION CO

40
VALENCIA CANYON UN
300392208200
FRLO
AMOCO PROD

8-36
SAN JUAN UNIT 28-4
300390721800
FRLO
PACIFIC NW PIPELINE

1
JICARILLA 449 NO 1
300392193000
PCCF
SOUTHLAND ROYALTY

30

147
SAN JUAN 27 4 147

153
SAN JUAN 27-4

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

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WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

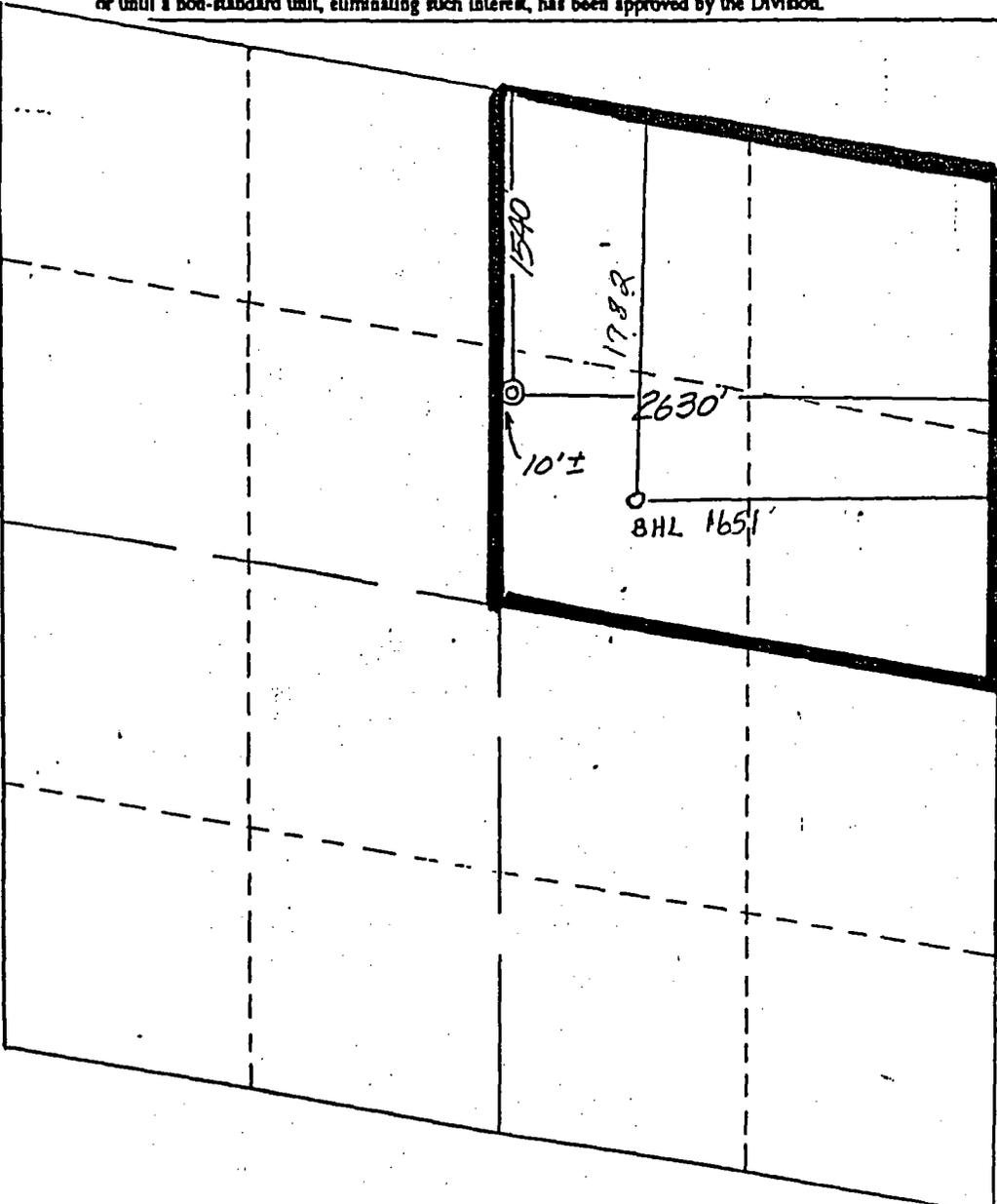
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Ground level Elev. 7337	Producing Formation Pictured Cliffs		Pool Choza Mesa Pictured Cliffs		Dedicated Acreage: N$\frac{3}{4}$ 160 Acres

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OPERATOR CERTIFICATION

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

Signature: *Julie L. Acevedo*

Printed Name: **Julie L. Acevedo**

Position: **Sr. Staff Assistant**

Company: **Amoco Production Company**

Date: **6/9/94**

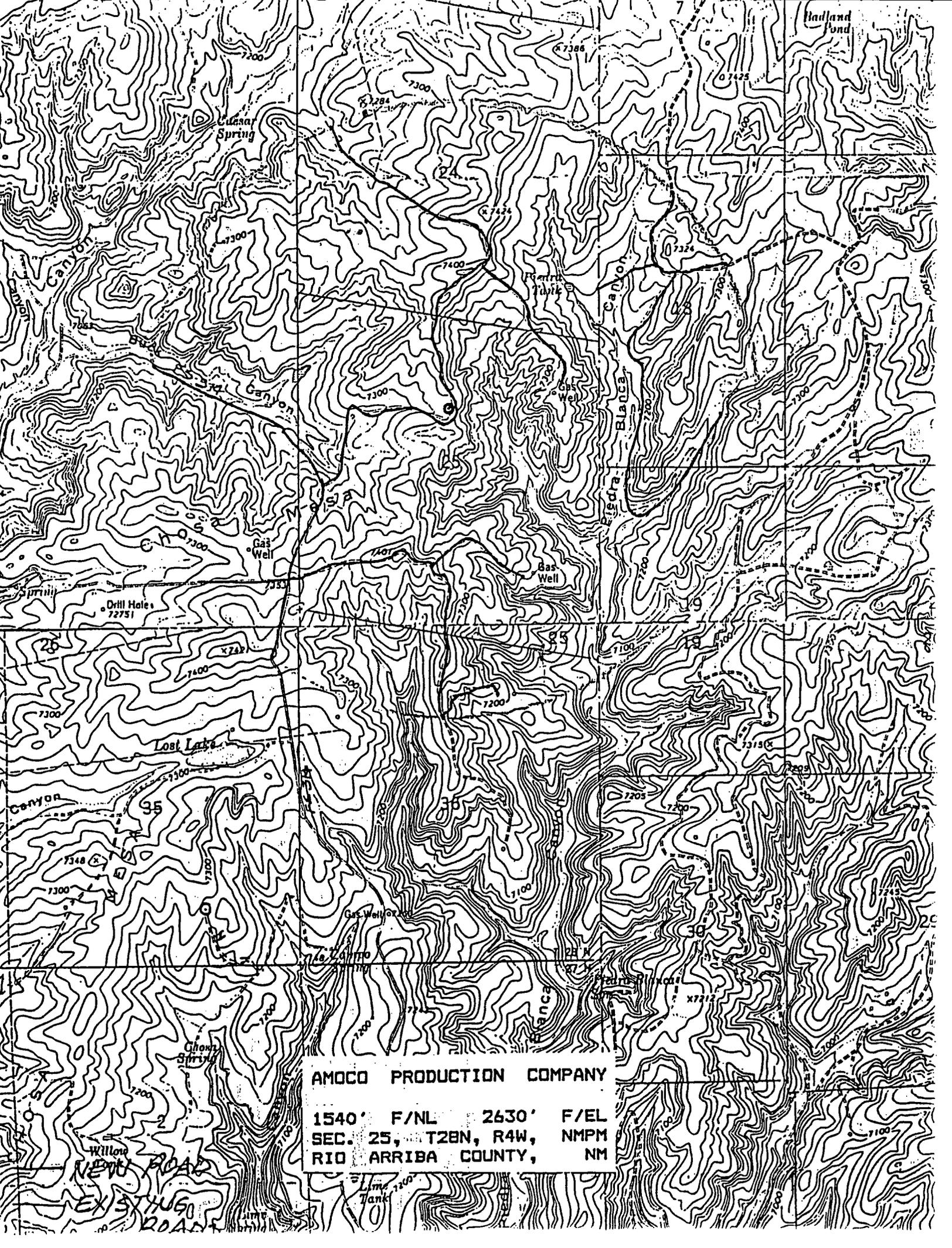
SURVEYOR CERTIFICATION

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 knowledge and belief.

Date Surveyed: **June 1, 1994**

Signature & Seal of Professional Surveyor: **GARY D. VANN**

Gary D. Vann
 Registered Professional Land Surveyor
 7016



Highland Road

Sugar Spring

Front Tank

Gas Well

Gas Well

Drill Hole 72751

Lost Lake

Canyon

Chow Spring

AMOCO PRODUCTION COMPANY

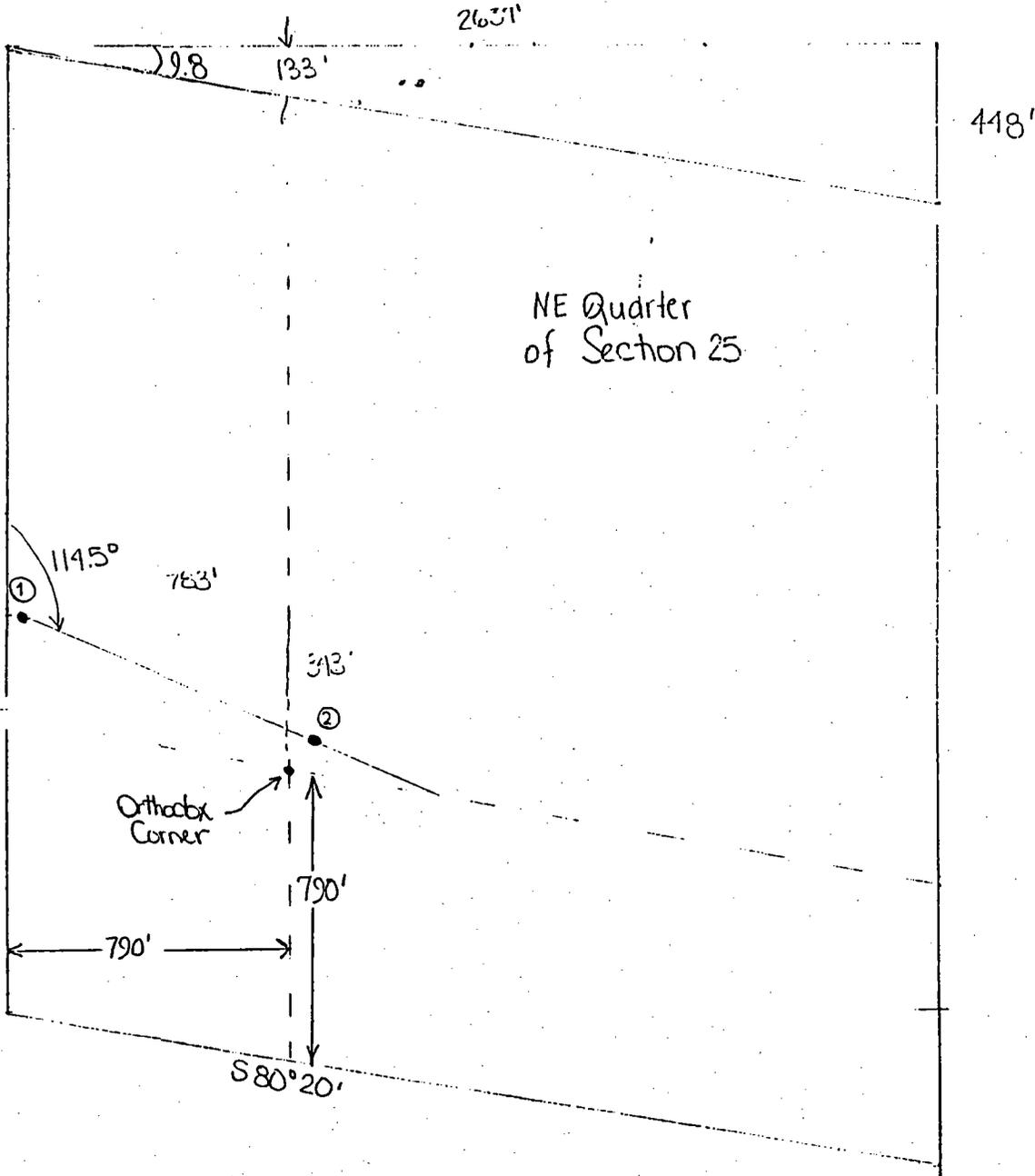
1540' F/NL 2630' F/EL
SEC. 25, T28N, R4W, NMPM
RIO ARRIBA COUNTY, NM

WILLIAMS ROAD

EXISTING ROAD

Lime Tank

SUBJECT Carson Federal G #11
Directional Plan.



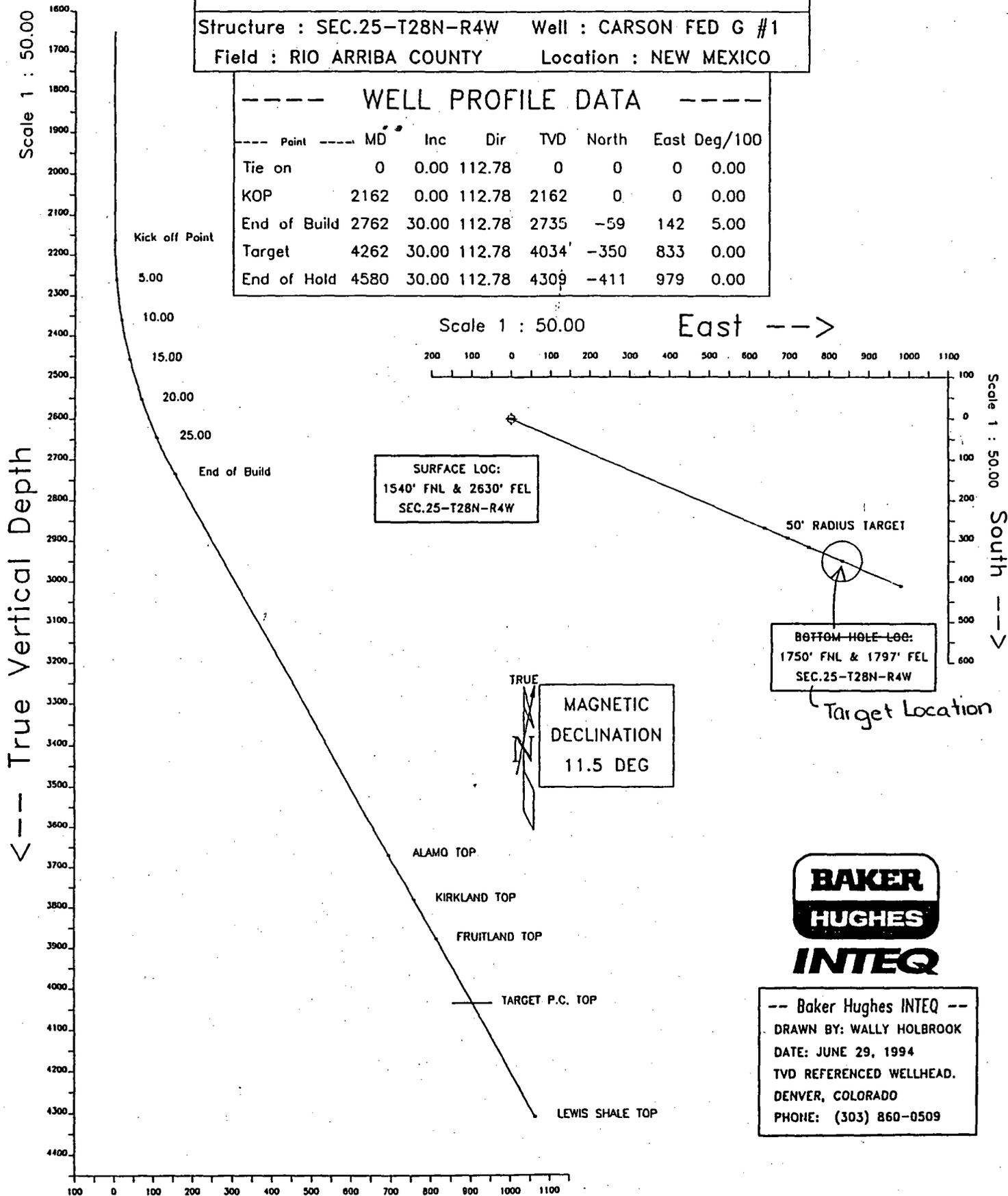
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 1574' FNL & 2488' FEL
- ④ Anticipated BML @ \approx 50' MD \approx 1309' TND \approx 1782' FNL & 1651' FEL

AMOCO PRODUCTION COMPANY

Structure : SEC.25-T28N-R4W Well : CARSON FED G #1
 Field : RIO ARRIBA COUNTY Location : NEW MEXICO

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	Deg/100
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 1540' FNL & 2630' FEL
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BOTTOM HOLE LOG:
 1750' FNL & 1797' FEL
 SEC.25-T28N-R4W

TRUE
 MAGNETIC
 DECLINATION
 11.5 DEG



-- Baker Hughes INTEQ --
 DRAWN BY: WALLY HOLBROOK
 DATE: JUNE 29, 1994
 TVD REFERENCED WELLHEAD.
 DENVER, COLORADO
 PHONE: (303) 860-0509