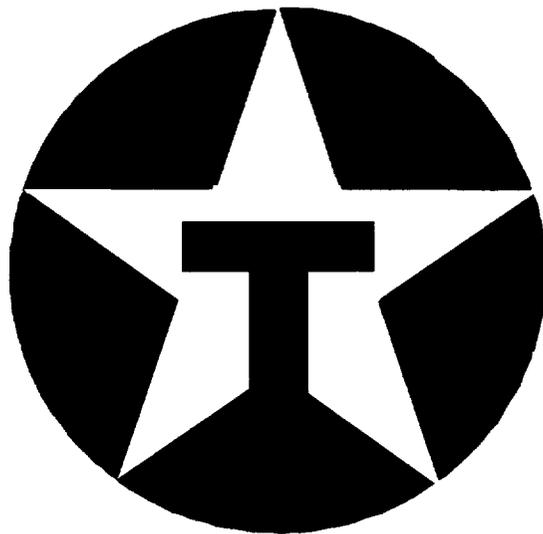


TEXACO EXPLORATION AND PRODUCTION INC.

**JICARILLA C NO. 35**  
**1850' FSL 1190' FWL**  
**SEC. 21, T25N, R5W**  
**RIO ARRIBA CO., NEW MEXICO**

*Case 11326*



## **LIST OF EXHIBITS**

- A. Land Map - Location of Well/Lease**
- B. Well Location and Acreage Dedication Plat (Form C-102)**
- C. Offset Operator Plat**
- D. List of Offset Operators**
- E. Return Receipt of Notice to Offset Operators**
- F. Waiver Letters From Offset Operators**
- G. Gallup Structure Map**
- H. Gallup Isopach Map (Upper and Lower Zones)**
- I. Gallup Isopach Map (Upper Perforated Zone)**
- J. Cross Section (West - East)**
- K. Well Schematic - Current/Proposed Completion**

-37000, -36000, -35000, -34000, -33000, -32000, -31000, -30000, -2900-28588

36,400



EXHIBIT "A"

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980  
DISTRICT II  
P.O. Box Drawer DD, Artesia, NM 88211-0719  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87000  
DISTRICT IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

### OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1999  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies  
 AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 3003923433	<sup>2</sup> Pool Code 39189	<sup>3</sup> Pool Name LINDRITH GALLUP-DAKOTA, WEST
<sup>4</sup> Property Code 11170	<sup>5</sup> Property Name JICARILLA C	<sup>6</sup> Well No. 35
<sup>7</sup> OGRID Number 022364	<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION, INC.	<sup>9</sup> Elevation 6631' KB

#### <sup>10</sup> Surface Location

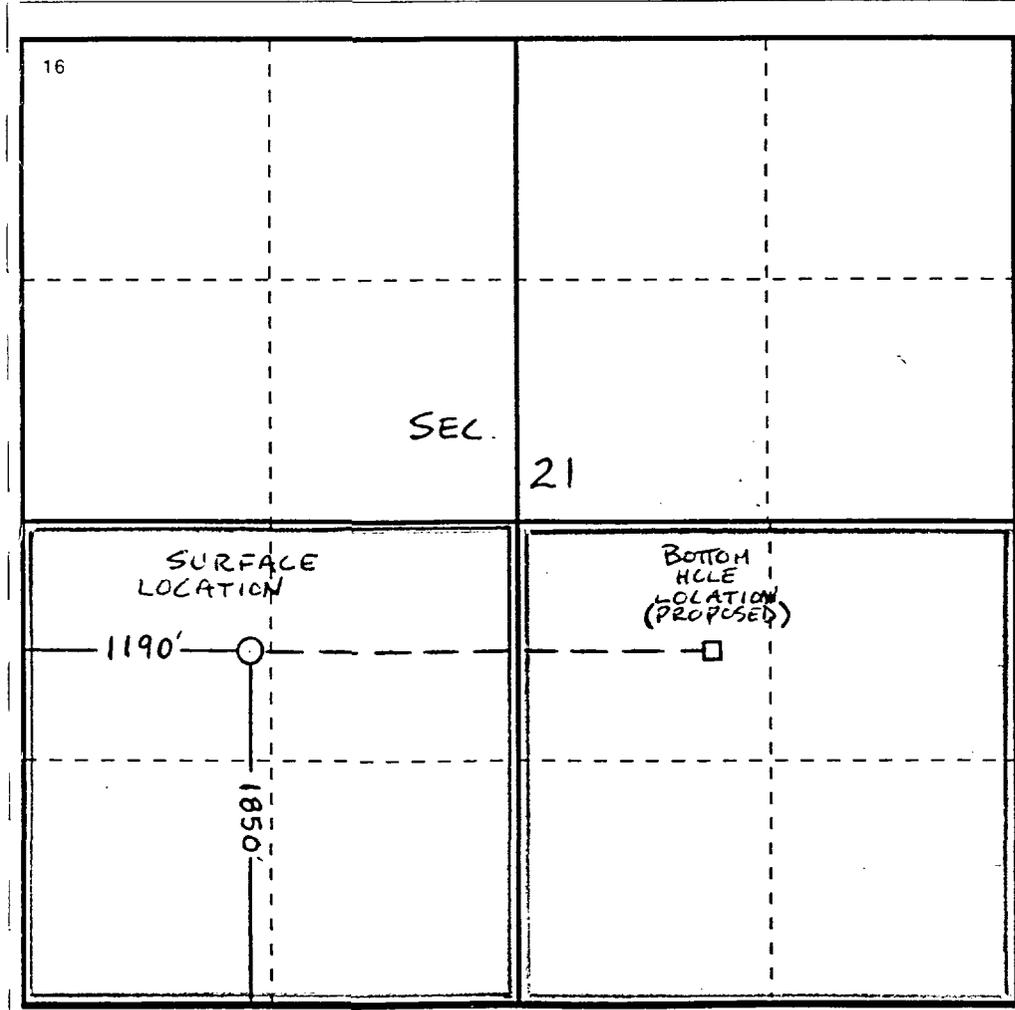
Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
L	21	25N	5W		1850	SOUTH	1190	WEST	RIO ARRIBA

#### <sup>11</sup> 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

<sup>2</sup> Dedicated Acre	<sup>13</sup> Joint or Infill No	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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



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

*Rashed Hindi*  
Signature

Printed Name  
RASHED HINDI

Position  
Senior Engineer

Date  
6/2/95

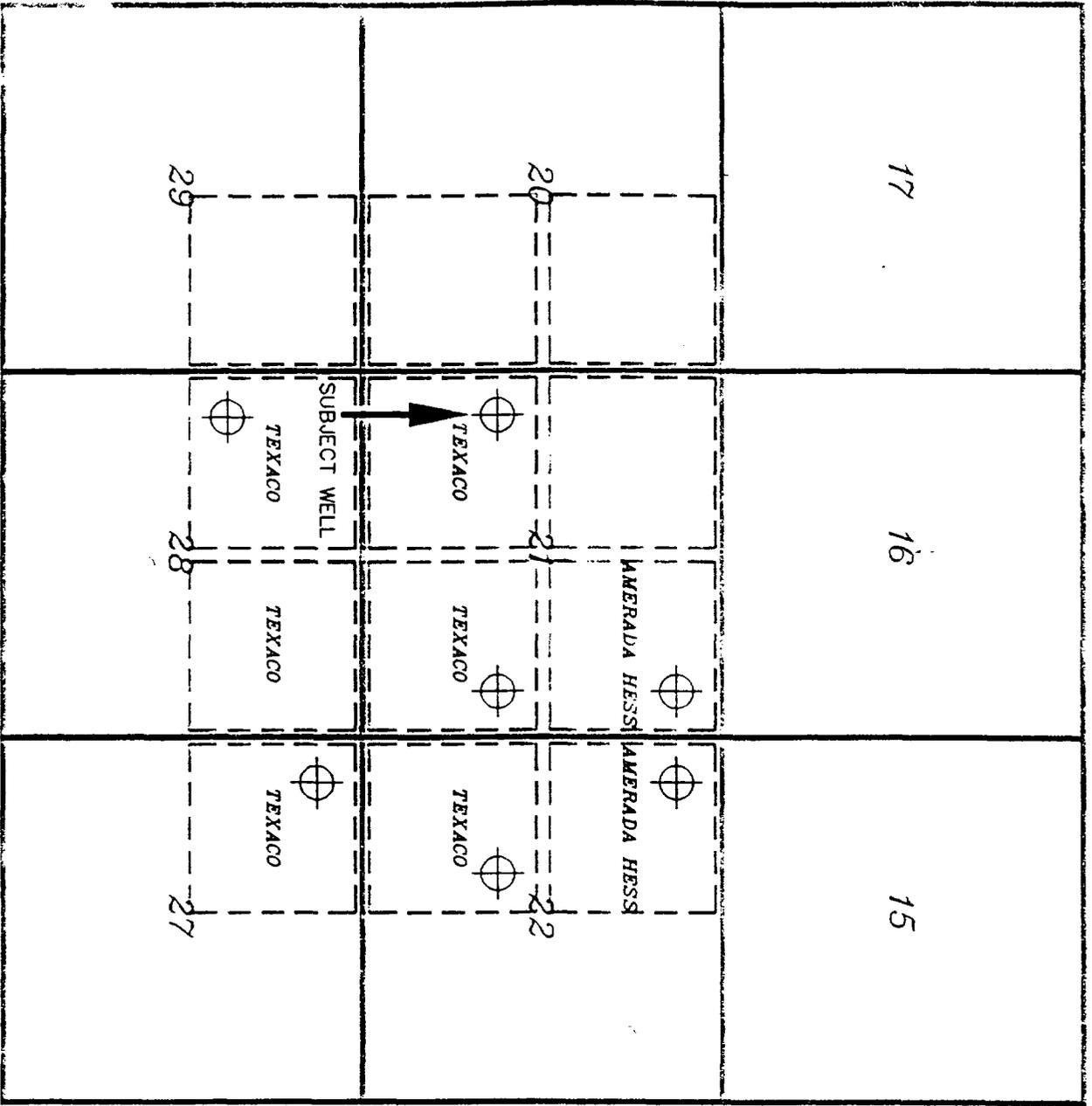
**18 SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

T 25 N / R 05 W



*Attachment E*

WEST LINDBRITH GALLUP/DAKOTA  
180 AC. SPACING UNIT



**TEXACO** FABRICATION OPERATING UNIT  
DENVER DIVISION  
DENVER, COLORADO

APPLICANT	AGARILLA INDIAN RESERVATION
ADDRESS	RD. ARRIBA COUNTY, NEW MEXICO
DESCRIPTION	WEST LINDBRITH GALLUP/DAKOTA PEG
OPERATOR	TEXACO E. & P. INC. - AGARILLA, C. 835
DATE	9/24/73
APPROVED BY	_____ TITLE
DATE	_____ TITLE
REVISION	_____ DATE

*Attachment VI*

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OFFSET OPERATORS  
JICARILLA C #35  
WEST LINDRITH GALLUP/DAKOTA

**Amerada Hess Corporation**  
P.O. Box 2040  
Tulsa, OK 74102  
(918)599-4252

Attachment VIII

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

AMERADA HESS CORPORATION  
P.O. BOX 2040  
TULSA, OK 74102

4a. Article Number

2175 054 502

4b. Service Type

- Registered  Insured
- Certified  COD
- Express Mail  Return Receipt for Merchandise

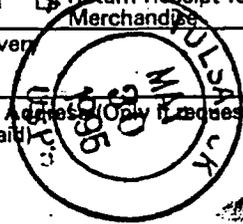
7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

*[Handwritten Signature]* 5-30-95

8. Addressee's Address (Only if requested and fee is paid)



Thank you for using Return Receipt Service

PS Form 3811, December 1991

U.S. GPO: 1993-352-714

**DOMESTIC RETURN RECEIPT**



JOINT VENTURES-U.S.

AHC INT. 2

Texaco Exploration and Production Inc

8900 N Butler  
Farmington NM 87401

May 25, 1995

Amerada Hess Corporation

P.O. Box 2040

Tulsa, OK 74102

1995 JUN -5 AM 11:03

RLC  RELD  JLK

WSL

FILE  COPY

RECEIVE

JUN 8 1995

L. D. JONE

RE: Horizontal Re-Entry  
Jicarilla "C" No. 35  
Surf Loc: 1850' FSL, 1190' FWL, Unit L  
Sec. 21-T25N-R5W  
Rio Arriba County, New Mexico

Gentlemen:

As offset operator to the spacing unit for the referenced well, you are being notified of our application with the New Mexico Oil Conservation Division (NMOCD) to drill a short radius horizontal lateral re-entry into the Gallup formation. We plan to mill out a section of casing, sidetrack, drill and complete a single 2500' short radius horizontal section (100' radius, 57 degrees/100' build) into the upper portion of the Gallup formation. The kick off point will be at approximately 5970' and the targeted total vertical depth of the horizontal lateral section is 6070'. Attached are wellbore diagrams for the current and proposed completions. The horizontal leg will be in a eastward direction, as shown on the attached location map. We expect to recover additional Gallup reserves in the adjacent W. Lindrith Gallup Dakota 160 acre spacing unit (SE quarter of section 21, T25N-R5W). The existing W. Lindrith Gallup/Dakota wellbore in the SE 1/4 of sec. 21 is currently completed in Dakota formation only. Both spacing units are included in the Texaco Exploration and Producing Inc. operated Jicarilla "C" lease.

If you have no objection to the above application please sign the waiver at the bottom of this letter and return it to this address. To expedite this procedure a facsimile signed copy would be greatly appreciated. Please fax to 505-325-5398. If you do have an objection, it must be filed with the NMOCD in writing within twenty (20) days of the date this notice was received. Your attention to this matter is greatly appreciated.

If you have any questions concerning this matter please contact Mr. Mark R. Reinhold at 505-325-4397 ext. 19.

Sincerely,

*Ted A. Tipton*

Ted A. Tipton  
Operating Unit Manager  
MRR/s

Attachments

cc: file

WAIVER APPROVAL:

COMPANY: Amerada Hess

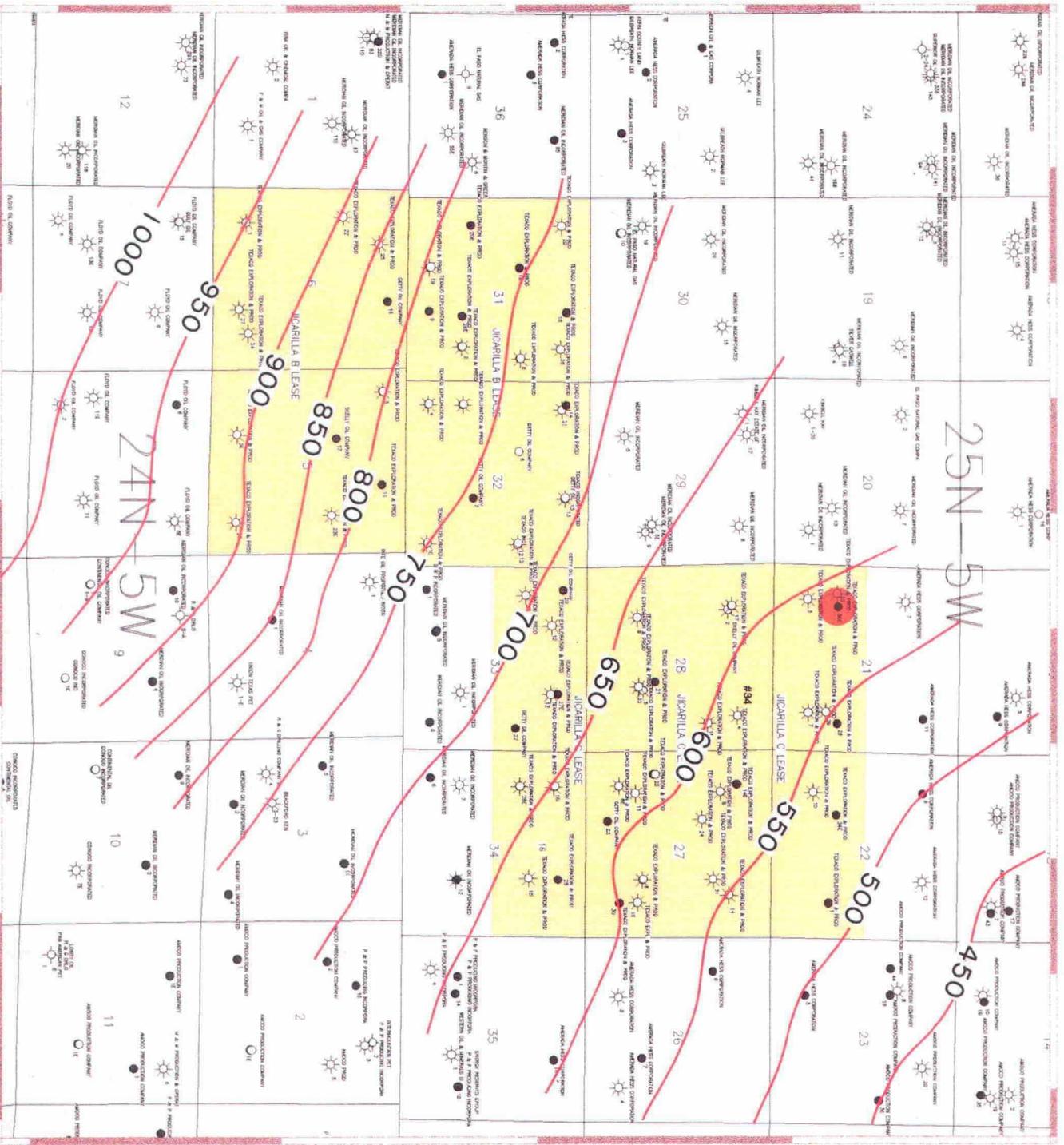
BY: [Signature]

DATE: 6/20/95

EXHIBIT "F"

-37000. -36000. -35000. -34000. -33000. -32000. -31000. -30000. -2900-28588.

4286000.



-107,400

36,400



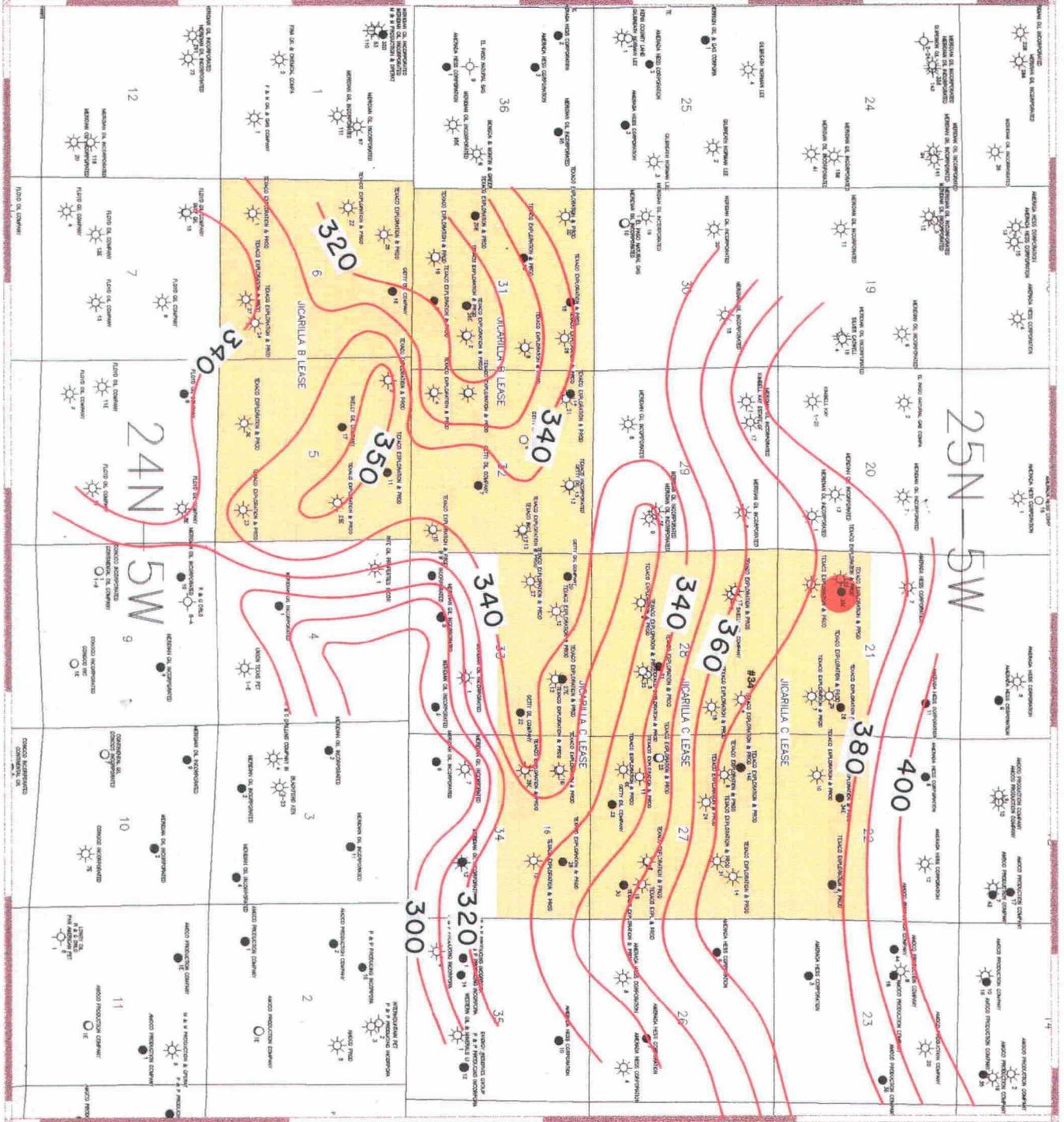
TEXACO ERP INC.			
JICARILLA LEASES B & C			
CALLUP STRUCTURE MAP			
SAN JUAN BASIN, NEW MEXICO			
E. C. Gentry	D. C. W.	1-5-98	
ESD KCM 250	1"-1000'	REVISION #1	



EXHIBIT "G"

-37000. -36000. -35000. -34000. -33000. -32000. -31000. -30000. -2900-28588.

36,400



4285000.

-107,400



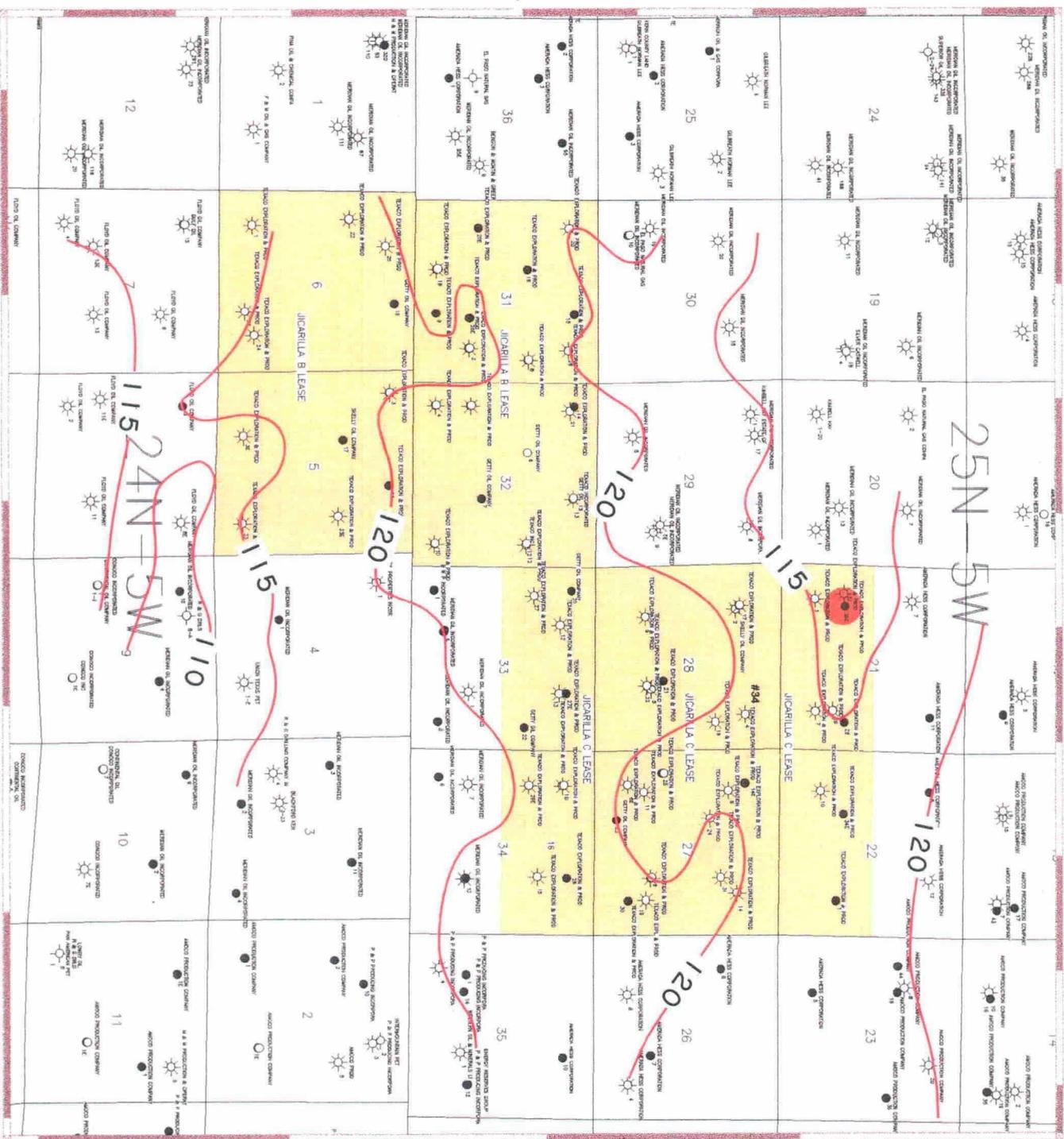
TEXACO E&P INC			
JICARILLA LEASES B & C			
UPPER & LOWER PERM ZONE GALLUP ISOPACH			
SAN JUAN BASIN, NEW MEXICO			
G. C. Densities	0 - 18'	1-4-85	
COO BVM 501	P-1027	FLB9590447	



EXHIBIT "H"

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36,400



4285000.

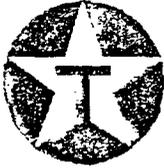
-107,400

TEXACO E&P INC		
JICARILLA LEASES B & C		
UPPER PEER ZONE GALLUP ISOPACH		
SAN JUAN BASIN, NEW MEXICO		
C. C. Databank	D = 10'	7-5-95
ESD ROOM 550	1-4-000	REL:FB/BAW/

C.I. # 51



EXHIBIT "I"



# JICARILLA C No. 35 CURRENT COMPLETION

**LOCATION:**

1850' FSL & 1190' FWL  
Sec. 21, T25N, R5W  
Rio Arriba, NM

**SPUD DATE:** 4/19/94

**RECOMPL DATE:** 6/12/94

**ELEVATION:** 6631' KB

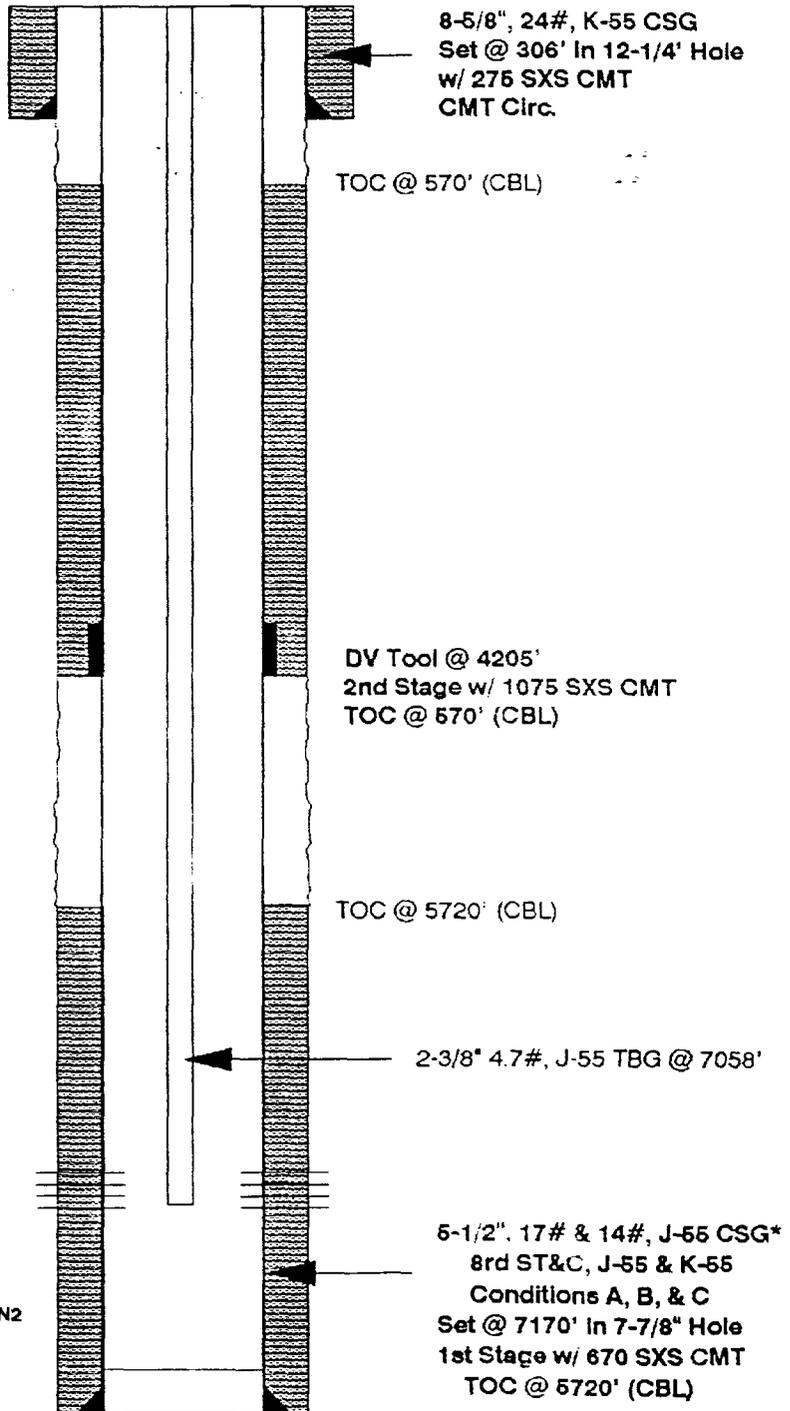
6819' GR

**FORMATION TOPS:**

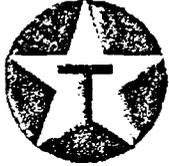
- Ojo Alamo 2154' (+4477')
- Kirtland 2324' (+4307')
- Fruitland 2462' (+4169')
- Pictured Cliffs 2692' (+3939')
- Chacra 3560' (+3071')
- Mesaverde 4337' (+2294')
- Gallup 6048' (+ 583')
- Greenhorn 6807' (- 176)
- Graneros 6874' (- 243)
- Dakota 6906' (- 275)

**DAKOTA PERFS:**

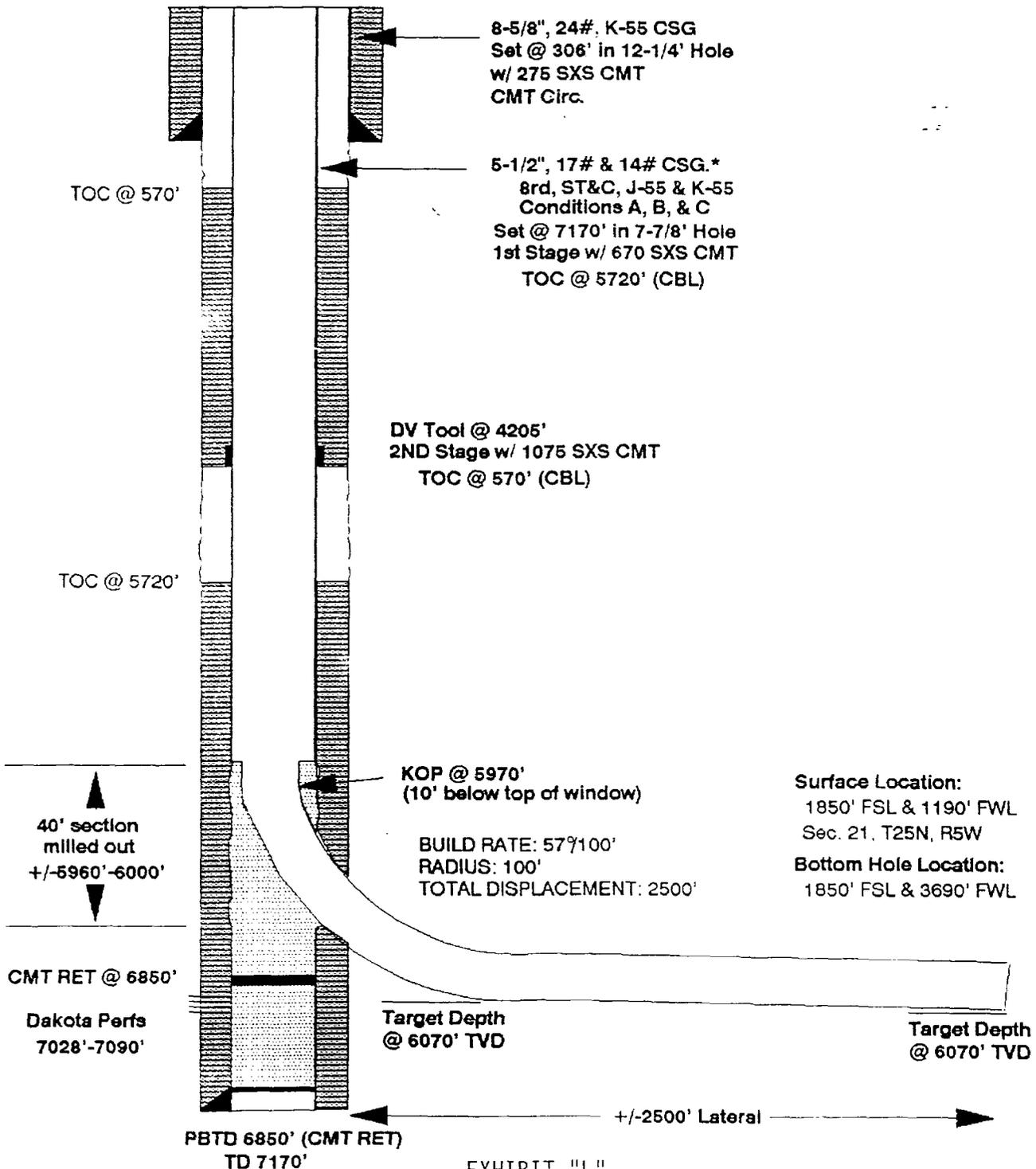
7028'-37', 7042'-46'  
7066'-71', 7080'-90'  
1 SPF, 0.40" dia. Holes  
Frac w/ 56,700 Gal 70 Q Foam  
& 53,500# 20-40 Brady Sand  
BD w/ 1400 Gal 15% HCl w/ 500 SCF/BBL N2



PBTD - 7130'  
TD - 7170'



**JICARILLA C No. 35**  
**PROPOSED SIDETRACK COMPLETION**



Attachment I

**JICARILLA "C" No. 35  
HORIZONTAL SINGLE LATERAL REENTRY**

The subject well is a producing well. It is to be reentered and a single horizontal lateral is to be drilled in the Gallup formation. The existing perforations will be squeeze cemented and a 40' section is to be milled in the casing. A short radius horizontal lateral will be drilled in the west direction approximately 2500' long. The well will be acidized using coiled tubing, if necessary, and then production tested.

**WELL PREPARATION:**

- 1) MIRUSU. Nipple up 3M BOPE.
- 2) Kill well with produced water.
- 3) TOH and lay down 2-3/8" production tubing.
- 4) TIH with 4-3/4" bit on 2-7/8" work string and clean out to PBTD. TOH.

**SQUEEZE EXISTING PERFORATIONS: (A CIBP may be set instead of squeezing)**

- 5) TIH with cement retainer on tubing and set above perms (7028'-7090') at 7000'.
- 6) Space out tubing in neutral position and test tubing to 3000 psi. Rig up squeeze manifold. Establish rate into perforations (2 BPM), note pump in pressure. Pressure up annulus to 1000 psi. monitor casing during job.
- 7) Cement squeeze with 150 sx Class "G" with 0.2% D156 and 0.2% D65 to obtain a fluid loss of 200-300 cc/30 min. (determine by lab testing) followed by 100 sx Class "G" neat, mixed at 15.8 ppg. Minimum pump time 150 minutes at 175°F.
- 8)
  - a) Spot cement to end of tubing.
  - b) Sting into retainer.
  - c) When cement reaches perforations, slow rate to 1/2 BPM
  - d) Maximum squeeze pressure 3000 psi.
  - e) Displace cement to retainer.
- 9) Pull out of retainer, reverse out cement and check for flow. Pull tubing to 4000' and shut-in for 24 hours.
- 10) Shut in backside and test casing to 500 psi.

Jicarilla "C" No. 35  
Horizontal Reentry  
Rio Arriba County, New Mexico  
Drilling & Completion Procedure

**MILL 5 1/2" CASING:**

- 11) Circulate hole with mud for milling. TOH with tubing and bit.

MUD: Starch  
Volume:  $(6000' * .0238 \text{ bbl/ft} = 143 \text{ bbls} + 200 \text{ bbls for pit} = 343 \text{ bbls})$   
Weight: 8.5 - 8.7  
Funnel Visc.: 75-80

- 12) If casing collar log is not available in Area, Run GR-CCL to determine position of collars. (Window may be moved +/- 10 to avoid milling a casing collar).
- 13) TIH with mill for 5 1/2" casing on 2 7/8" workstring. Mill 40' section of casing from +/- 5960' - 6000'. While milling, run paper sweeps in the mud to ensure the hole is clean. Place ditch magnets in return lines to catch metal cuttings. Any time a trip is made, make sure the hole is clean and the blades are retracted.
- 14) TOH with mill.

**SPOT KICK OFF PLUG:**

- 15) TIH with diverter tool and +/- 400' 2 3/8" (2 1/16" if available) on 2 7/8" work string to 6010'. Circulate Starch mud out of hole. Pull up hole so diverter tool is across milled section and wash section. TIH to PBTD.
- 16) Spot 50 sx Class "G" mixed at 17.5 PPG from 5760' to +/- 6010' (200' above window). Batch mix cement. Pull out of cement plug slow to approximately 4000'. **Do not reverse circulate**. Shut in for 24 hours minimum. TOH with tubing.
- 17) TIH with 4 3/4" bit and dress off cement to the KOP at 5970'. TOH with 4 3/4" bit. Cement must drill 1.5-2 min/ft with 10 pts and 50 RPM to insure the plug is hard enough for kickoff.
- 18) Circulate hole clean.

Jicarilla "C" No. 35  
Horizontal Reentry  
Rio Arriba County, New Mexico  
Drilling & Completion Procedure

**DRILL CURVE SECTION (WEST DIRECTION):**

19) Displace hole with starch mud. TOH with bit.

MUD: Starch  
Volume: (6000' \* .0238 bbl/ft + 200 bbls for pit + 2500' \* .0219 bbl/ft)  
(143 bbls + 200 bbls + 55 bbls = 398 bbls)  
Weight: 8.7  
Funel Visc.: 35-40

20) Pick up kick-off motor and test on surface. TIH with kick-off BHA s follows:

4 3/4" bit.  
Kick-off motor (with 2.5-3.0° bent sub)  
Float/ orientation sub.  
1 jt 2 7/8" flexible monel collars.  
Enough P-110 tubing to reach from KOP to end of planned horizontal wellbore.  
Drill collars  
2 7/8", Grade G, AOH DP. to surface.

21) TIH to **KOP (5970')**. Run GYRO and Orient motor to west direction. Break circulation and establish off bottom pressure at operating flow rates. **Planned build rate is 57°/100' with a radius of 100'.**

22) Slowly lower motor to bottom, adjusting toolface as necessary to compensate for reactive torque. Drill approximately 20' of build section with kick-off motor. TOH with kick-off motor and lay down. Pick up build motor (3 restricted articulations to maintain build rates below 70°/100') and TIH. Continue drilling curve while maintaining proper toolface orientation. Drill curve section to **target depth of 6070' TVD** for start of horizontal.

23) Circulate hole clean. TOH with curve motor.

**DRILL HORIZONTAL LATERAL (WEST DIRECTION):**

24) TIH with lateral motor BHA. (Same as step 22 but motor has lower build rate.)

Jicarilla "C" No. 35  
Horizontal Reentry  
Rio Arriba County, New Mexico  
Drilling & Completion Procedure

- 25) Drill the **horizontal lateral (2500')** adjusting tool face as needed to the target. **The end of the horizontal target depth is 6070' TVD.** There is a window around the target line which the well path is to stay within. (see attached well plan for well path and hardlines). While drilling the lateral section, run sweeps of 5 bbls. water, 3 bbls prehydrated gel (90+ viscosity), and 1 gallon polymer.
- 26) At TD circulate hole clean with mud. TOH. Release directional equipment.

**COMPLETION:**

- 27) TIH with muleshoe, 6 jts P-110 tbg and 5-1/2" casing on 2 7/8" tubing. Space out so P-110 tubing is across curve section and packer is in the casing. Set the packer.
- 28) Rig up coiled tubing unit. TIH with "PERFCLEAN" jetting sub on 1 1/2" coiled tubing to TD. Circulate mud out of hole
- 29) Wash 1st lateral open hole with 25,000 gallons 15% NEFE. Rate 2 BPM. POH with coiled tubing while acidizing so entire open hole is stimulated.
- 30) Displace acid to the end of the tubing. SI for 15 min.
- 31) Flow well until dead. TOH with coiled tubing.
- 32) TOH with workstring. TIH with production equipment and test well as needed.