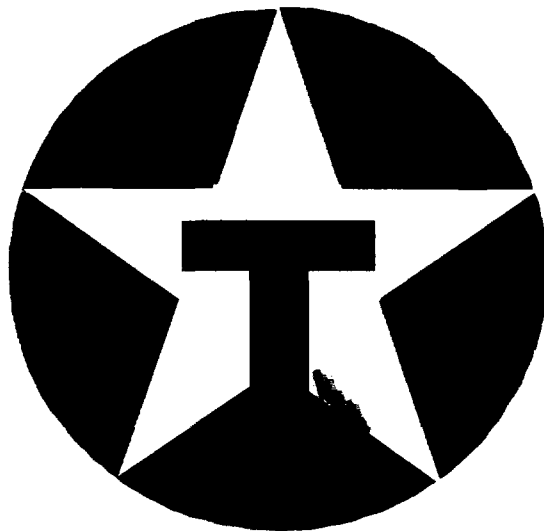


TEXACO EXPLORATION AND PRODUCTION INC.

C. W. ROBERTS NO. 4
660' FSL 660' FWL
SEC. 17, T25N, R3W
RIO ARRIBA CO., NEW MEXICO



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 Completion**
- L. Well Schematic - Proposed Completion**
- M. Proposed Drilling Procedure**

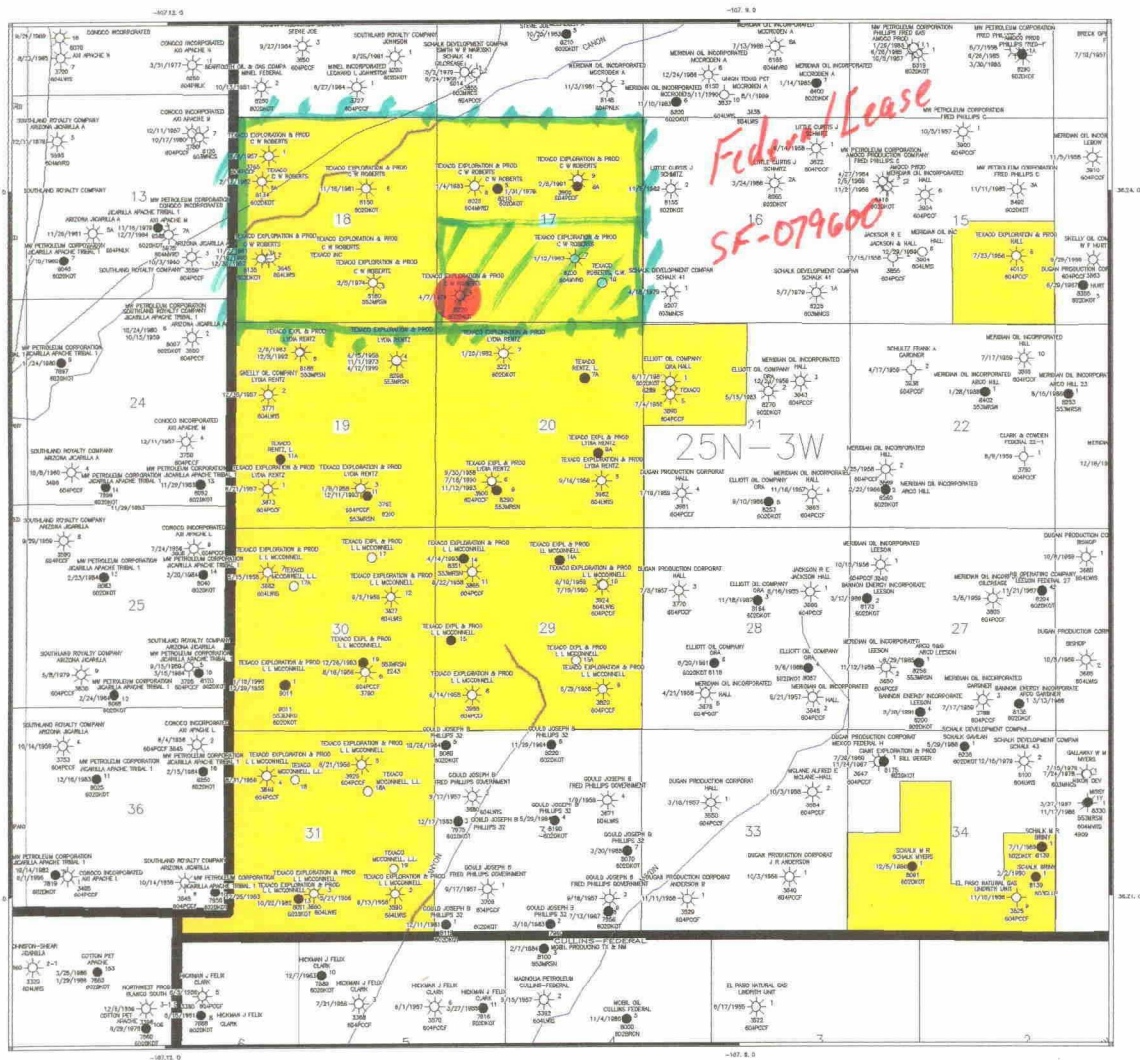


EXHIBIT "A"

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 87410

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, 199

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copie

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 3003905965	² Pool Code 39189	³ Pool Name LINDRITH GALLUP-DAKOTA, WEST
⁴ Property Code 11208	⁵ Property Name C W ROBERTS	⁶ Well No. 4
⁷ OGRID Number 022364	⁸ Operator Name TEXACO EXPLORATION & PRODUCTION, INC.	⁹ Elevation 7193' DF

¹⁰ Surface Location

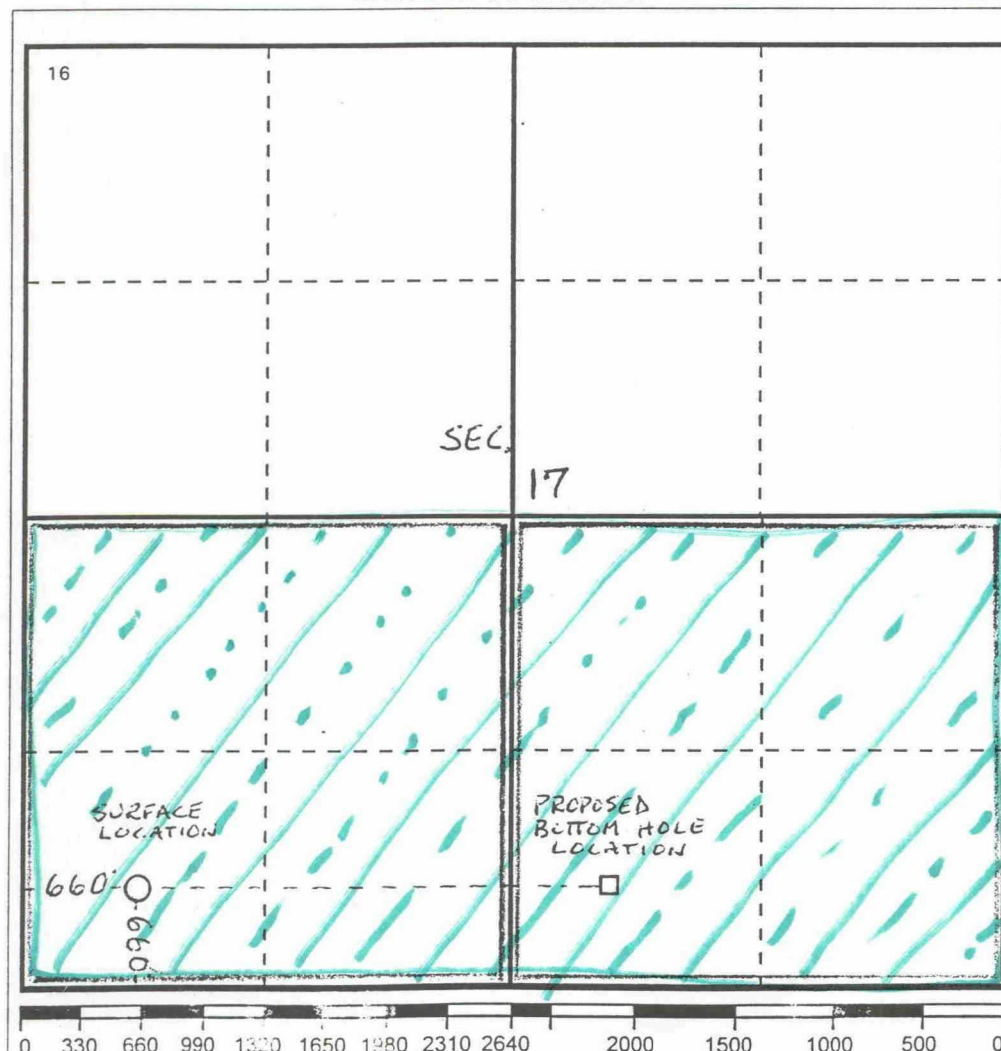
Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
M	17	25N	3W		660	SOUTH	660	WEST	RIO ARriba

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 Acre	¹³ Joint or Infill No	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



17 OPERATOR CERTIFICATION

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

Rached Hindi
Signature

Printed Name

RACHED 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.

Federal
Lease

SF-079600

T 25 N / R 03 W




Window

Attachment II

WEST LINDRITH GALLUP/DAKOTA
160 AC. SPACING UNIT



	
FARMINGTON OPERATING UNIT DENVER DIVISION DENVER, COLORADO	
ARCE, C. W. ROBERTS LEASE RIO ARRIPIA COUNTY, NEW MEXICO DESCRIPTION: OFFSET OPERATORS WEST LINDRITH GALLUP/DAKOTA POOL TEXACO E & P, INC. - C.W. ROBERTS # 4	
DATE: 5/2/95	BY: [Signature]
REVIEW: [Signature]	SCALE: 1" = 40'
DATE: 5/2/95	BY: [Signature]
REVIEW: [Signature]	SCALE: 1" = 40'

Attachment VI

OFFSET OPERATORS
C.W. ROBERTS #4
WEST LINDRITH GALLUP/DAKOTA

Elliott Oil Co.
P.O. Box 1355
Roswell, NM 88202

Little, Curtis J., Oil & Gas
Box 1258
2346 E. 20th St.
Farmington, NM 87499

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):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

LITTLE, CURTIS J., OIL & GAS
P.O. BOX 1258
2346 E. 20TH ST.
FARMINGTON, NM 87499

4a. Article Number

2 175 054 504

4b. Service Type

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

7. Date of Delivery

5-30

5. Signature (Addressee)

[Signature]

6. Signature (Agent)

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

PS Form 3811, December 1991

*U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

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):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

ELLIOTT OIL CO.
PO BOX 1355
ROSWELL, NM 88202

4a. Article Number

2 175 054 503

4b. Service Type

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

7. Date of Delivery

5-30-95

5. Signature (Addressee)

[Signature]

6. Signature (Agent)

[Signature]

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

PS Form 3811, December 1991

*U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.



Texaco Exploration and Production Inc

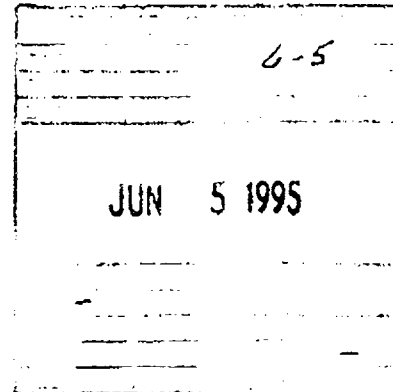
3300 N. 5th St.
Farmington, NM 87401

May 25, 1995

Little, Curtis J., Oil & Gas

Box 1258
2346 E. 20th St.
Farmington, NM 87499

RE: **Horizontal Re-Entry**
C.W. Roberts No. 4
Surf Loc: 660' FSL, 660' FWL, Unit M
Sec. 17-T25N-R3W
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 6900' and the targeted total vertical depth of the horizontal lateral section is 7160'. 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 undeveloped W. Lindrith Gallup Dakota 160 acre spacing unit (SE quarter of section 17, T25N-R3W). These reserves would normally be recovered by an additional vertical well. Both spacing units are included in the Texaco Exploration and Producing Inc. operated C.W. Roberts 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 for TAT

Ted A. Tipton
Operating Unit Manager
MRR/s

Attachments

cc: file

WAIVER APPROVAL: *[Signature]*

COMPANY: *Little Oil & Gas* BY: *[Signature]*

DATE: *6-2-95*



Texaco Exploration and Production Inc

3300 N Butler
Farmington NM 87401

May 25, 1995

Elliott Oil Co.
P.O. Box 1355
Roswell, NM 88202

RE: Horizontal Re-Entry
 C.W. Roberts No. 4
 Surf Loc: 660' FSL, 660' FWL, Unit M
 Sec. 17-T25N-R3W
 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 6900' and the targeted total vertical depth of the horizontal lateral section is 7160'. Attached are wellbore diagrams for the current and proposed completions. The horizontal log will be in a eastward direction, as shown on the attached location map. We expect to recover additional Gallup reserves in the adjacent undeveloped W. Lindrith Gallup Dakota 160 acre spacing unit (SE quarter of section 17, T25N-R3W). These reserves would normally be recovered by an additional vertical well. Both spacing units are included in the Texaco Exploration and Producing Inc. operated C.W. Roberts lease.

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

Sincerely,

Ted A. Tipton
 Operating Unit Manager
 MRR/s

Attachments

cc: file

WAIVER APPROVAL:

COMPANY: Elliott Oil Co.

BY:

DATE: 5/31/95

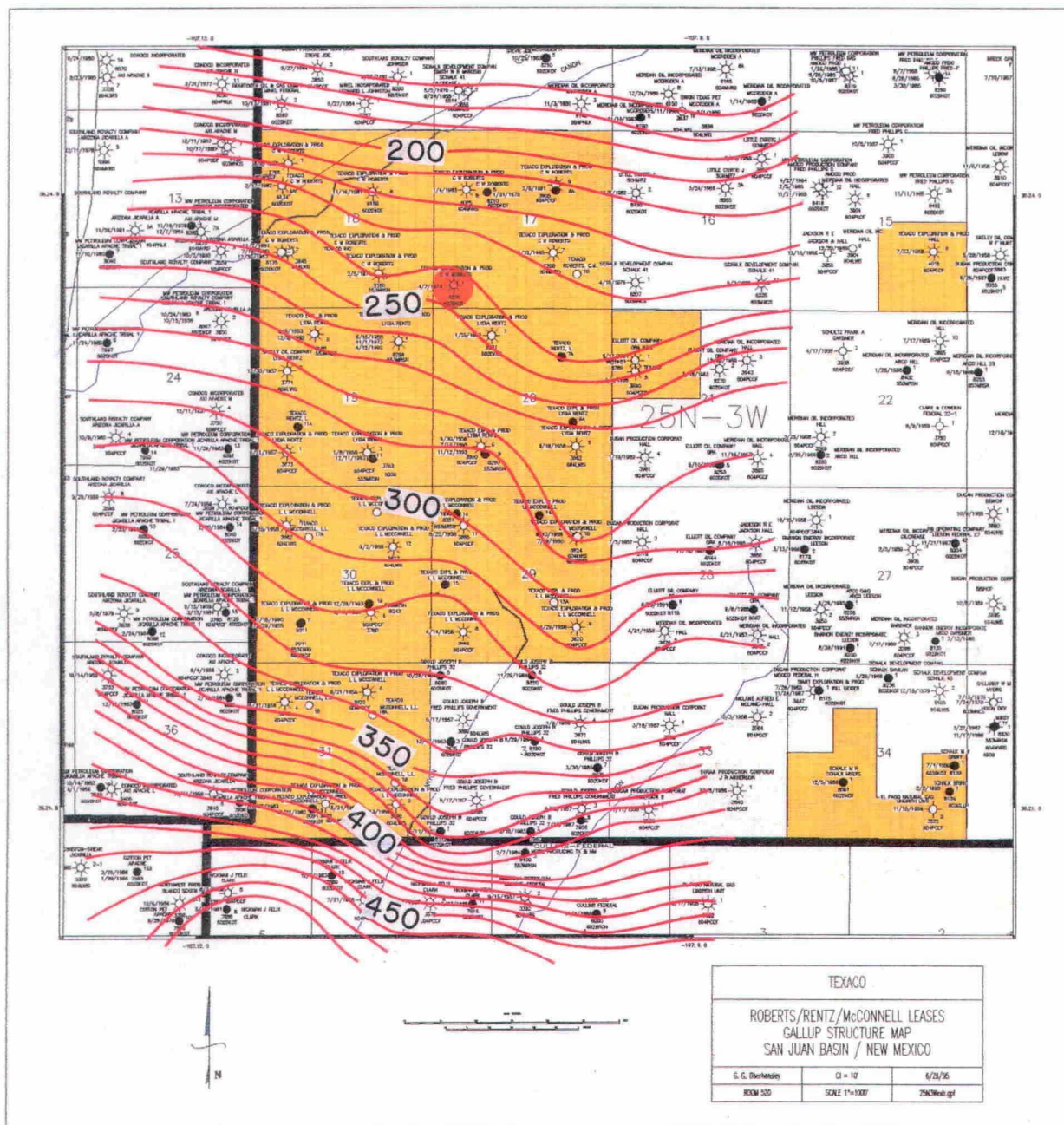
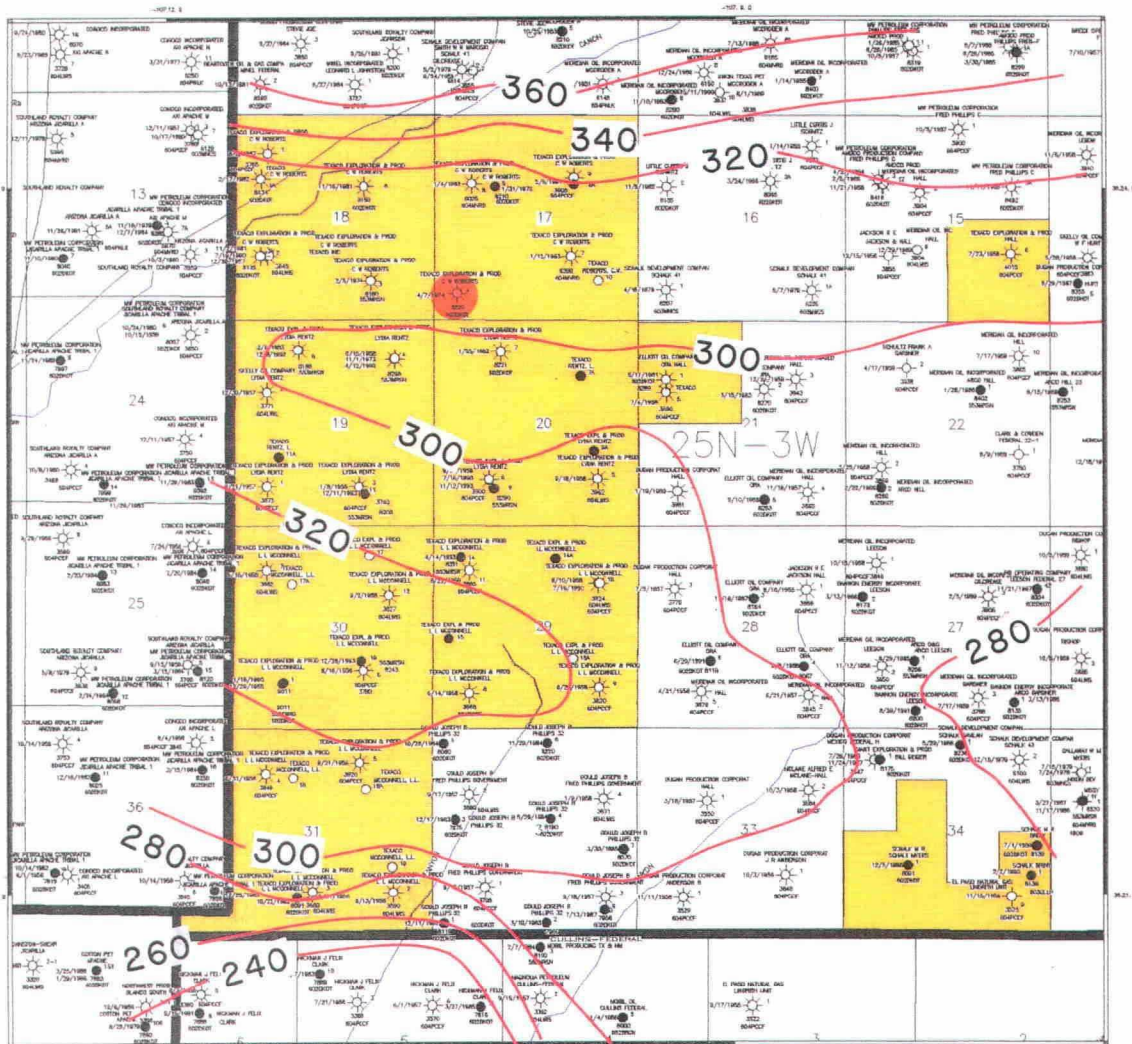


EXHIBIT "G"



TEXACO		
ROBERTS/RENTZ/McCONNELL LEASES UPPER & LOWER PERM ZONE GALLUP ISOPACH SAN JUAN BASIN / NEW MEXICO		
G. G. Robertson	D - 10'	6/22/95
ROOM 520	SCALE 1"=1000'	2500000 gpi

C.I.:20'

EXHIBIT "H"

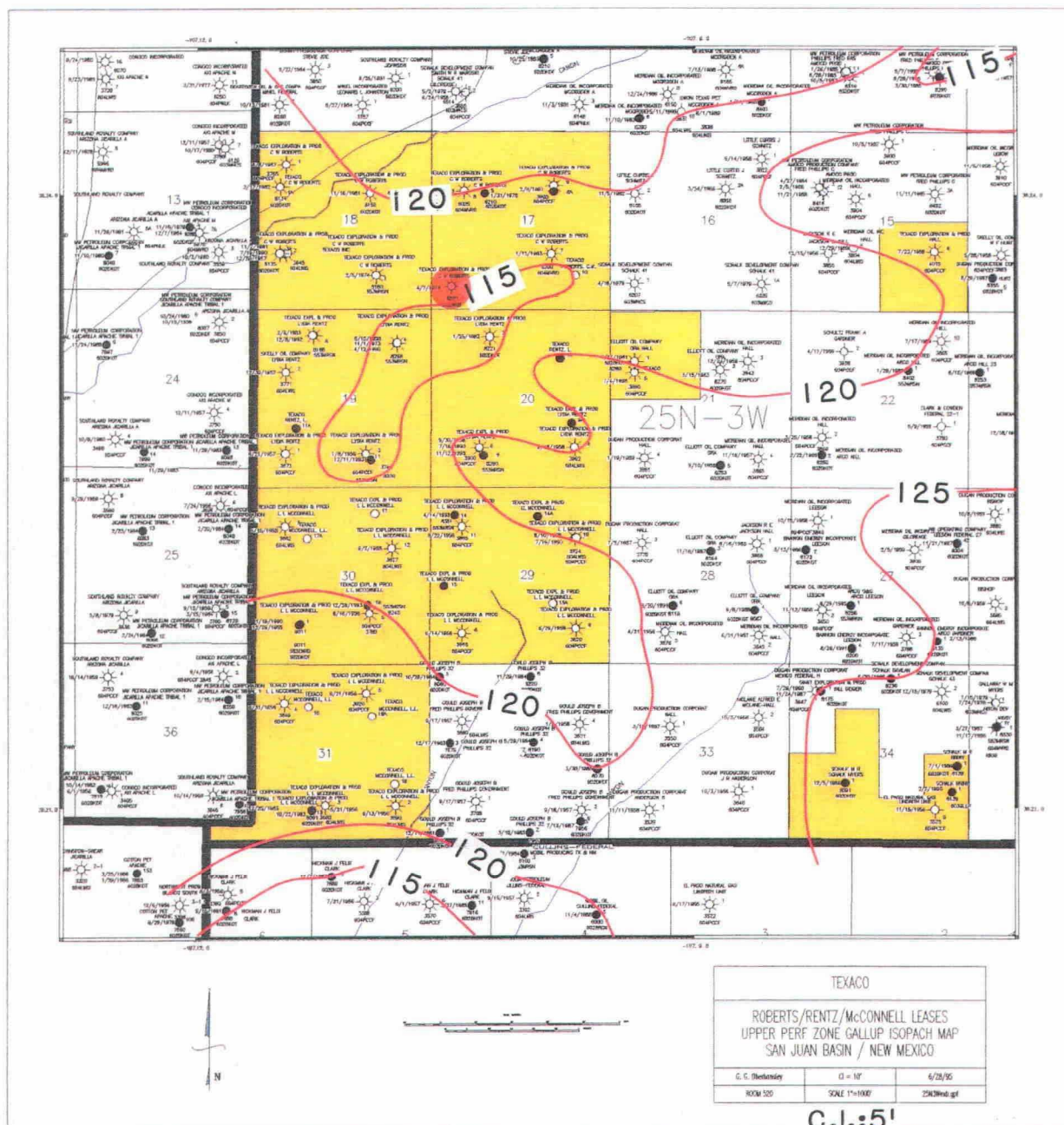
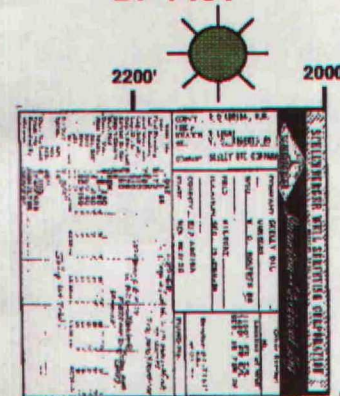


EXHIBIT "I"

N 76 DEG W
(TRUE NORTH)

TEXACO E&P INC.
C. W. ROBERTS #3
SE 18-25N-3W
DF 7151'



DST #6
6970'-7080' open 2 hrs SI
30min fair blow of air through
out rec 1620' GCM
IHP 3485 FHP 3390
IFP 585 FFP 755
FSI 1725

DST #7
7135'-7285' open 2 hr SI 30 min
rec 2,000' gas in pipe 60' GCM
IHP 3580 FHP 3550
IFP 15 FFP 35
SIP 160

GALLUP

UPPER PERF
ZONE

SHALE
INTERVAL

LOWER PERF
ZONE

SUBSEA
DATUM

6915

(-230)

7038

(-113)

7085

(-00)

7151

(0)

7222

(-71)

Core #1, 6980'-7030' rec 50' blk sh
w/ intrbd vl gr ss, tile, vert fract.

Core #2, 7030'-7080' rec 50' blk sh
w/ few intrbd vl gr ss.

Core #3, 7150'-7200' rec 50' blk sh, sdy
all odor w/ bldg oil.

7150'-7170' blk carb sh, 7170'-7180' blk
carb sh, sdy, all odor w/ bldg oil, 7180'-
7200' sdy blk carb sh.

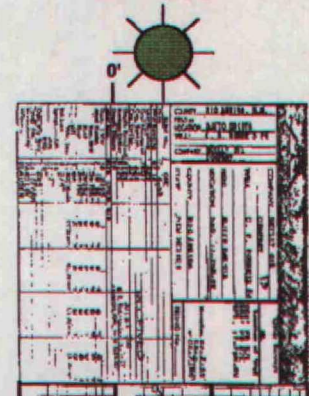
Core #4, 7200'-7230' rec 30' blk carb sh,
all silty, vert frac (7213'-7222').

Core #5, 7230'-7280' rec 50' blk carb sh,
silty in prt.

1/20/58
IPF 171 BOPD
es: 150 MCFPD
16 BWPD
7936'-8020'
8070'-8078' kd
Kg Not Tested

CUM 3/74
187592 MCFPD
64023 BOPD KD
CURRENTLY PRODUCING
FROM MESA VERDE & PICTURED CLIFFS

TEXACO E&P INC.
C. W. ROBERTS #4
SW 17-25N-3W
DF 7195'



6950

(-245)

7070

(-125)

7110

(-85)

7195

(0)

7250

(-35)

PERF 6900'-7250'

FRAC W/ 60,500 gals unkn fluid;
120,000 # sd

7/13/58
IPF 104 BOPD
8024'-8067' Kd

4/7/74
IPF 110 MCFPD
9 BOPD
6960'-7250' Kg

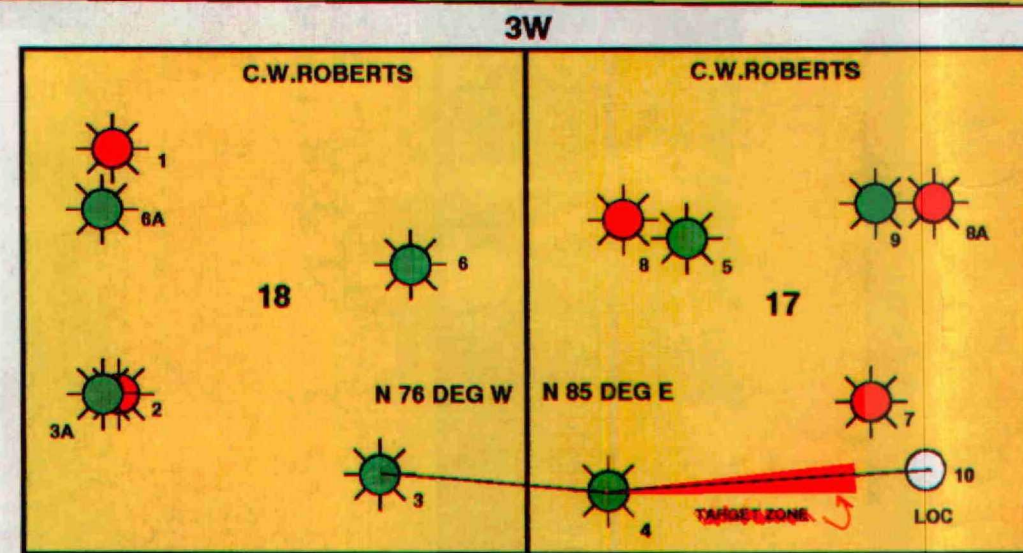
10/16/89
IPF 1148 MCFPD
3680'-3700' Kpc

CUM 7/58-6/74 Kd
74386 MCF
52260 BO
0 BW

CUM 7/74-9/89 Kg
202844 MCF
26180 BO
404 BW

CUM 4/90-12/94
80814 MCFPD

N 85 DEG E
(TRUE NORTH)



TEXACO EXPLORATION & PRODUCTION INC.
DENVER, COLORADO

PROPOSED HORIZONTAL GALLUP TEST
C. W. ROBERTS #4 RE-ENTRY
SECTION 17-T25N-R3W
SAN JUAN BASIN
RIO ARRIBA COUNTY, NEW MEXICO

GEOLOGIST: Gary Oberhansley
DATE: 4/28/95

SCALE:
1"=100' Vert & Horz

Attachment IV-A

6/17/96



C.W. ROBERTS No. 4 Current Completion

LOCATION:

660' FSL & 660' FWL
SW/SW, Sec. 17, T25N, R3W
Rio Arriba County

SPUD DATE: 6-15-58

COMPL DATE: 7-23-58

ELEVATION: 7152' KB
7142' GR

PICTURED CLIFF PERFS (10/89):

3680'-3700'
20', 4 JSP

Acid w/ 500 Gal. 15% HCl
Frac w/ 40,000# 20/40 Sand & 43,000 Gal. KCl Water
BDP 1330#, AVG IR 6 BPM @ 600#

2-3/8" TBG @ 3696'

TOC @ 4970' (Temp. Survey)

MESAVERDE PERFS (10/89):

5352'-73', 5555'-65'
1 SPF, Total 29 shots

Frac w/ 75,000# 20/40 Sand & 77,000 Gal. KCl Water
BDP 3400#, AVG IR 40 BPM @ 3500#

GALLUP PERFS:

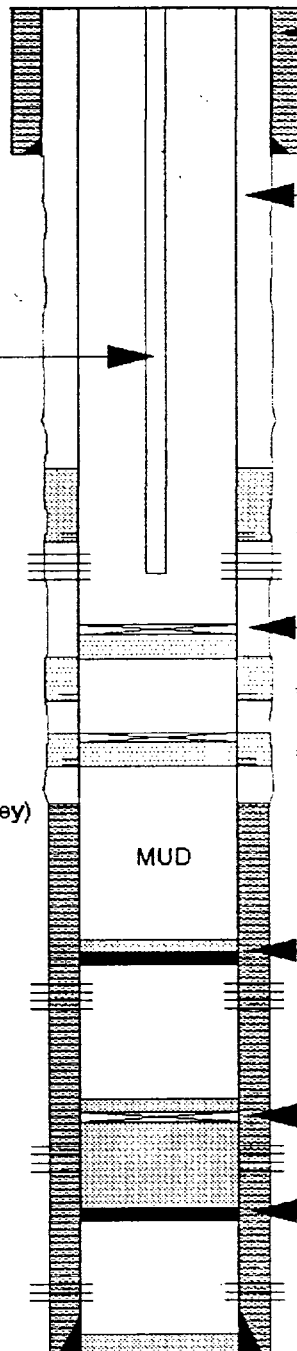
6960'-7250'
100', 1 SPF, Total 200 shots

Frac w/ 120,000# 40-60 Sand & 63,000 Gal. Lse Oil
3500 Gal. Acid, MAX TP 4500# AVG IR 20 BPM

DAKOTA PERFS:

8024'-8057'
33', 4 SPF, Total 132 shots

Frac w/ 20,000# 40-60 Sand & 25,000 Gal. Lse Oil
BDP 2700#, MAX TP 3500# SD 2200#, IR 23.3 BPM



13-3/8", 48#, H40 CSG
Set @ 323'
w/ 350 SXS CMT.
Circ. CMT

5-1/2", 17# CSG.*
Set @ 8201' In 8-3/4" Hole
w/ 375 SXS CMT &
375 CU.FT. Strata Crete

*5-1/2" CSG SET @:
N-80 @ 156'(156') - Top
J-55 @ 7792'(7636') - Mid.
N-80 @ 8188'(396') - Bottom

Pumped 275 SXS CMT into
SQZ Holes @ 3595'-3600'

Pumped 75 SXS CMT into
Retainer @ 3879'

Pumped 250 SXS CMT into
SQZ Hole @ 4000'

Pumped 75 SXS CMT into
(100' plug inside & out-100% excess)
SQZ Hole @ 4580' to Retainer @ 4480'

10 SXS CMT on top of
CIBP @ 5325' (10/89)

5 SXS on top of
CMT RETAINER @ 6875'
pumped 50 SXS CMT

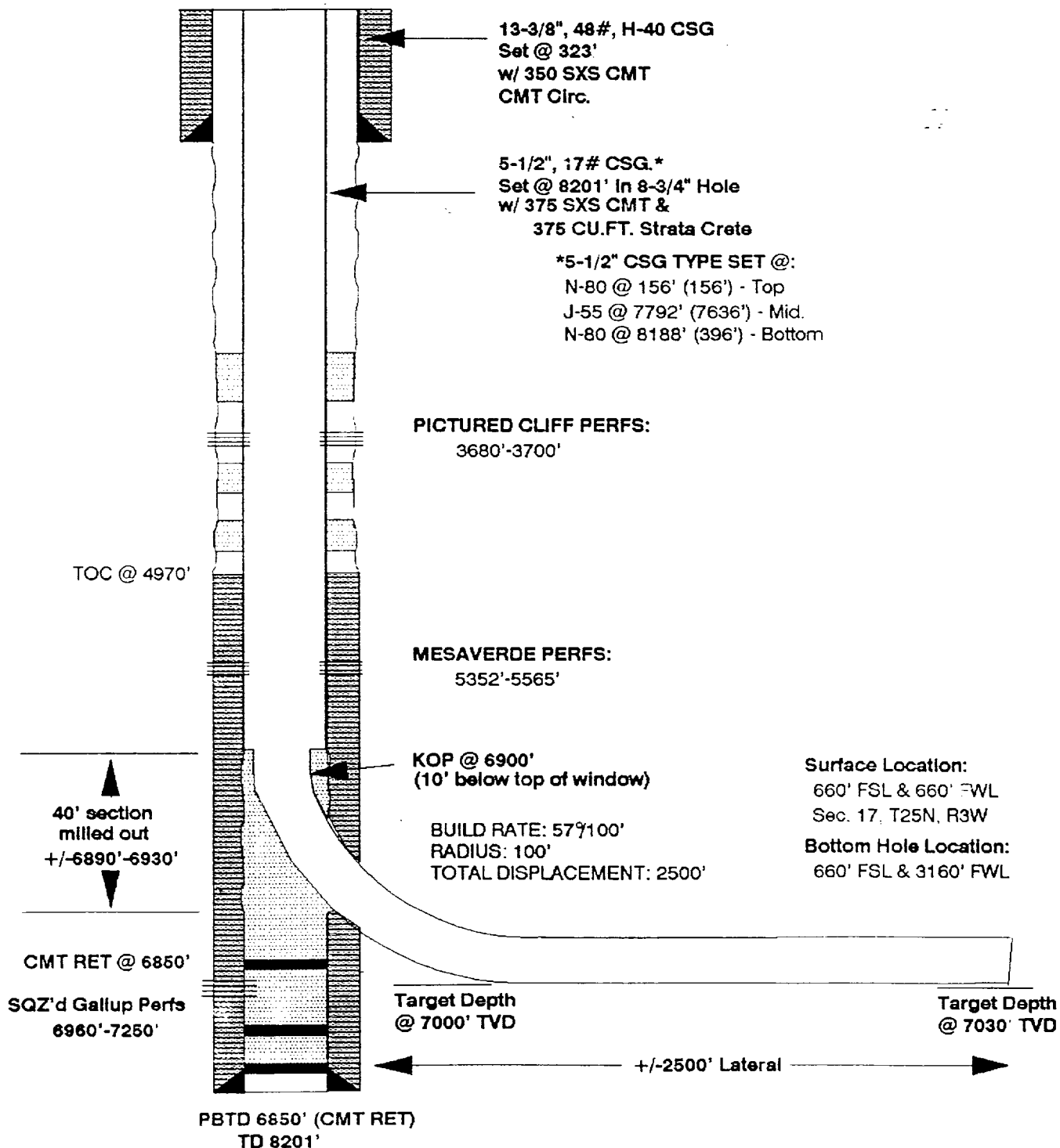
Model "K" Retainer @ 7400'

PBTD - 3879'
TD - 8220'



C.W. ROBERTS No. 4

PROPOSED SIDETRACK COMPLETION



Attachment I

C. W. ROBERTS #4 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 in the Pictured Cliff and Mesa Verde formations 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 production tubing.
- 4) TIH with 4-3/4" bit on 2-7/8" work string and clean out to PBTD. TOH.

SQUEEZE EXISTING PERFORATIONS:

- 5) TIH with cement retainer on tubing and set above Pictured Cliff perms (3680'-3700') at 3650'.
- 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.
 - 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.
- 8) Pull out of retainer, reverse out cement and check for flow. Pull tubing to 2000' and shut-in for 24 hours. TOH with tubing.

C. W. Roberts No. 4
Horizontal Reentry
Rio Arriba County, New Mexico
Drilling & Completion Procedure

- 9) Trip in hole with 4-3/4" bit, drill collars and tubing and drill out retainer and cement to 3700'. Circulate hole clean. Shut in backside and test casing to 500 psi.
- 10) Drill out cement retainers (3879' & 4480') and cement plugs (4000' & 4580') and test to 500 psi. Drill out CIBP at 5325'. Repeat steps 5 - 9 for squeezing Mesa Verde perms at 5352'-73 and 5555'-65'. Drill out cement retainer at 6875' and cement to 6940'

MILL 5 1/2" CASING:

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

MUD: Starch
Volume: $(6800' * .0238 \text{ bbl/ft} = 162 \text{ bbls} + 200 \text{ bbls for pit} = 362 \text{ bbls})$
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 +/- 6890' - 6930'. 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 PBTD 6940' 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 6700' to +/- 6940' (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.

C. W. Roberts No. 4
Horizontal Reentry
Rio Arriba County, New Mexico
Drilling & Completion Procedure

- 17) TIH with 4 3/4" bit and dress off cement to the KOP at 6900'. 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.

DRILL CURVE SECTION (WEST DIRECTION):

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

MUD: Starch

Volume: (6800' * .0238 bbl/ft + 200 bbls for pit + 2500' * .0219 bbl/ft)
(162 bbls + 200 bbls + 55 bbls = 417 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 (6900')**. 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 7000' TVD** for start of horizontal.

C. W. Roberts No. 4
Horizontal Reentry
Rio Arriba County, New Mexico
Drilling & Completion Procedure

- 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.)
- 25) Drill the **horizontal lateral (2500')** adjusting tool face as needed to the target. **The end of the horizontal target depth is 7030' 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.