

HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

218 MONTEZUMA

POST OFFICE BOX 2068

SANTA FE, NEW MEXICO 87504-2068

(505) 982-4554

FAX (505) 982-8623

CLARENCE E. HINKLE 1904-1985
W. E. BONDURANT, JR. 1913-1973
ROY C. SNODGRASS JR. 1914-1937

OF COUNSEL
O. M. CALHOUN
MACK EASLEY
JOE W. WOOD
RICHARD S. MORRIS

WASHINGTON, D.C.
SPECIAL COUNSEL
ALAN J. STAMMAN

700 UNITED BANK PLAZA
POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88202
(505) 622-6510
FAX (505) 623-9332

2800 CLAYDESTA CENTER
6 DESTA DRIVE
POST OFFICE BOX 3580
MIDLAND, TEXAS 79702
(915) 683-4691
FAX (915) 683-6518

1700 TEAM BANK BUILDING
POST OFFICE BOX 9238
AMARILLO, TEXAS 79105
(806) 372-5569
FAX (806) 372-9761

500 MARQUETTE N.W., SUITE 800
POST OFFICE BOX 2043
ALBUQUERQUE, NEW MEXICO 87103
(505) 768-1500
FAX (505) 768-1529

LEWIS C. COX
PAUL W. EATON
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANDR
ERIC D. LANPHERE
C. D. MARTIN
ROBERT P. TINKIN, JR.
MARSHALL G. MARTIN
OWEN M. LOPEZ
DOUGLAS L. LUNSFORD
JOHN J. KELLY
NICHOLAS J. NOEDING
T. CALDER EZZELL, JR.
WILLIAM B. BURFORD
RICHARD E. OLSON
RICHARD R. W. FONG
THOMAS J. MCBRIDE
JAMES J. WECHSLER
NANCY S. CUSACK
JEFFREY L. FORNACIARI
JEFFREY D. HEWITT
JAMES BRUCE
JERRY F. SHACKELFORD
JEFFREY W. HELLBERG
ALBERT L. PITTS
THOMAS M. HNASKO
JOHN C. CHAMBERS
GARY D. COMPTON
MICHAEL A. GROSS
THOMAS D. HANES, JR.
GREGORY J. NIBERT
DAVID T. MARKETTE
MARK C. DOW
FRED W. SCHWENDIMANN
JAMES M. HUDSON
JEFFREY S. BAIRD
REBECCA N. CHOLIS JOHNSON
WILLIAM P. JOHNSON
STANLEY K. KOTOVSKY, JR.
H. R. THOMAS
EILEEN S. CASEY
MARGARET CARTER LUDEWIG
S. BARRY PAISNER
STEPHEN M. CRAMPTON
MARTIN MEYERS
GREGORY S. WHEELER
ANDREW J. CLOUTIER
JAMES A. G. LLESPIE
GARY W. LARSON
STEPHANIE LANDRY
JOHN R. KULSETH, JR.
MARGARET R. MCNETT
BRIAN T. CARTWRIGHT
JISA K. SMITH
ROBERT H. BETHEA
BRADLEY W. HOWARD
CHARLES A. SUTTON
NORMAN D. EWART
DARREN T. GROCE
MOLLY MCINTOSH
MARGA B. LINCOLN
SCOTT A. SHUART
DARREN L. BROOKS
CHRISTINE E. LALE
PAUL G. NASON
DARLA M. SILVA

*NOT LICENSED IN NEW MEXICO

Florene Davidson
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87503

Dear Florene:

Please find enclosed for filing the original and two copies of the Application of Cross Timbers Operating Company for Institution of a Waterflood Project, Lea County, New Mexico.

Very truly yours,

HINKLE, COX, EATON, COFFIELD
& HENSLEY

Fran Sowers
Fran Sowers, Secretary
to James Bruce

Enclosures

VIA HAND DELIVERY

FRS5\93E52.c

Proposed Advertisement

10822

Application of Cross Timbers Operating Company for a waterflood project, Lea County, New Mexico. Applicant seeks authority to convert its State "BY" Well No. 6, located 2,130 feet from the South line and 430 feet from the East line (Unit I) of Section 32, Township 17 South, Range 33 East, and utilize said well for secondary recovery purposes for the applicant's State "BY" Lease by injecting produced and fresh water through the perforated interval from approximately 4,602 to 4,708 feet. The applicant requests that the Division establish procedures for the administrative approval of additional injection wells on said lease without the necessity of further hearings, and the adoption of any other provisions necessary for such other matters as may be appropriate for said waterflood operations. Said well is located approximately _____

RECEIVED
OCT 1 1993

11 1993

DIVISION

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF CROSS TIMBERS
OPERATING COMPANY FOR INSTITUTION
OF A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO.

No. 10822

APPLICATION

Cross Timbers Operating Company hereby applies for an order approving the institution of a waterflood project for secondary recovery of hydrocarbons from its State "BY" Lease, Lea County, New Mexico, and in support thereof, states:

1. Applicant is the operator of the State "BY" Well No. 6, located 2,310 feet from the South line and 430 feet from the East line (Unit I) of Section 32, Township 17 South, Range 33 East, N.M.P.M.

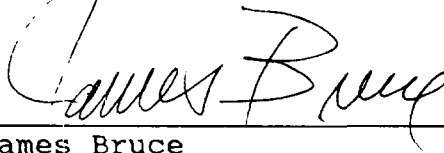
2. Applicant proposes to convert said well and inject produced and fresh water into the Grayburg formation at depths of 4,602-4,708 feet subsurface, as set forth in the Form C-108 attached hereto.

3. The injection well will be used for secondary recovery of hydrocarbons from the Grayburg formation underlying Applicant's State "BY" Lease (State of New Mexico Lease E-398-8), which covers the NW $\frac{1}{4}$ and SE $\frac{1}{4}$ of said Section 32.

4. Applicant requests that the Order entered in this case contain an administrative procedure for approval of additional injection wells and expansion of the waterflood project, and such other matters as may be appropriate for waterflood operations.

WHEREFORE, Applicant requests that, after due notice and hearing, the relief requested above be granted.

HINKLE, COX, EATON, COFFIELD
& HENSLEY

A handwritten signature in cursive script, appearing to read "James Bruce", is written over a horizontal line.

James Bruce
Post Office Box 2068
Santa Fe, New Mexico 87504-2068
(505) 982-4554

Attorneys for Applicant

Case 10822

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: Cross Timbers Operating Company
Address: P. O. Box 50847, Midland, Texas 79710
Contact party: Gary L. Markestad Phone: (915)682-8873
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- * VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Gary L. Markestad Title: Operations Engineer
Signature: *Gary L. Markestad* Date: 11/25/92
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a
daily newspaper published at
Hobbs, New Mexico, do solemnly
swear that the clipping attached
hereto was published once a week
in the regular and entire issue of
said paper, and not a supplement
thereof for a period

of _____

one _____ weeks.

Beginning with the issue dated

Nov. 17 _____, 19 92

and ending with the issue dated

Nov. 17 _____, 19 92

Kathi Bearden
General Manager

Sworn and subscribed to before

me this 20th day of

November, 19 92

Peggy J. Lantz
Notary Public.

My Commission expires _____

July 6, 19 94

(Seal)

This newspaper is duly qualified to
publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for said
publication has been made.

REC'D. / MIDLAND

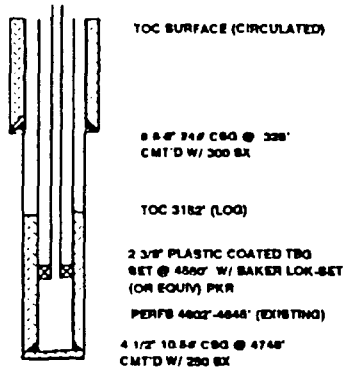
NOV 24 1992

LEGAL NOTICE
November 17, 1992
Cross Timbers Operating
Company, P.O. Box 60847
Midland, Texas 79710 (915)
662-8873 is hereby giving
notice of our intent to inject
produced water and/or fresh
water into the State by
Well No. 6 located 2310
FSL & 430' FEL of Section
32, T.17-S, R.33-E for sec-
ondary recovery purposes.
Water is to be injected into
the Grayburg formation from
4,802' to 4,708' at an ex-
pected rate of 200 BWPD
and 1400 psig pressure. In-
terested persons objecting
to this application must file
a request for hearing with
the Oil Conservation Divi-
sion, P.O. Box 2088, Santa
Fe, New Mexico 87501 with-
in 15 days of this notice.

INJECTION WELL DATA SHEET

CROSS TIMBERS OPERATING COMPANY STATE BY
 OPERATOR LEASE
 6 2310' FSL, 430' FEL. SEC 32, T17S, R33E
 WELL NO. FOOTAGE LOCATION SEC/TWP/RGE

SCHEMATIC



TABULAR DATA

SURFACE CASING
 SIZE 8 5/8"
 TOC SURFACE CEMENTED WITH 300 SX
 HOLE SIZE 11" DETERMINED BY CIRCULATION

INTERMEDIATE CASING CEMENTED WITH
 SIZE DETERMINED BY
 TOC
 HOLE SIZE

LONG STRING 4 1/2" CEMENTED WITH 250 SX
 TOC 3152' DETERMINED BY LOG
 HOLE SIZE 7 7/8"
 TOTAL DEPTH 4748'

INJECTION INTERVAL
 4602 FEET TO 4708 FEET

TUBING SIZE 2 3/8" LINED WITH PLASTIC SET IN A
 BAKER LOK-SET (OR EQUIV.) PACKER AT 4550'.

OTHER DATA

1. NAME OF INJECTION FORMATION GRAYBURG
2. NAME OF FIELD OR POOL MALJAMAR (G-SA)
3. IS THIS A NEW WELL DRILLED FOR INJECTION ? NO
 IF NO, FOR WHAT PURPOSE WAS THIS WELL ORIGINALLY DRILLED ?
 PRODUCTION
4. HAS THE WELL EVER BEEN PERFORATED IN ANY OTHER ZONE(S) ? LIST ALL SUCH
 PERFORATED INTERVALS AND GIVE PLUGGING DETAIL (SACKS OF CEMENT OR BRIDGE PLUG(S) USED
 NO.
5. GIVE THE DEPTH TO AND NAME OF ANY OVERLYING AND/OR UNDERLYING OIL OR GAS
 ZONES (POOLS) IN THIS AREA.
 CORBIN (ABO) 8650', CORBIN (QUEEN) 3700'.

ATTACHMENT

ITEM VII OPERATION DATA

- 1) Proposed average daily rate - 200 BWPB.
Proposed maximum daily rate - 400 BWPB @ 1400 psig.
- 2) Closed system.
- 3) Expected average injection pressure - 1000 psig.
Maximum injection pressure - 1500 psig.
- 4) Injection water is primarily produced water from the Cross Timbers State "BY" Lease and the Cross Timbers SMGSAU with some fresh water to augment the injection volume. The fresh water is being supplied to the SMGSAU by Conoco, Inc. and is used extensively in this area for secondary recovery purposes.
- 5) Injection is not for disposal purposes.

ITEM VIII GEOLOGICAL DATA

Formation Name: Grayburg
Lithology: Sandstone
Thickness: 508' gross, 50' net
Depth: 4,205'

Sources of Drinking Water: None
Listed in State Engineer's Report

ITEM IX

- 1) Additional stimulation is not planned at this time.

ITEM X

Open hole logs not available.

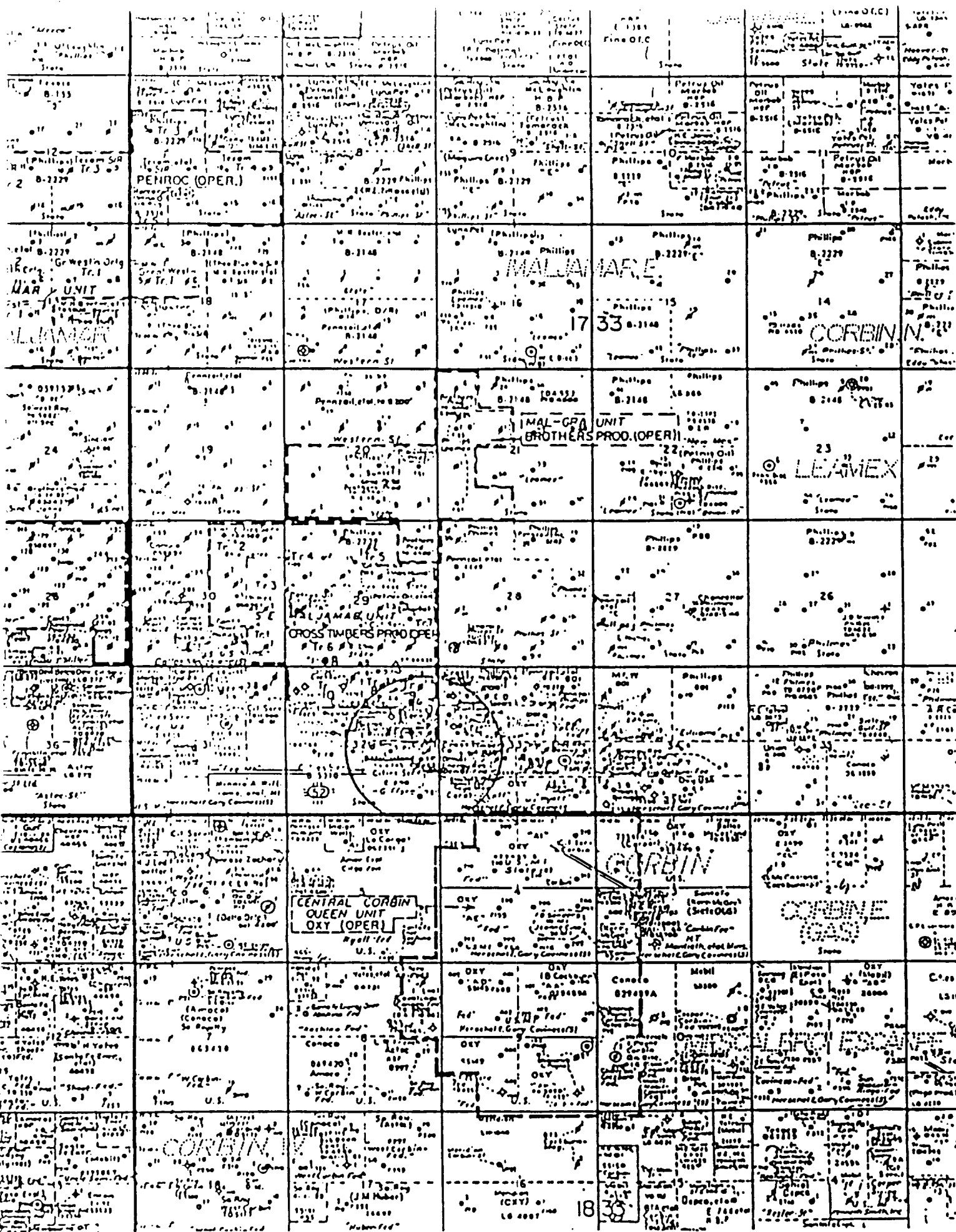
ATTACHMENT
(cont'd)

ITEM XI
CHEMICAL ANALYSIS OF FRESH WATER

No fresh water wells within 1 mile of proposed injection well.

ITEM XII

All available data indicates that the injection interval is not in hydraulic communication with any sources of fresh water in this area.



OPERATOR	:CITIES SERVICE(ORIG CARPER DRLG CO)	CITIES SERVICE	BARNEY COCKBURN
WELL NAME	:OHIO STATE "A" #6(OHIO-STATE #6)	STATE "CB" #5	WYATT-PHILLIPS #2
LOCATION	:2310 PNL & 330' PEL	1650' PNL & 1650' PEL	1980' PNL & 460' PNL
WELL TYPE	SEC 32, T17S, R33E	SEC 32, T17S, R33E	SEC 33, T17S, R33E
STATUS	:OIL	DRY HOLE	DRY HOLE
SURFACE CASING	:PLUGGED	PLUGGED	PLUGGED
TCP OF CEMENT	:8-5/8" @ 1,368' W/50 SX.	13" 42# @ 205'.	8-5/9" @ 1,430' W/50 SX.
INTERMEDIATE CASING	:1240'	10-3/4" 34# @ 856'.	
TCP OF CEMENT	:	7" 20# @ 3,912'W/ 100 SX.	7" @ 3,649' W/310 SX.
PRODUCTION CASING	:7" @ 3,735' W/100 SX.	2916'	
TCP OF CEMENT	:2660'		
LINER	:		
DATE DRILLED	:11/53	7/49	11/51
TOTAL DEPTH	:3,769'	4500'	3,765'
COMPLETION INTERVAL	:3,735'-3,769' (OH)		3,649'-3,765'
			NO RECORD OF WELL @ NMOCD DIST OFC.
PLUGGING PROCEDURE	CIBP @ 3700'	CIBP @ 3475'.	
	5 SX. @ 3700'-3660'	PERP @ 1340'.	
	CUT OFF 7" @ 1750'	RETAINER @ 1305'.	
	50 SX 1800'-1650'	SQZ W/ 500 SX.	
	50 SX 1425'-1300'	PERP @ 1150'.	
	10 SX 30'-0'	PHP 500 SX DWN CSG & DISPL TO 1050'	
		PERP @ 250'.	
		PHP 375 SX DWN CSG.	
		CIRC 5 SX TO SURF.	

WELLS WITHIN STATE BY WELL NO. 6 AREA OF REVIEW

OPERATOR	:CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING CO.
WELL NAME	:DENIUS FEDERAL #9	DENIUS FEDERAL #10	STATE "BY" #5
LOCATION	:2310' FSL & 940' FWL	2310' FSL & 2117' FWL	2310' FSL, 1650' FEL
	SEC 33, T-17-S, R-33-E	SEC 33, T-17-S, R-33-E	SEC 32, T17S, R33E
WELL TYPE	:OIL	OIL	OIL
STATUS	:ACTIVE	PLUGGED	SI
SURFACE CASING	:8 5/8" 24# @ 326' W/ 200 SX.	11 3/4" @ 314' W/ 275 SX.	8 5/8" 24# @ 1334' W/ 50 SX
TOP OF CEMENT	:SURFACE (CIRC.)	SURFACE (CIRC.)	1254' (CALC)
INTERMEDIATE CASING :			
TOP OF CEMENT :			
PRODUCTION CASING	:4 1/2" 10.5# @ 4750' W/ 850 SX.	4 1/2" 10.5# @ 4710' W/ 1200 SX.	7" 20# @ 3797' W/ 100 SX.
TOP OF CEMENT	:1286' (CALC)	74' (CALC)	3364' (CALC)
LINER :			5 1/2" 14# 3700'-4701' W/ 100 SX
DATE DRILLED	:8/61	2/62	11/53 (DEEPEMED 11/51)
TOTAL DEPTH	:4750'	4750'	4701'
COMPLETION INTERVAL	:4612'-4630'	4659'-4667'	4568'-4680'

PLUGGING PROCEDURE

CIBP @ 4575' W/ 14SX.
PERP @ 1400'. SQZ W/ 50 SX.
PERP @ 350'. SQZ W/ 50 SX.
50' - SURF. PLUG
DRY HOLE MARKER
P&A'D 5/12/90

OPERATOR	:CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING COMPANY
WELL NAME	:STATE "BY" #7	SMGSAU #707	SMGSAU #904
LOCATION	:660' FSL, 660' FEL SEC 32, T-17-S, R-33-E	100' FSL & 1430' FEL SEC 29, T17S, R33E	660' FNL & 660' FEL SEC 32, T17S, R33E
WELL TYPE	:OIL	DRY HOLE	OIL
STATUS	:ACTIVE	PLUGGED	PLUGGED
SURFACE CASING	:8 5/8" @ 1383' W/ 700 SX.	8-5/8" 24# @ 810' W/350 SX.	9-5/8" @ 1,300'.
TOP OF CEMENT	:SURFACE	SURFACE	
INTERMEDIATE CASING :			
TCP OF CEMENT :			
PRODUCTION CASING	:5 1/2" @ 4767' W/ 800 SX.	5-1/2" 14# @ 4,429' W/435 SX.	7" @ 3,943'.
TCP OF CEMENT	:SURFACE (CIRC. 50 SX)	1740'	
LINER :			
DATE DRILLED	:12/79	11/72	7/46
TOTAL DEPTH	:4775'	4,430'	4,306' (PBTD 4,266')
COMPLETION INTERVAL	:2702'-4150'	4,272'-4,284' (PERP)	3,943'-4,266' (OH)

FLICGGING PROCEDURE

CIBP @ 4207' W/ 5 SX
CUT OFF 5 1/2" CSG @ 1738'
25 SX @ 1788'-1688'
40 SX @ 1380'-1280'
30 SX 840'-740'
10 SX @ 30'-SURF
DRY HOLE MARKER
P&A'D 7/73

CIBP @ 3,891' W/9 SX CMT (3,846'-3,891').
PULLED 2,215' 7" CSG.
45 SX 2,265'-2,165'.
45 SX 1,350'-1,250'.
15 SX 30' SURF.

WELLS WITHIN STATE BY WELL NO. 6 AREA OF REVIEW

OPERATOR	:CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING COMPANY	CROSS TIMBERS OPERATING COMPANY
WELL NAME	:SHGSAU #906	SHGSAU #907	U.S. MINERALS #2
LOCATION	:1200' PNL & 950' FEL SEC 32, T17S, R33E	2310' PNL & 990' FEL SEC 32, T17S, R33E	990' PNL, 990'FWL SEC 33, T-17-S, R-33-E
WELL TYPE	:OIL	INJECTION	OIL
STATUS	:ACTIVE	ACTIVE	ACTIVE
SURFACE CASING	:8-5/8" 24# @ 306' W/250 SX.	8-5/8" 24# @ 338' W/200 SX.	8 5/8" 28# @ 1305' W/ 50 SX.
TOP OF CEMENT	:SURFACE (CIRC.)	SURFACE (CIRC.)	1225'
INTERMEDIATE CASING :			
TCP OF CEMENT :			
PRODUCTION CASING	:5 1/2" 17# @ 4545' W/ 1300 SX.	5 1/2" 15.5# & 17# @ 4600' W/ 1450 SX.	7" 20# @ 4104' W/ 100 SX.
TCP OF CEMENT	:SURFACE (CIRC.)	SURFACE (CIRC.)	2860'
LINER :			
DATE DRILLED	:12/91	12/91	7/53
TOTAL DEPTH	:4545'	4600'	4302'
COMPLETION INTERVAL	:4270'-4460'	4316'-4457'	4104'-4302' (OPEN HOLE)

PLUGGING PROCEDURE

OPERATOR	:H. R. DENIUS	H. R. DENIUS	JAMES P. DUNIGAN	OXY USA, INC.
WELL NAME	:COCKBURN-FEDERAL #5	COCKBURN-FEDERAL #9	COCKBURN #1	COCKBURN STATE "A" #4
LOCATION	:2310' FSL, 330' FWL	2264' FSL, 990' FWL	990' FWL & 430' FWL	1980' FEL & 990' FWL
	SEC 33, T17S, R33E	SEC 33, T17S, R33E	SEC 33, T17S, R33E	SEC 32, T-17-S, R-33-E
WELL TYPE	:OIL	OIL	DRY HOLE	OIL
STATUS	:P&A	P&A	PLUGGED	ACTIVE
SURFACE CASING	:8 5/8" 24# @ 1380' W/ 50 SX.	8-5/8" @ 226' W/75SX	13-3/8" @ 308' W/340 SX.	13 3/8" @ 334' W/ 320 SX.
TCP OF CEMENT	:1300' (CALC)	31' (CALC)	SURFACE	SURFACE
INTERMEDIATE CASING :			8-5/3" @ 4,557' W/1950 SX.	8 5/8" @2899' W/ 500 SX.
TCP OF CEMENT :			1400'	2100'
PRODUCTION CASING	:5 1/2" 14# @ 3880' W/ 100 SX.	5-1/2" @ 3845' W/300SX	NONE	4 1/2" @ 9819' W/700 SX.
TOP OF CEMENT	:3372' (CALC)	2321' (CALC)		6085'
LINER :				
DATE DRILLED	:11/53	2/60	4/61	3/66
TOTAL DEPTH	:3890'	3854'	8,940'	8820'
COMPLETION INTERVAL	:3840'-3862'	3806'-28'	NONE	8632'-8695'

PLUGGING PROCEDURE 100' PLUG @ 3865'-3765'
 CUT OFF 5 1/2" @ 2396'
 100' PLUG @ 2400'-2300'
 100' PLUG @ 1430'-1330'
 CUT OFF 8 5/8" @ 454'
 60' PLUG @ 270'-210'
 15' SURF PLUG
 P&A 6/16/61

CUT OFF 8 5/8" @ 1400'
30 SX. @ 1400'
30 SX @ 308'
10 SX. @ SURFACE

100' PLUG 3460'-3360'
CUT OFF 5 1/2" @ 2110'
100' PLUG 2110'-2020'
100' PLUG 1370'-1270'
10' SURFACE PLUG
P&A 6/16/61

OPERATOR	:OXY USA, INC.	OXY USA, INC.	OXY USA, INC.
WELL NAME	:GIPFORD STATE "A" #1	OHIO STATE "C" #1	STATE CD #1
LOCATION	:330' FEL & 2310' PSL	1980' PNL & 330' FEL	2310' PSL, 2310' PNL
	SEC 32, T-17-S, R-33-E	SEC 32, T-17-S, R-33-E	SEC 32, T17S, R33E
WELL TYPE	:OIL	OIL	OIL
STATUS	:ACTIVE	ACTIVE	ACTIVE
SURFACE CASING	:11 3/4" 28# @ 314' W/ 225 SX.	13 3/8" @ 311' W/ 340 SX.	8 5/8" 24# @ 319' W/ 320 SX.
TCP OF CEMENT	:SURFACE	SURFACE	SURP (CIRC)
INTERMEDIATE CASING	:8 5/8" 24# & 32# @ 2915' W/ 250 SX.	8 5/8" @ 3168' W/ 800 SX.	
TCP OF CEMENT	:2180'	820'	
PRODUCTION CASING	:4 1/2" 10.5# & 11.6# @ 8829' W/ 1500 SX.4 1/2" @ 4810' W/ 250 SX.	4 1/2" 11.6# @ 8825' W/ 1600 SX.	4 1/2" 10.5# @ 4954' W/ 250 SX.
TOP OF CEMENT	:3030'	2645	3930' (CALC)
LINER	:		
DATE DRILLED	:9/61	11/60	1/62
TOTAL DEPTH	:8829'	8828'	4955'
COMPLETION INTERVAL	:8561'-8586' & 8594'-8644' (PERP?)	8615'-8650' (PERP)	4512'-4604'

PLUGGING PROCEDURE

OPERATOR	: PHILLIPS PETROLEUM COMPANY	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	L.B. SIMMONS ENERGY
WELL NAME	: EILLIAMS #6	WYATT "A" FEDERAL #3	WYATT "A" FEDERAL #13	DENIUS FEDERAL #6
LOCATION	: 2311' FNL & 659' FWL	1650' FNL & 330' FWL	1980' FNL, 660' FWL	2310' FSL, 990' FWL
	SEC 33, T17S. R33E	SEC 33, T-17-S, R-33-E	SEC 33, T-17-S, R-33-E	SEC 33, T17S, R33E
WELL TYPE	: OIL	OIL	OIL	OIL
STATUS	: ACTIVE ABO	ACTIVE	ACTIVE	ACTIVE
SURFACE CASING	: 13-3/8" @ 320' W/350 SX.	7" @ 1318' W/ 50 SX.	10" 34# @ 20' W/ 5 SX.	13-3/8" @ 315' W/325SX
TOP OF CEMENT	: SURFACE	1260	SURFACE	SURF
INTERMEDIATE CASING	: 8-5/8" @ 4,589' W/700 SX.		7" 20# @ 3995' W/ 100 SX.	8-5/8" @ 2962' W/1050SX
TOP OF CEMENT	: 2530	5 1/2" @ 3718' W/ 50 SX.	3625	1283' (CALC)
PRODUCTION CASING	: 5-1/2" @ 8,788' W/361 SX.	3465		4-1/2" @ 8809' W/1610SX
TOP OF CEMENT	: 6950	4" 11.43# @ 4430' W/ 400 SX.	8/47	3814' (CALC)
LINER	:	6/52		
DATE DRILLED	: 7/61	4432'	4582'	1/61
TOTAL DEPTH	: 8,788'	4378'-4357, 4320'-4323' (PERP)	3995'-4582' (OPEN HOLE, PLUGGED)	8809'
COMPLETION INTERVAL	: 8,562'-8,734' (PERPS)		3695'-3720' (PERPS)	8605'-60'

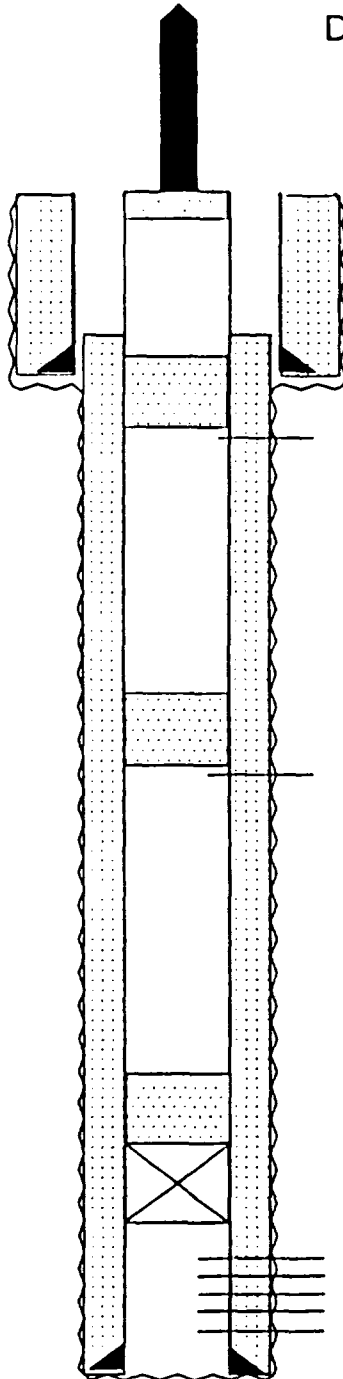
PLUGGING PROCEDURE

OPERATOR :L.B. SIMMONS ENERGY
WELL NAME :DENIUS FEDERAL #3
LOCATION :1980' FSL, 1980' FWL
SEC 33, T17S, R33E
WELL TYPE :OIL
STATUS :SI
SURFACE CASING :13-3/8" @ 309' W/340SX
TOP OF CEMENT :SURP
INTERMEDIATE CASING :9-5/8" @ 2920' W/850SX
TOP OF CEMENT :SURFACE (CALC)
PRODUCTION CASING :4-1/2" @ 9068' W/250SX. SQZ @ 5475' W/35
TOP OF CEMENT :4389' (CALC)
LINER :
DATE DRILLED :8/60
TOTAL DEPTH :9071
COMPLETION INTERVAL :8690'-8740' (CIBP @ 8660' W/ 25 SX)
8576'-8608'

PLUGGING PROCEDURE

CROSS TIMBERS OPERATING CO.
DENIUS FEDERAL NO. 10
(FORMERLY GRAUTEN & PEPPER)
(P&A 5/12/90)

DRY HOLE MARKER



50' SURF. PLUG

11 3/4" @ 314' W/ 275 SX
CIRC CMT TO SURF.

TAGGED TOP OF PLUG @
193'
PERF @ 350' & SQZ W/ 50
SX.

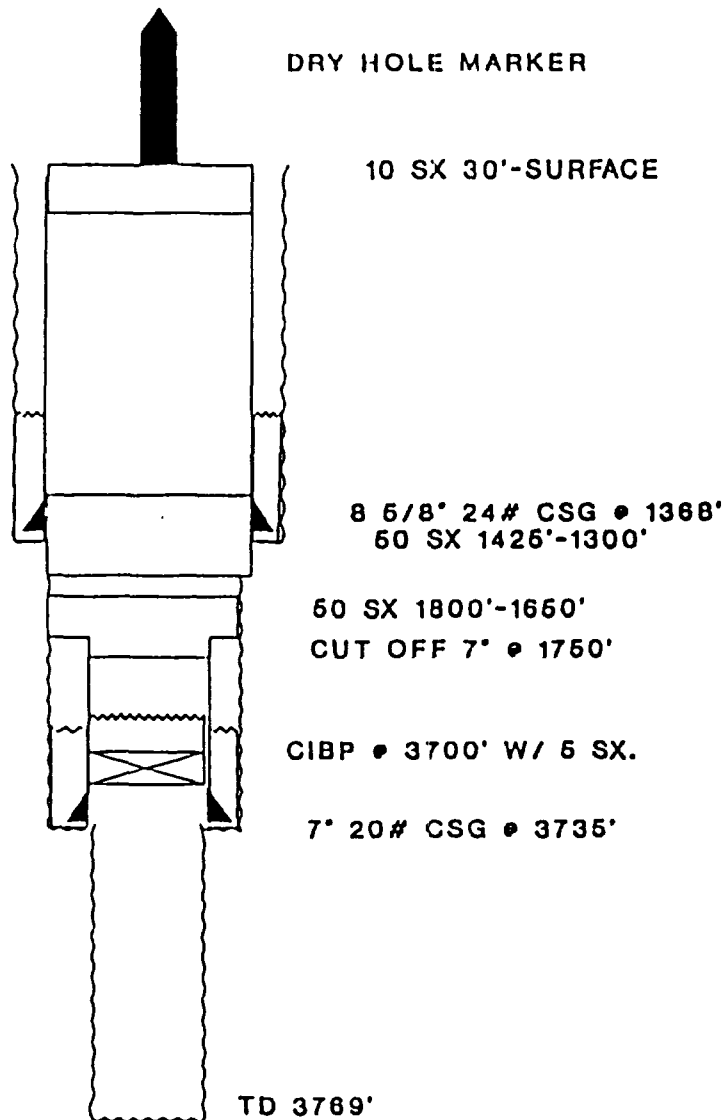
TAGGED TOP OF PLUG @
1325'
PERF @ 1400' & SQZ W/ 50
SX.

CIBP @ 4575' W/ 14 SX CMT
ON TOP.

PERFS: 4659'-4667'

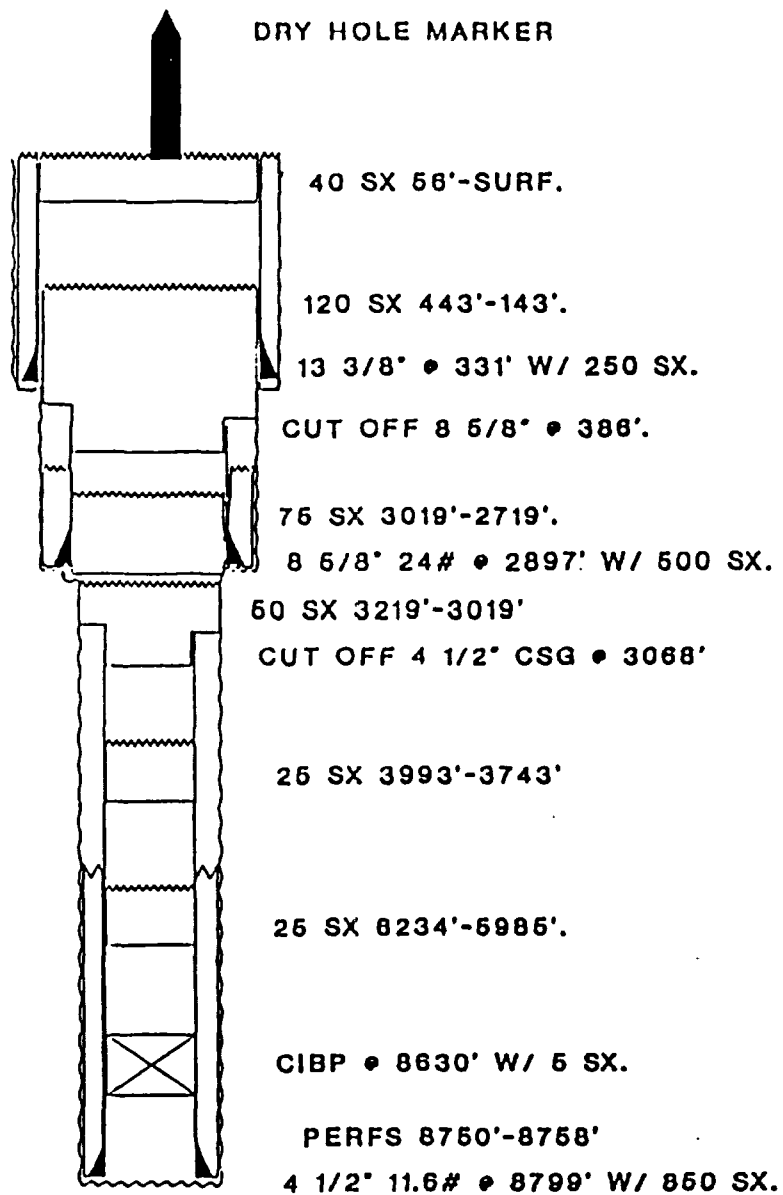
4 1/2" CSG @ 4710' CMT'D W/
1200 SX.

CITIES SERVICE
OHIO STATE "A" #6
(P&A 8/70)



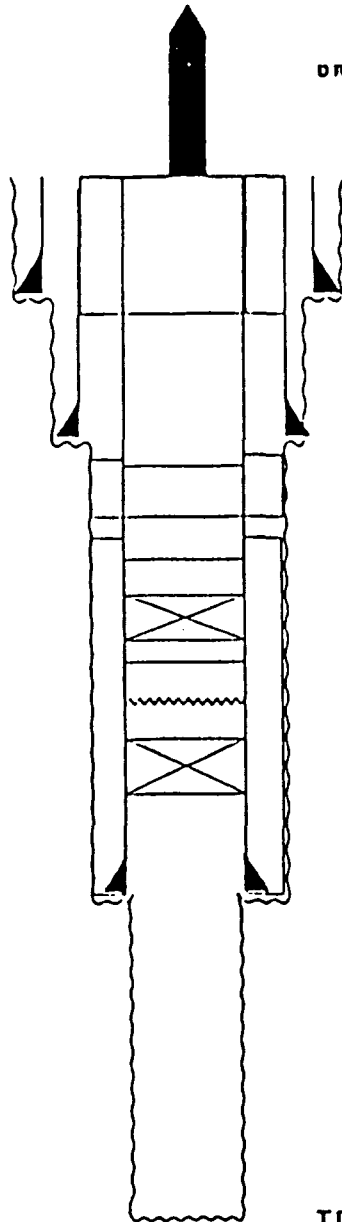
2310' FNL, 330' FEL, SEC 32, T17S, R33E

CITIES SERVICE
STATE "CB" #2



2310' FNL, 1700' FEL, SEC 32, T17S, R33E

CITIES SERVICE
STATE "CB" #5
(P&A 2/80)



DRY HOLE MARKER

13 3/8" • 206' W/ 0 SX.
PERF • 250'. 8QZ W/ 375 SX.
CIRC. 8 SX TO SURF.

10 3/4" 34# CSG • 856' W/ 0 SX.
TOC 926'
PERF • 1160'. 8QZ W/ 600 SX.
DISPLACE TO 1050'
TOC 1260'

RETAINER • 1306'. 8QZ W/ 600 SX.

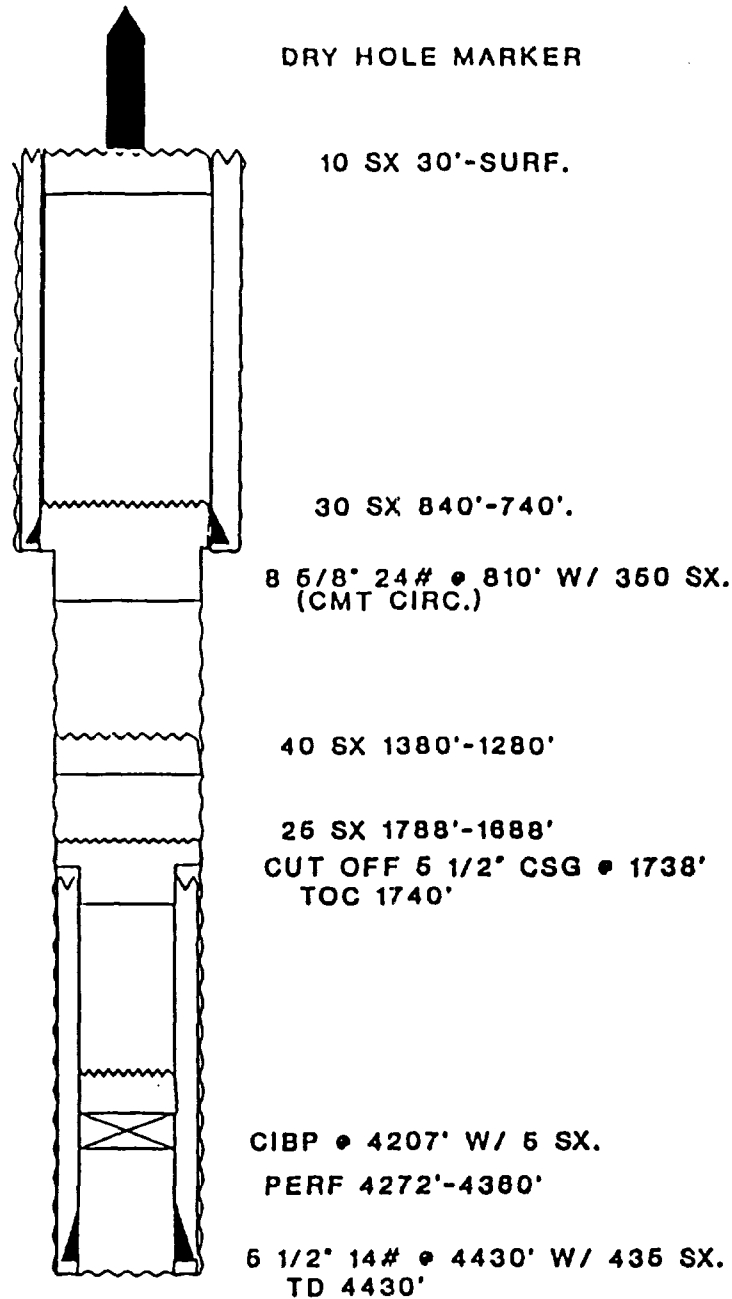
CIBP • 3476' W/ 7 SX.
8QZ • 3276' W/ 16 SX.
PERF 3686'-3700'

7" 20# CSG • 3812' W/ 100 SX.

TD 4500'

1650' FNL, 1650' FEL, SEC 32, T17S, R33E

CROSS TIMBERS OPERATING COMPANY
 SMGSAU TRACT 7 WELL #7
 (P&A 7/73)

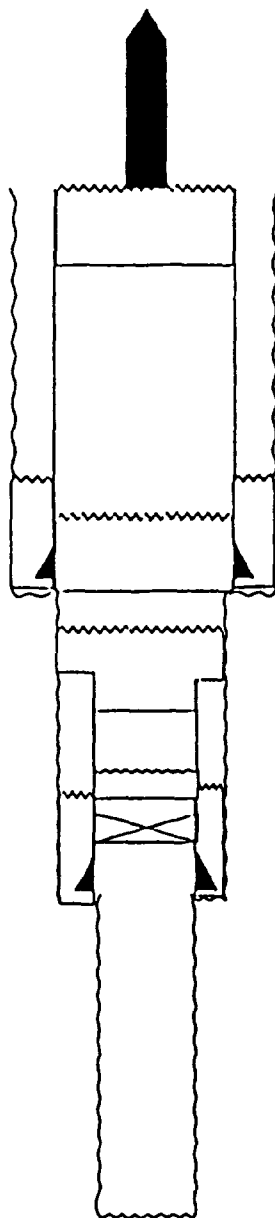


100' FSL, 1430' FEL, SEC 29, T 17S, R33E

CROSS TIMBERS OPERATING COMPANY
SMGSAU TRACT 9 WELL #4

(P&A 7/10/73)

DRY HOLE MARKER



15 SX 30'-SURF.

46 SX 1350'-1250'.

9 5/8" • 1300'

45 SX 2265'-2165'

CUT OFF 7" • 2215'

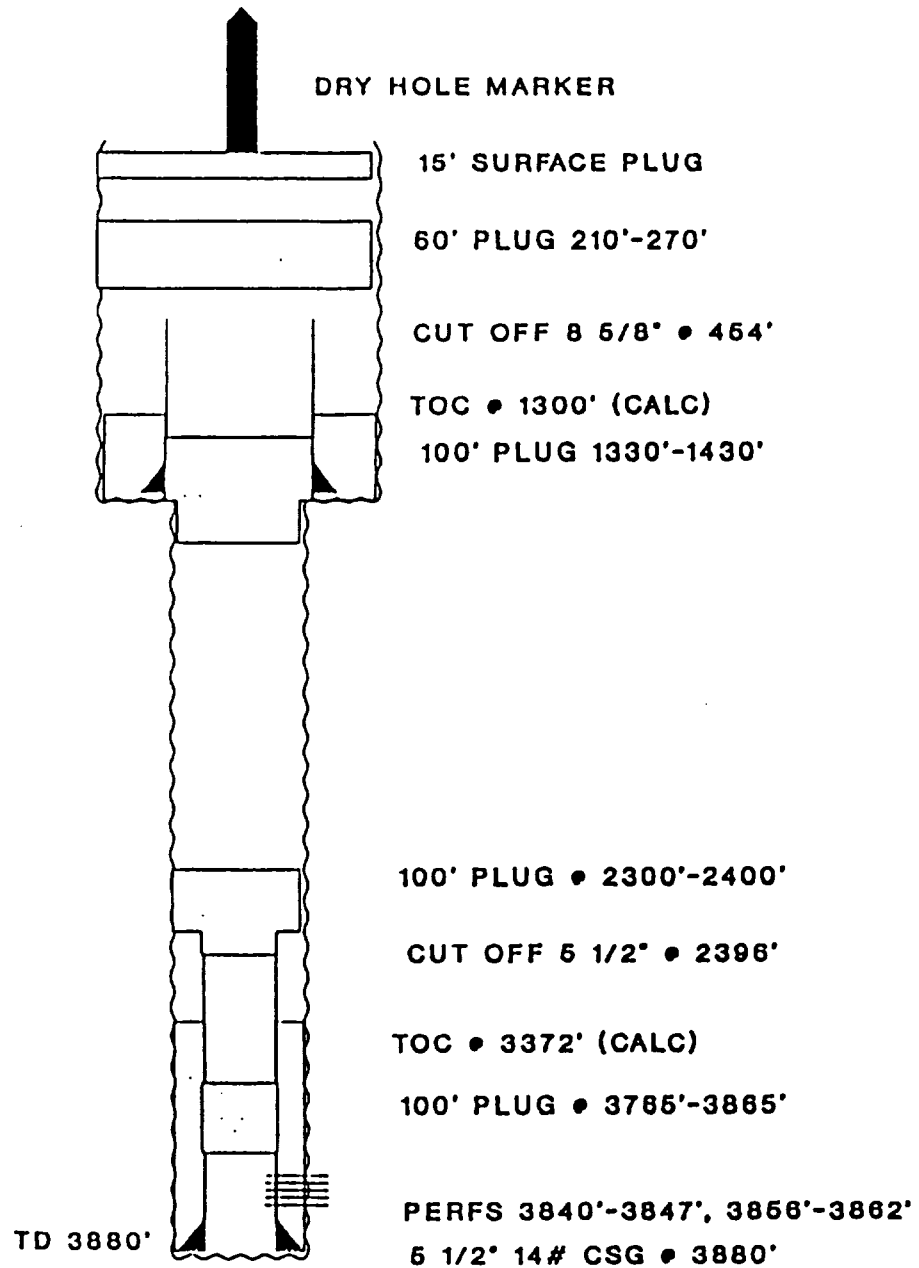
CIBP • 3991' W/ 7 SX.

7" • 3943'

TD 4306' ,

660' FNL, 660' FEL, SEC 32, T17S, R33E

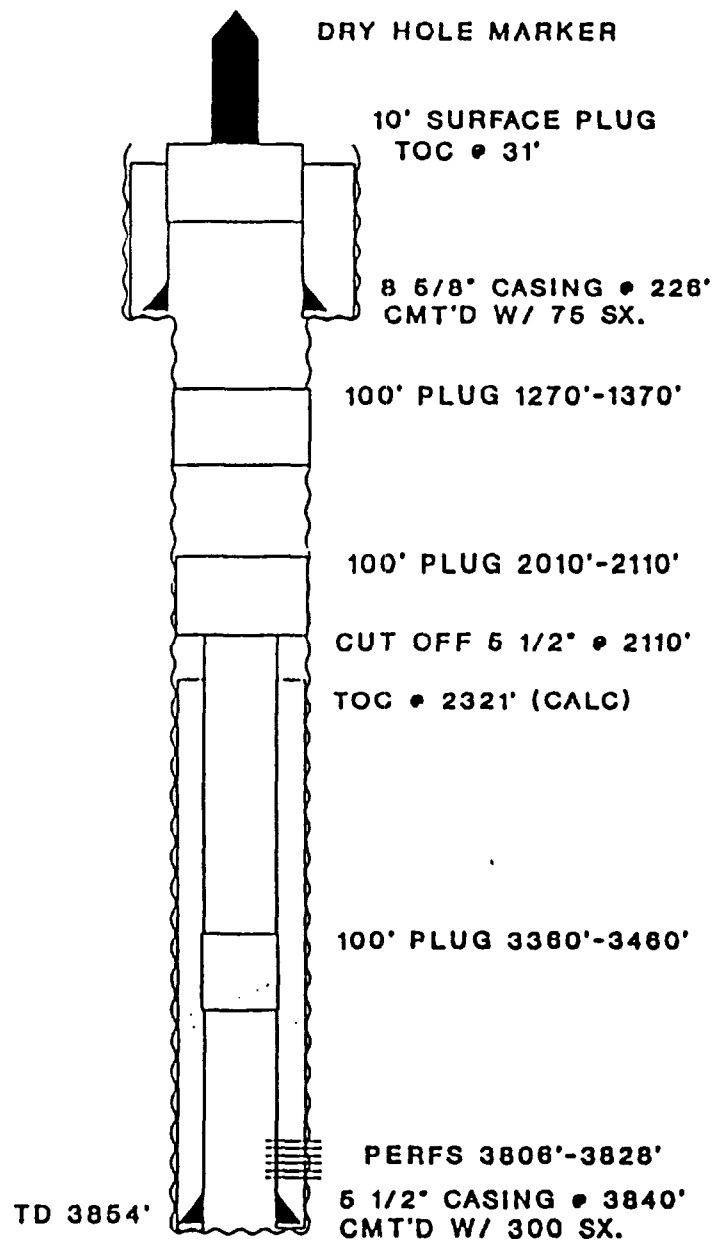
**H.R. DENIUS
COCKBURN FEDERAL #5
(P&A 6/16/61)**



2310' FSL, 330' FWL, SEC 33, T17S, R33E, NMPM

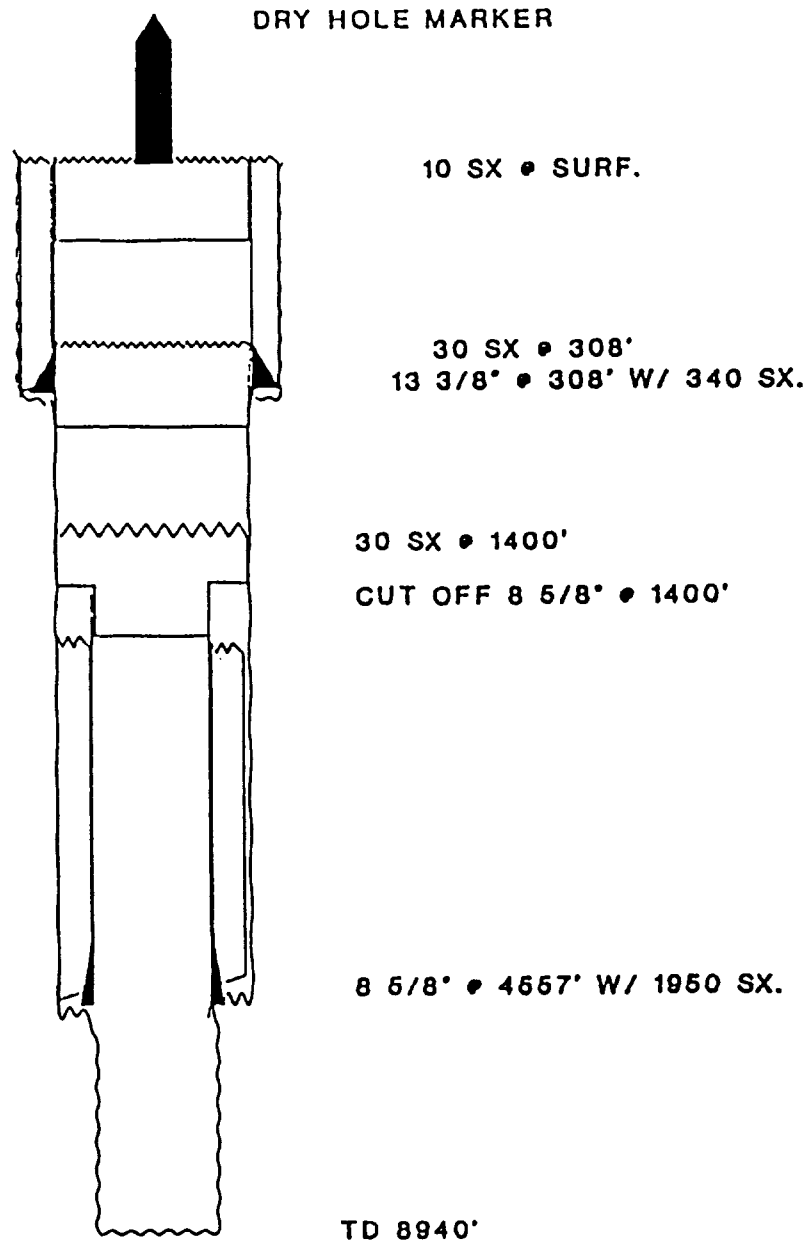
H.R. DENIUS
COCKBURN FEDERAL #9

(P&A 6/16/61)



2264' FSL, 990' FWL, SEC 33, T17S, R33E NMPM

JAMES P. DUNIGAN
COCKBURN #1



990' FNL, 430' FWL, SEC 33, T17S, R33E