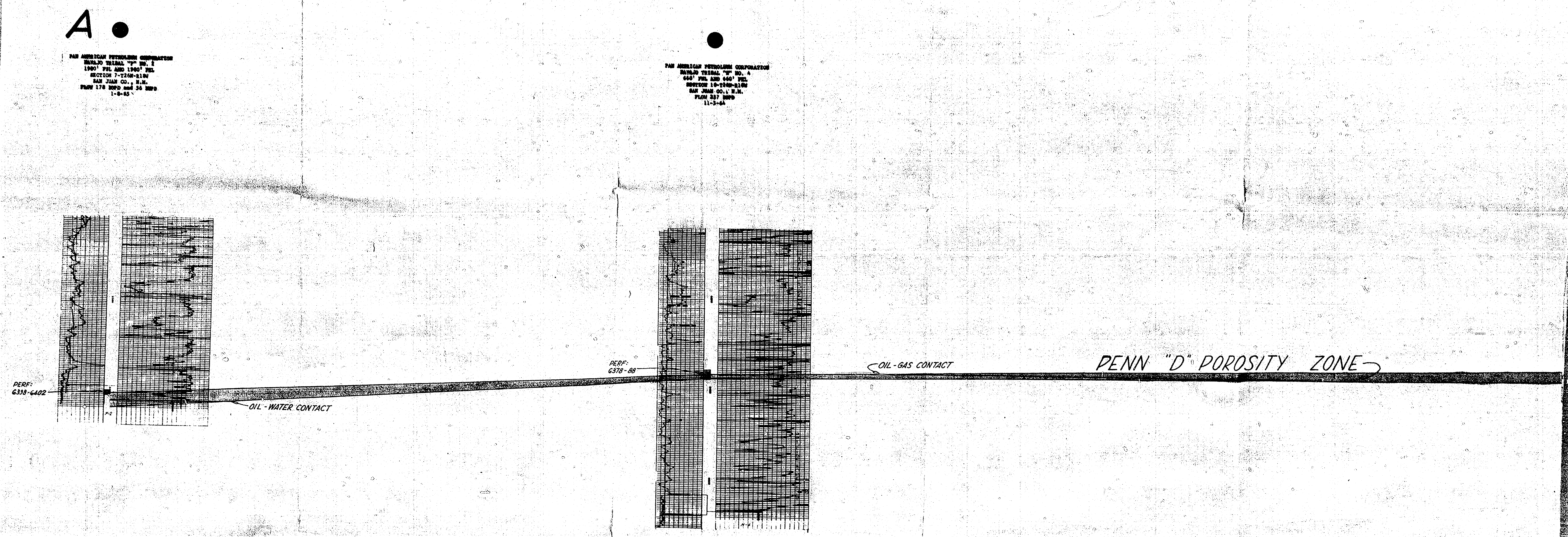
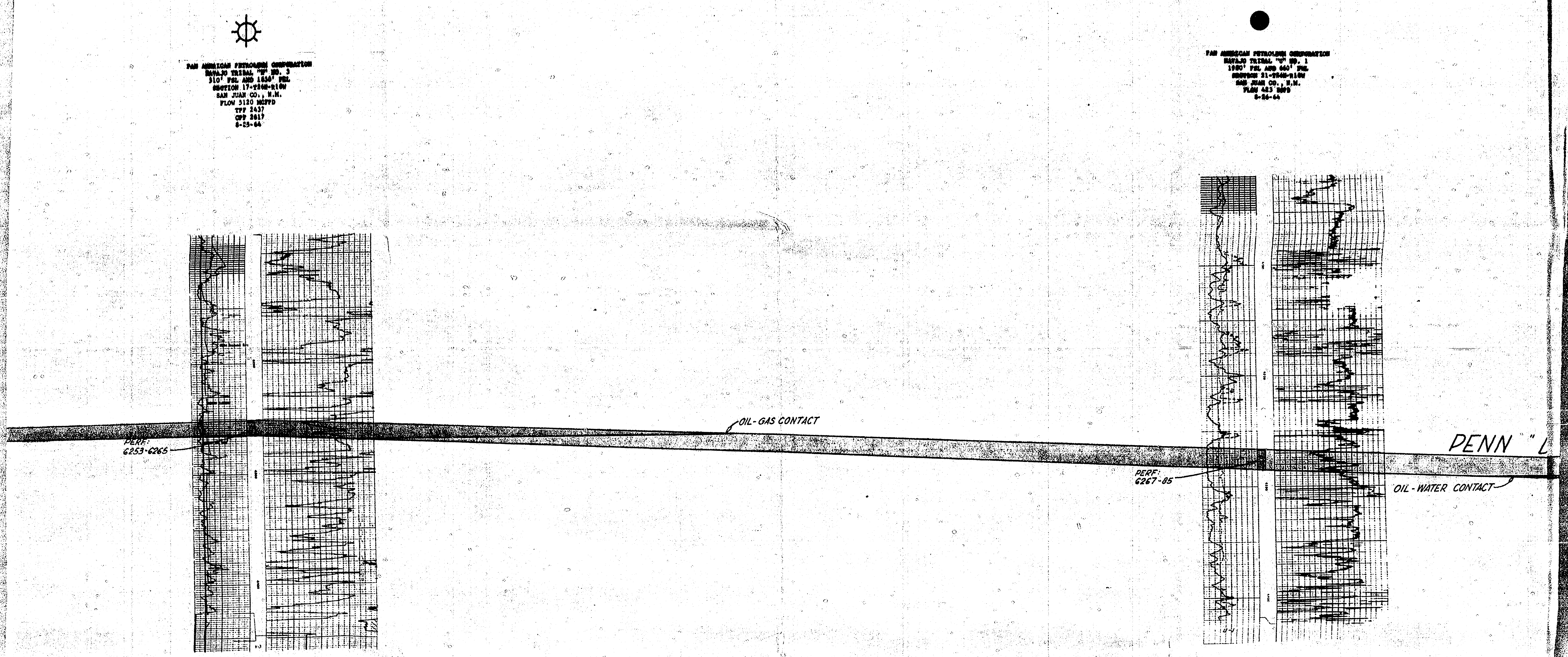
Case No.
3073

Large Exhibits

W.N.M.C.F. MICROGRAPHICS

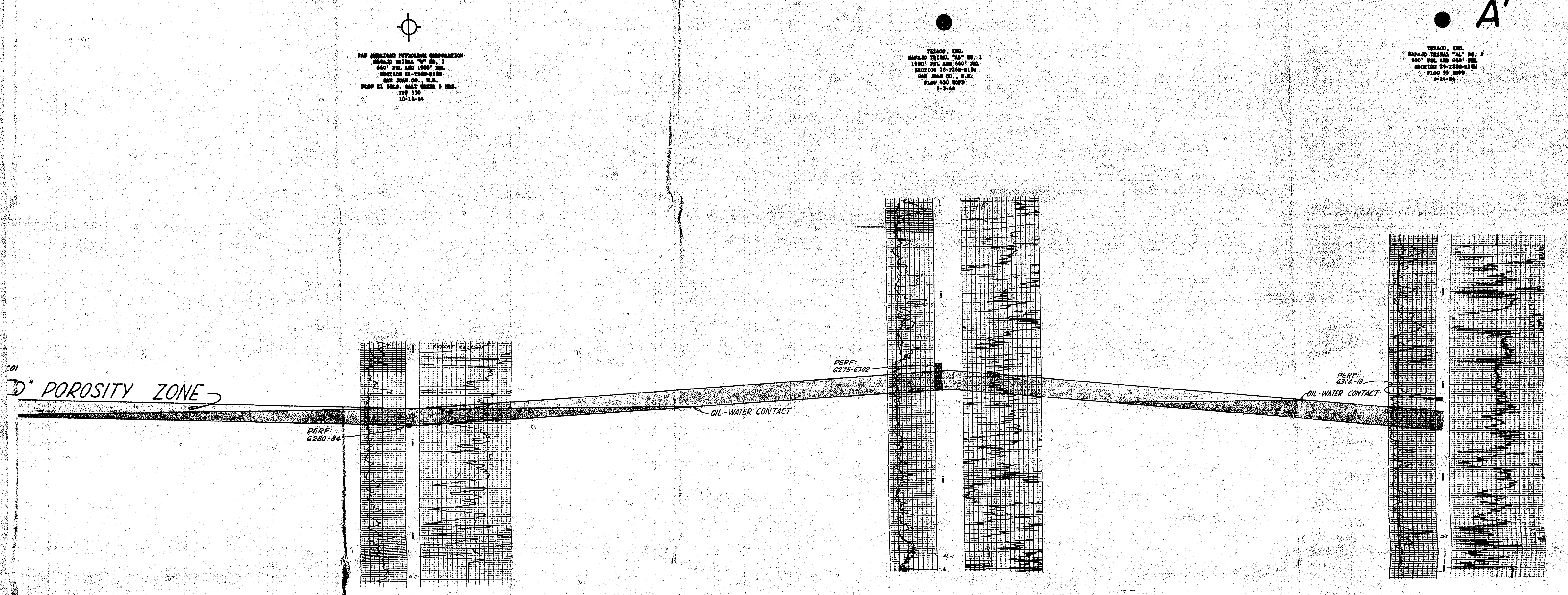
BEST AVAILABLE COPY


A
PAN AMERICAN PETROLEUM CORPORATION
NAVAJO TRIBAL "P" NO. 2
1980' FSL AND 1980' FEL
SECTION 7-T26N-R18W
SAN JUAN CO., N.M.
FLOW 178 BOPD and 36 BWPD
1-8-65
PAN AMERICAN PETROLEUM CORPORATION
NAVAJO TRIBAL "E" NO. 4
660' FNL AND 660' FEL
SECTION 18-T26N-R18W
SAN JUAN CO., N.M.
FLOW 257 BOPD
11-3-64
PERF: 6338-6402
P-2
OIL-WATER CONTACT
PERF: 6378-88
OIL-GAS CONTACT
PENN "D" POROSITY ZONE

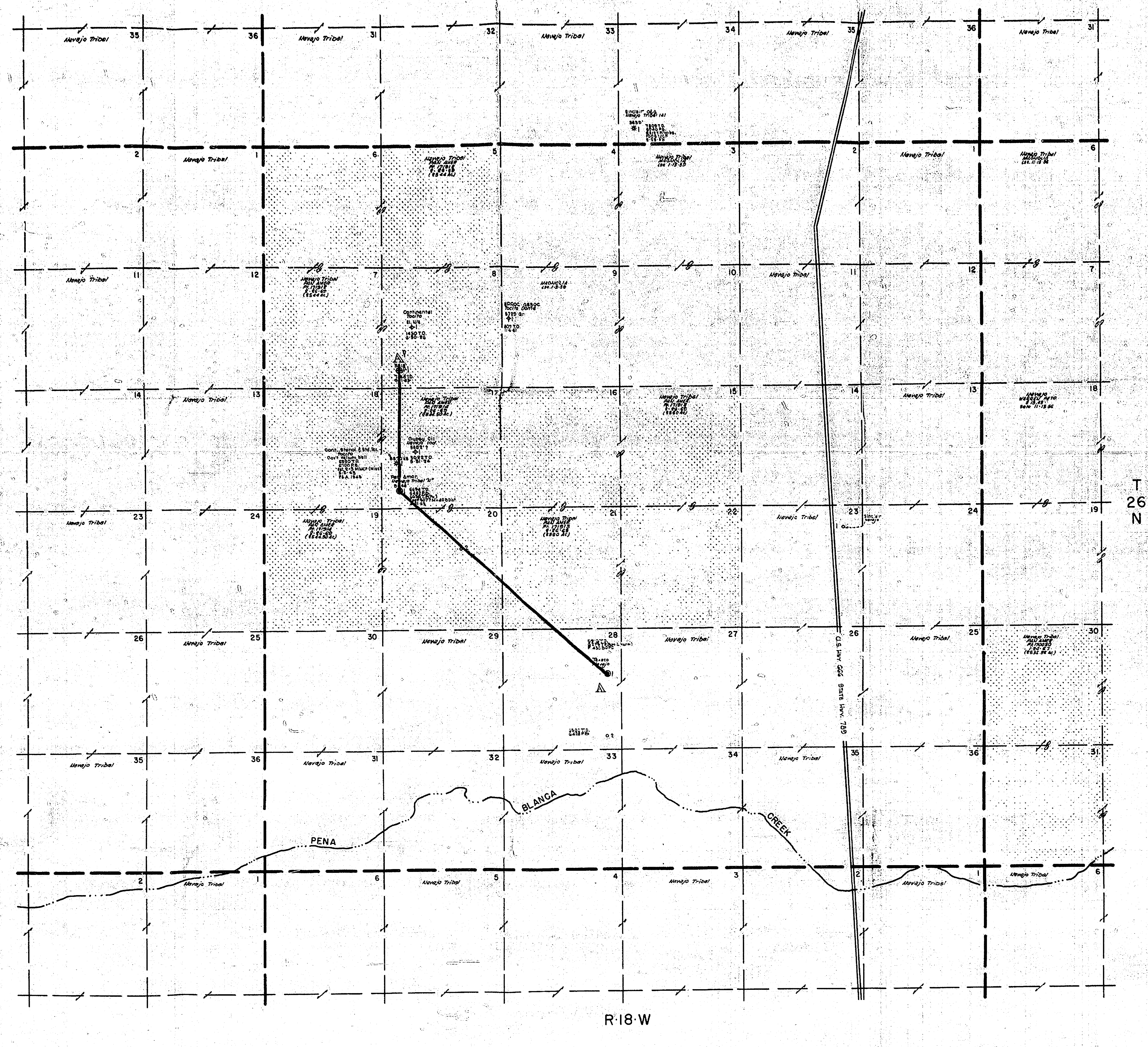

PAN AMERICAN PETROLEUM CORPORATION
NAVAJO TRIBAL "F" NO. 3
310' FSL AND 1830' FEL
SECTION 17-T26N-R18W
SAN JUAN CO., N.M.
FLOW 3120 MCFPD
TPF 2437
CPF 2617
8-25-64
PAN AMERICAN PETROLEUM CORPORATION
NAVAJO TRIBAL "U" NO. 1
1980' FSL AND 660' FWL
SECTION 21-T26N-R18W
SAN JUAN CO., N.M.
FLOW 423 BOPD
8-26-64
PERF: 6253-6265
OIL-GAS CONTACT
PENN "D"
PERF: 6267-85
OIL-WATER CONTACT

NORTH - SOUTH CROSS SECTION A - A'
TOCITO DOME PENN "D" FIELD
SAN JUAN COUNTY, NEW MEXICO

HORIZONTAL SCALE: 1" = 200'
VERTICAL SCALE: 1" = 40'


"D" POROSITY ZONE
PAN AMERICAN PETROLEUM CORPORATION
NAVAJO TRIBAL "U" NO. 2
660' FSL AND 1980' FEL
SECTION 21-T26N-R18W
SAN JUAN CO., N.M.
FLOW 21 BBLS. SALT WATER 5 HRS.
TPF 330
10-18-64
PERF: 6280-84
OIL-WATER CONTACT
TEXACO, INC.
NAVAJO TRIBAL "AL" NO. 1
1980' FNL AND 660' FEL
SECTION 28-T26N-R18W
SAN JUAN CO., N.M.
FLOW 430 BOPD
5-3-64
PERF: 6275-6302
AL-1
A'
TEXACO, INC.
NAVAJO TRIBAL "AL" NO. 2
660' FSL AND 660' FEL
SECTION 24-T26N-R18W
FLOW 99 BOPD
6-24-64
PERF: 6314-18
OIL-WATER CONTACT

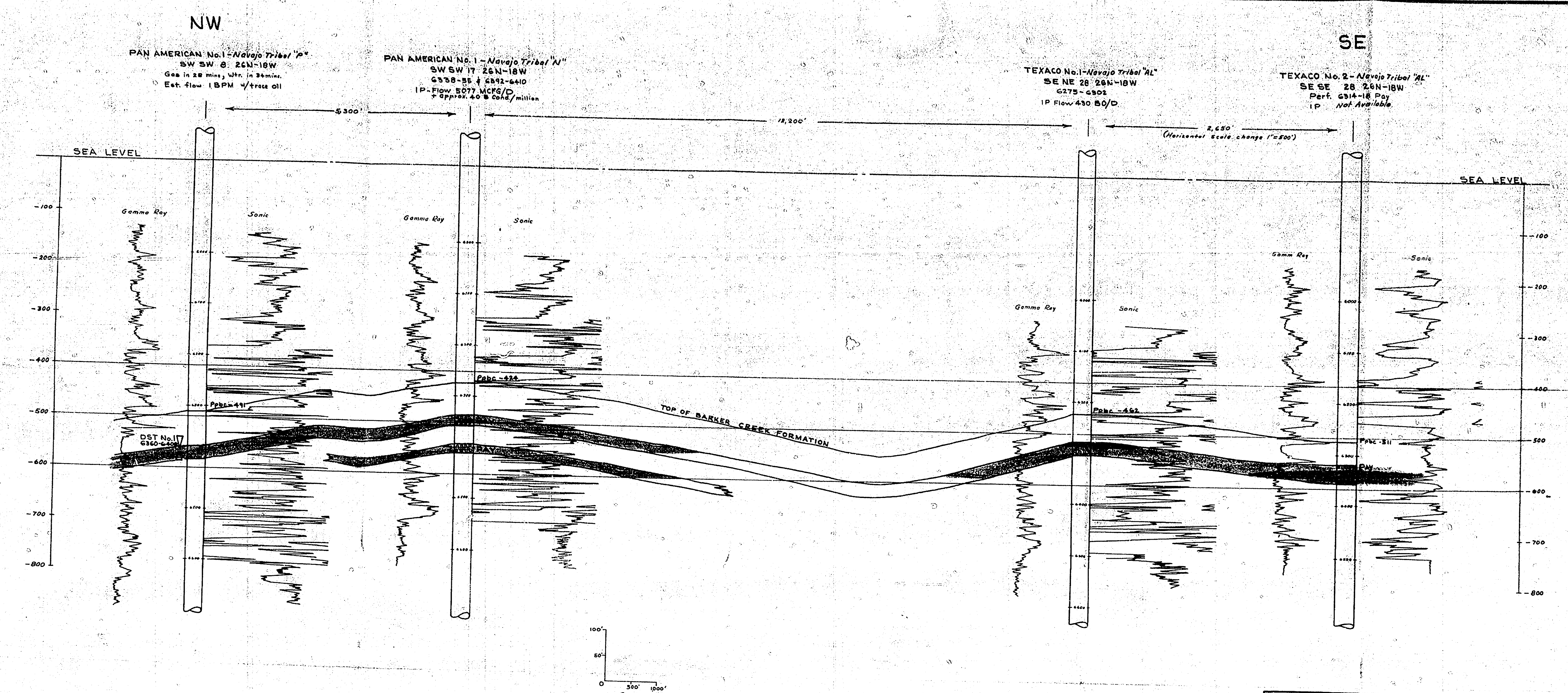
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Am EXHIBIT NO. 2
CASE NO. 3073
8-11-65


Navajo Tribal
35
36
31
32
33
34
2
1
6
5
4
3
11
12
7
8
9
10
14
13
18
17
16
15
23
24
19
20
21
22
26
25
30
29
28
27
Sinclair O&G
Navajo Tribal 141
Navajo Tribal
Pan Amer
Continental
Tocito
1450 T.D.
Gypsy Oil
Navajo Ind.
5022 T.D.
Cont., Stanol & Std. Rt.
Tocito
Cont. Helium Well
F&A 1946
Pan Amer.
Navajo Tribal "N"
Texaco
Navajo
U.S. HWY. 666 STATE HWY. 789
PENA BLANCA CREEK
T 26 N
R-18-W

PAN AMERICAN PETR CORP.
FARMINGTON DISTRICT
TOCITO DOME AREA
SAN JUAN CO., NEW MEXICO
SCALE: 1"=2000'

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Am's EXHIBIT NO. 1
CASE NO. 3073
7-1-64

W.N.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY


NW
PAN AMERICAN No.1-Navajo Tribal "P"
SW SW 8 26N-18W
Gas in 28 mins, Wtr. in 34mins.
Est. flow 1 BPM w/trace oil
PAN AMERICAN No. 1 - Navajo Tribal "N"
SW SW 17 26N-18W
6338-55 & 6392-6410
IP-Flow 5077 MCFG/D
+ approx. 40 B cond./million
TEXACO No.1-Navajo Tribal "AL"
SE NE 28 26N-18W
6275-6302
IP Flow 430 BO/D
SE
TEXACO No. 2 - Navajo Tribal "AL"
SE SE 28 26N-18W
Perf. 6314-18 Pay
IP Not Available
5,300'
13,200'
2,650'
(Horizontal scale change 1"=500')
SEA LEVEL
Gamma Ray
Sonic
Ppbc -491
Ppbc -424
Ppbc -462
Ppbc -511
DST No.1
6360-6400
Pay
TOP OF BARKER CREEK FORMATION
-100
-200
-300
-400
-500
-600
-700
-800
100'
50'
0
500'
1000'
Scale

▬ Gas Productive
▬ Water Productive
▬ Oil Productive

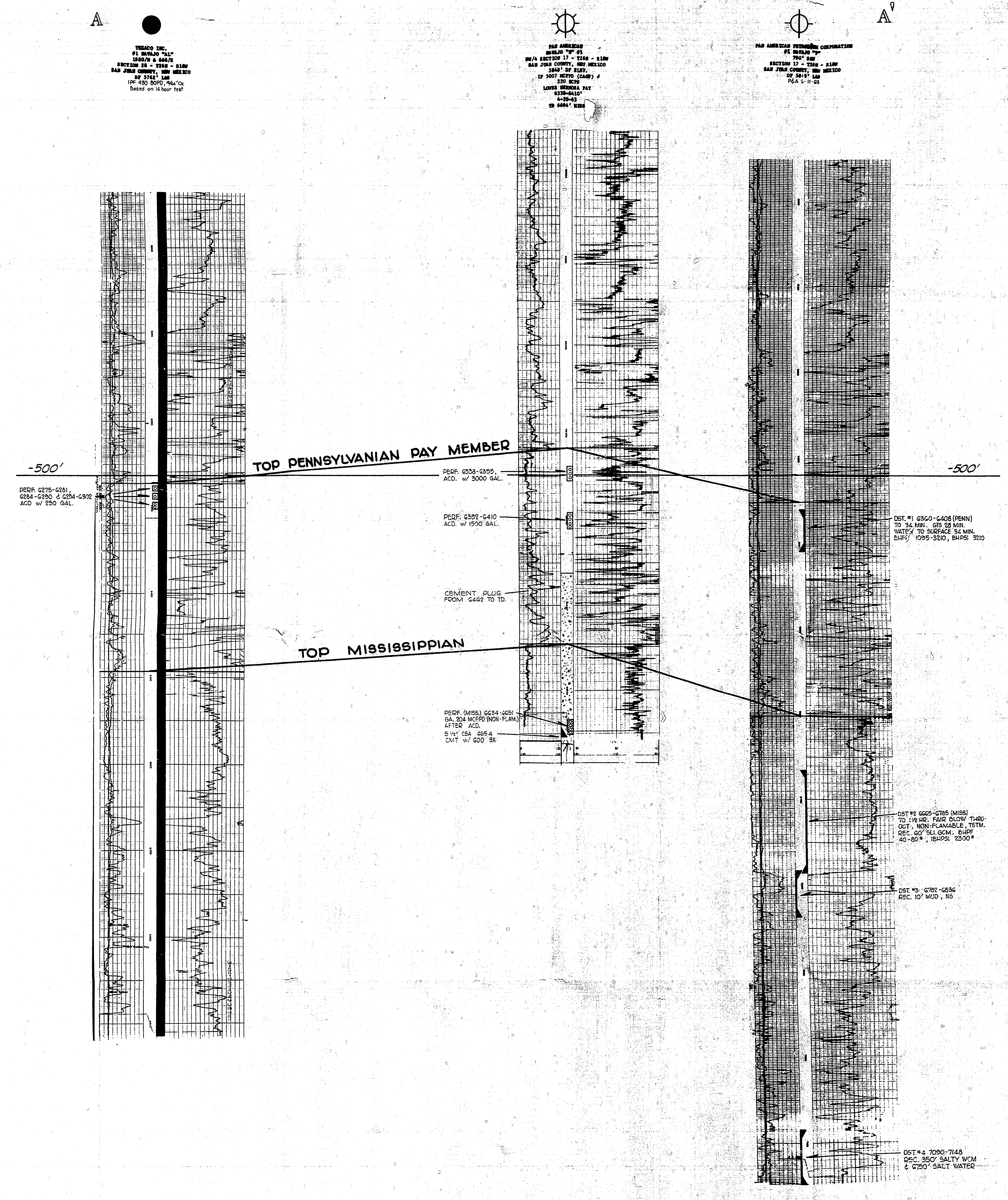
TEXACO Inc.
DENVER, COLORADO

NW-SE STRUCTURAL CROSS SECTION
TOCITO DOME AREA
San Juan County, New Mexico

HORIZONTAL SCALE: 1"=1000' JUNE 22, 1964
VERTICAL SCALE: 1"=100'

Exhibit "B"

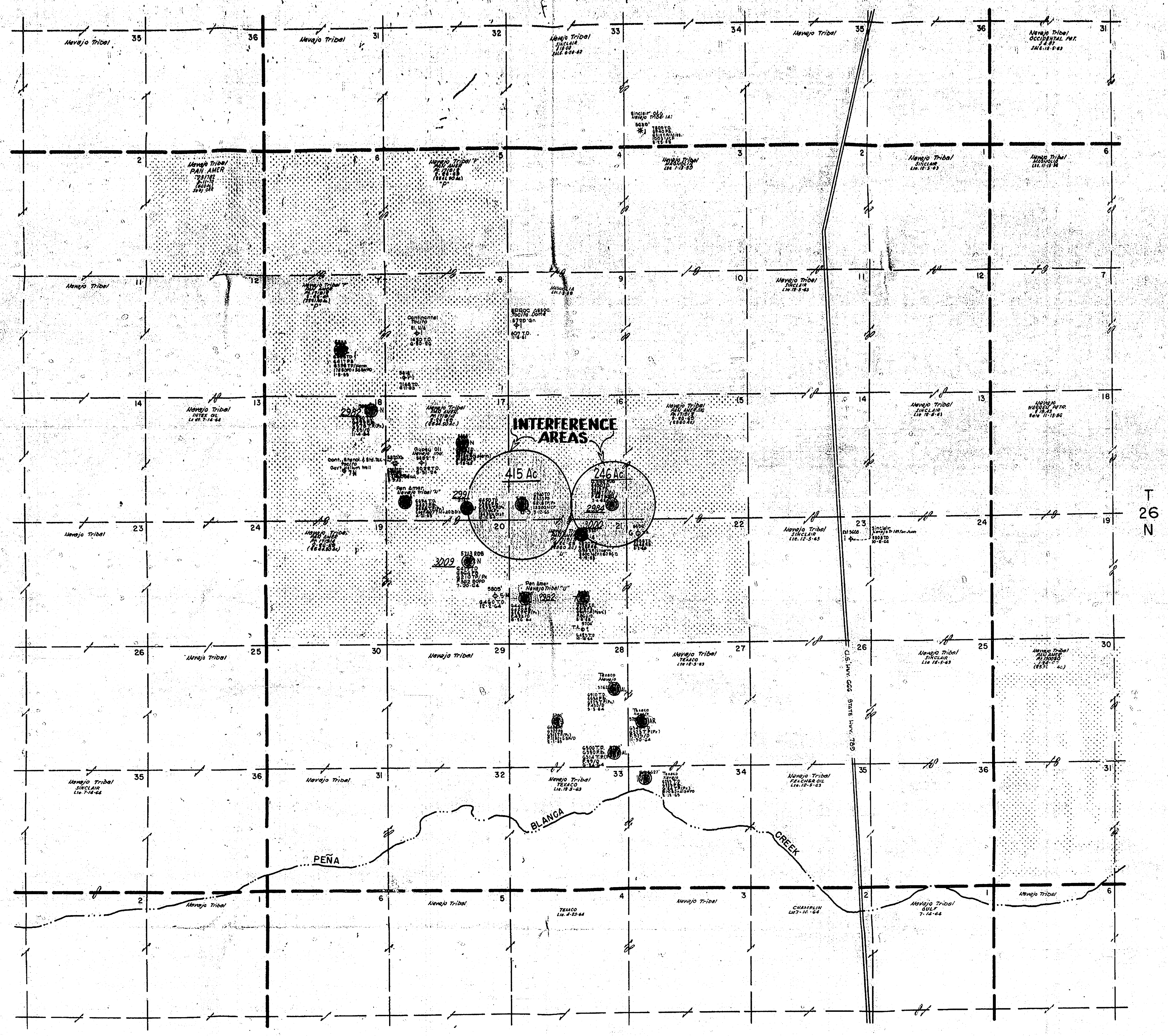
V.N.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY


A
TEXACO INC.
#1 NAVAJO "AL"
1980/N & 666/E
SECTION 28 - T26N - R18W
SAN JUAN COUNTY, NEW MEXICO
DF 5762' L&S
IPF 430 BOPD, 14/64"Ck
Based on 14 hour test
PAN AMERICAN
NAVAJO "K" #1
SW/4 SECTION 17 - T26N - R18W
SAN JUAN COUNTY, NEW MEXICO
5848' DF ELEV.
IP 5007 MCFPD (CAOF) &
220 BCPD
LOWER HERMOSA PAY
6338-6410'
4-20-63
TD 6694' MISS
PAN AMERICAN PETROLEUM CORPORATION
#1 NAVAJO "P"
790' S&W
SECTION 17 - T26N - R18W
SAN JUAN COUNTY, NEW MEXICO
DF 5819' L&S
P&A 6-11-63
A'
-500'
-500'
TOP PENNSYLVANIAN PAY MEMBER
TOP MISSISSIPPIAN
PERF. 6275-6281, 6284-6290 & 6294-6302 ACD w/ 250 GAL.
PERF. 6338-6355, ACD. w/ 3000 GAL.
PERF. 6392-6410 ACD. w/ 1500 GAL.
CEMENT PLUG FROM 6462 TO TD.
PERF. (MISS.) 6634-6651 GA. 204 MCFPD (NON-FLAM.) AFTER ACD.
5 1/2" CSA 6654 CMT w/ 600 SX.
DST. #1 6360-6408 (PENN) TO 34 MIN. GTS 28 MIN. WATER TO SURFACE 34 MIN. BHFP 1095-3210, BHPSI 3210
DST #2 6665-6785 (MISS) TO 1 1/2 HR. FAIR BLOW THRU-OUT, NON-FLAMABLE, TSTM. REC. 60' SLI. GCM. BHPF 40-80#, IBHPSI 2300#
DST. #3 6782-6836 REC. 10' MUD, NS
DST. #4 7090-7148 REC. 350' SALTY WCM & 6750' SALT WATER

NORTH - SOUTH CROSS SECTION
TOCITO DOME AREA

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Ams EXHIBIT NO. 2
CASE NO. 3023
7-1-64

N.M.O.C.C. MICROGRAPHICS
BEST AVAILABLE COPY


INTERFERENCE AREAS
415 Ac
246 Ac
PEÑA BLANCA CREEK
Navajo Tribal
PAN AMER
T 26 N
R·18·W
3009
2982
35
36
31
32
33
34
2
1
6
5
4
3
11
12
7
8
9
10
14
13
18
17
16
15
23
24
19
20
21
22
26
25
30
29
28
27

LEGEND

- ● Oil Wells
- ● Gas Wells
- 3000 Bottom hole pressure, 6·1·65(Datum -510)

PAN AMERICAN PETR CORP.

FARMINGTON DISTRICT

TOCITO DOME AREA

SAN JUAN CO., NEW MEXICO

SCALE: 1"=2000'

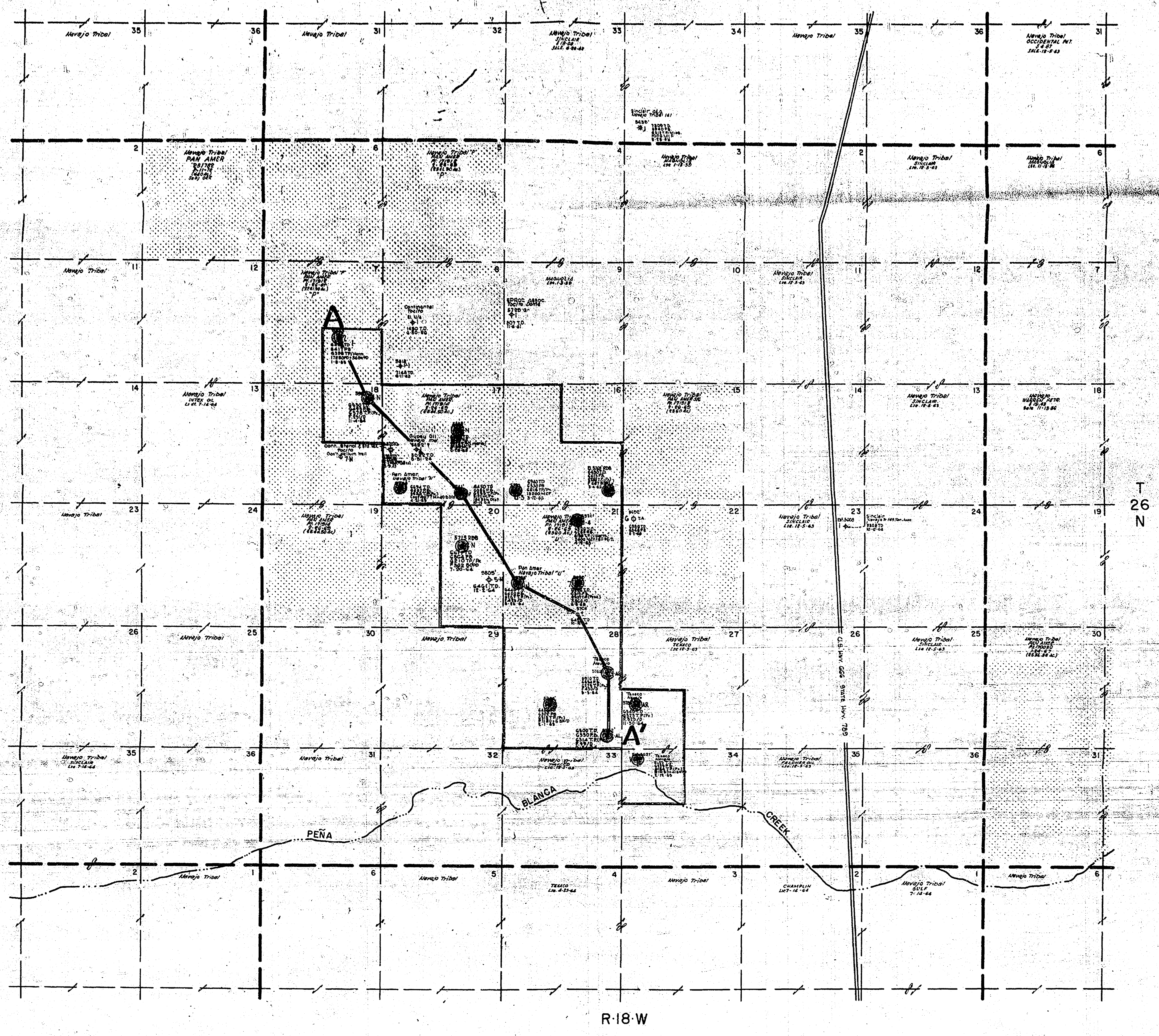
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Am's EXHIBIT NO. 5
CASE NO. 3073

8-11-65

7·21·65

V.E.N.C.F. MICROGRAPHICS

BEST AVAILABLE COPY


T 26 N
R·18·W
Navajo Tribal
A
A'
PEÑA BLANCA CREEK

LEGEND

● Oil Wells

● Gas Wells

— Trace Cross Section A-A'

— Pool Boundaries (R-2896 plus new development)

PAN AMERICAN PETR CORP.

FARMINGTON DISTRICT

TOCITO DOME AREA

SAN JUAN CO., NEW MEXICO

SCALE: 1"=2000'

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Pan Am's EXHIBIT NO. 1
CASE NO. 3073

8-11-65

7-21-65

W.N.M.C.P. MICROGRAPHICS
BEST AVAILABLE COPY

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Texaco EXHIBIT NO. C
CASE NO. 3073

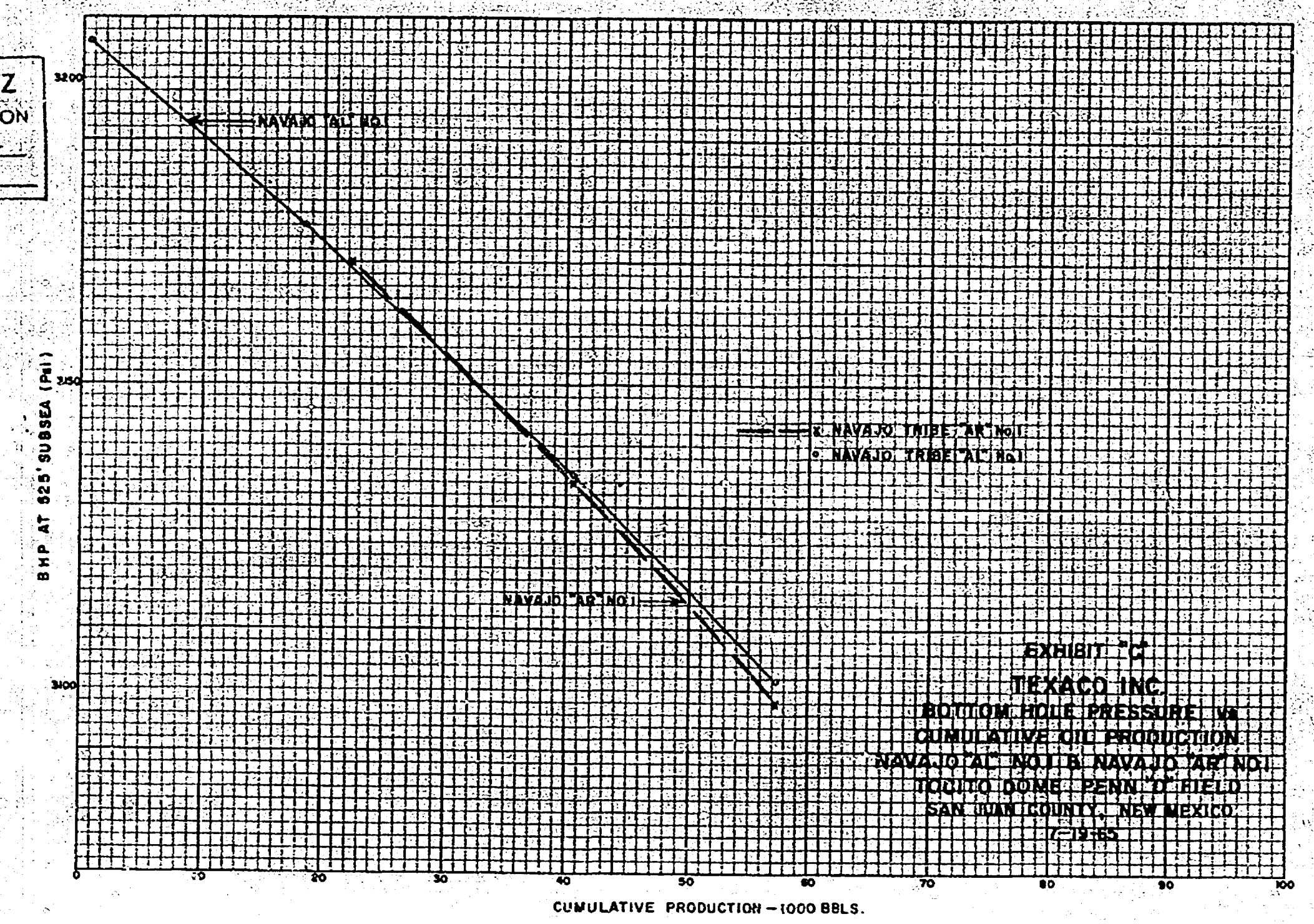


EXHIBIT "C"
TEXACO INC.
BOTTOM HOLE PRESSURE vs
CUMULATIVE OIL PRODUCTION
NAVAJO "AL" NO. 1 & NAVAJO "AR" NO. 1
TOCITO DOME PENN "D" FIELD
SAN JUAN COUNTY, NEW MEXICO
7-19-65

V.N.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

Texaco EXHIBIT NO. B

CASE NO. 3073

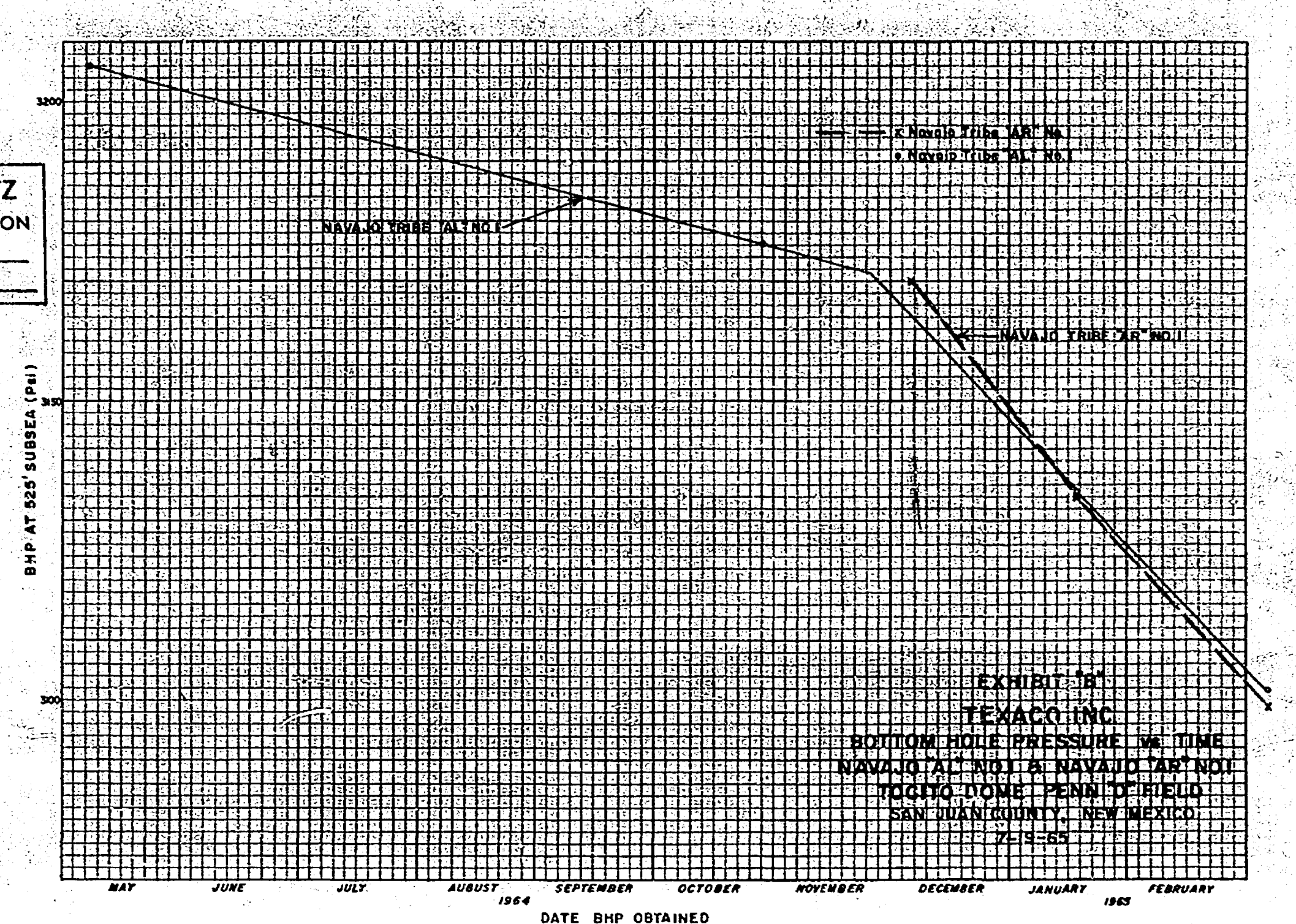


EXHIBIT "B"

TEXACO INC.

BOTTOM HOLE PRESSURE vs TIME

NAVAJO "AL" NO. 1 & NAVAJO "AR" NO. 1

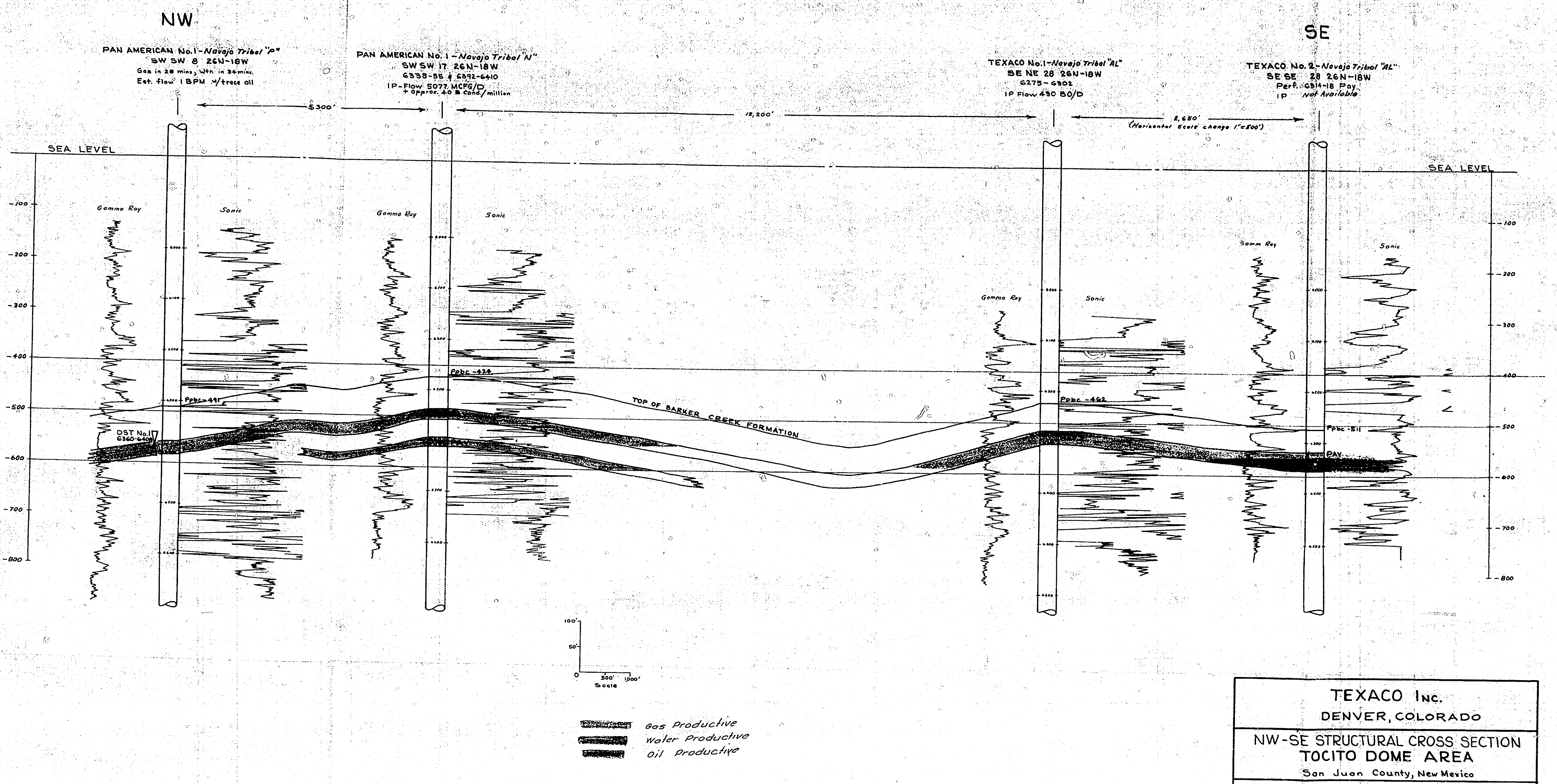
TOCITO DOME, PENN "D" FIELD

SAN JUAN COUNTY, NEW MEXICO

7-9-65

N.M.O.C.D. MICROGRAPHICS

BEST AVAILABLE COPY


NW
SE
PAN AMERICAN No.1-Navajo Tribal "P"
SW SW 8 26N-18W
Gas in 28 mins, Wtr. in 34 mins.
Est. flow 1 BPM w/trace oil
PAN AMERICAN No. 1 - Navajo Tribal "N"
SW SW 17 26N-18W
6338-55 & 6392-6410
IP-Flow 5077 MCFG/D
+ approx. 40 B cond./million
TEXACO No.1-Navajo Tribal "AL"
SE NE 28 26N-18W
6275-6302
IP Flow 430 BO/D
TEXACO No. 2-Navajo Tribal "AL"
SE SE 28 26N-18W
Perf. 6314-18 Pay
IP Not Available
5300'
12,200'
2,650'
(Horizontal Scale change 1"=500')
SEA LEVEL
SEA LEVEL
-100
-200
-300
-400
-500
-600
-700
-800
Gamma Ray
Sonic
Gamma Ray
Sonic
Gamma Ray
Sonic
Gamma Ray
Sonic
Ppbc -491
Ppbc -424
Ppbc -462
Ppbc -511
PAY
DST No.1
6360-6400
TOP OF BARKER CREEK FORMATION
100'
50'
0
500'
1000'
Scale
Gas Productive
Water Productive
Oil Productive

TEXACO INC.
DENVER, COLORADO

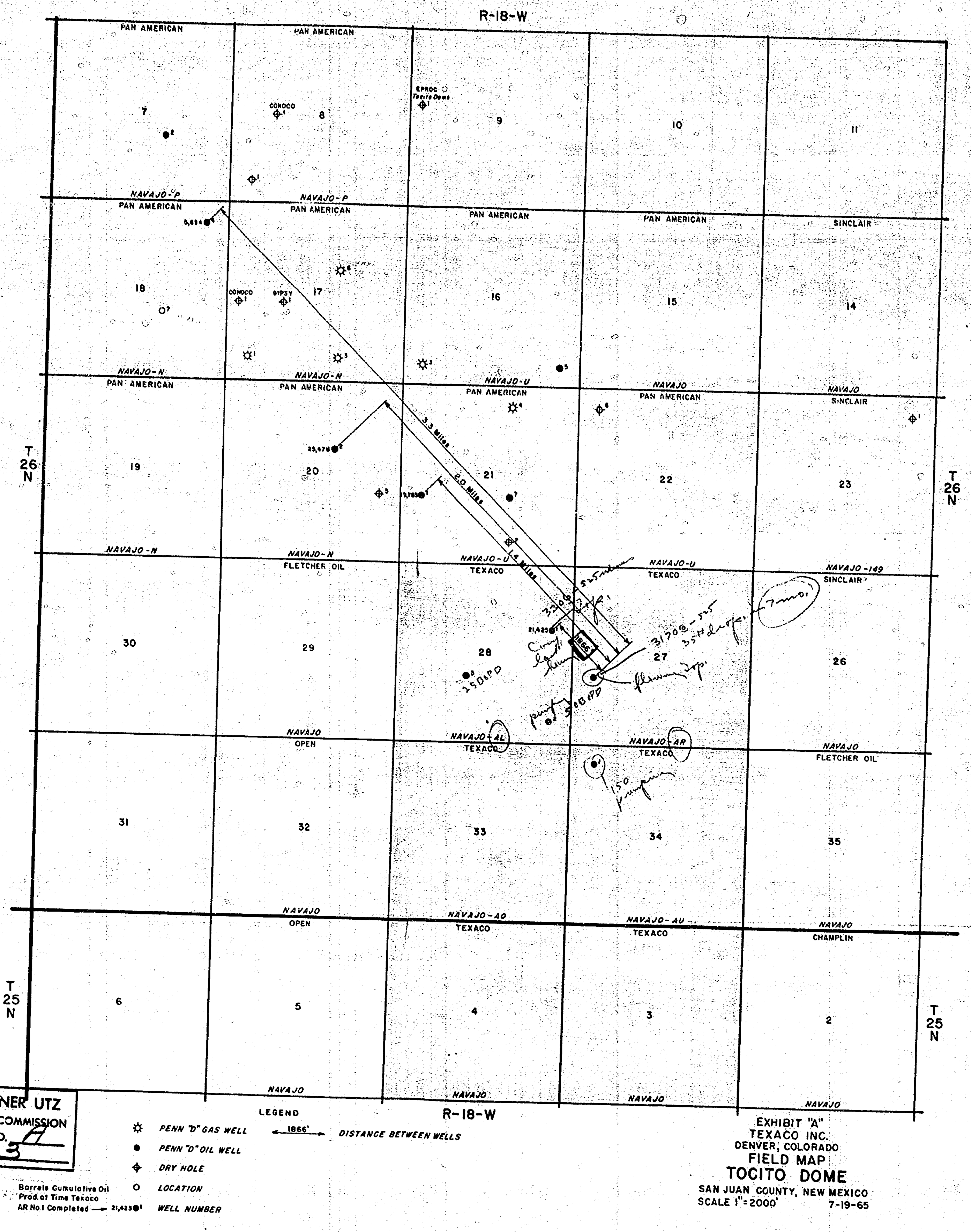
NW-SE STRUCTURAL CROSS SECTION
TOCITO DOME AREA

San Juan County, New Mexico

HORIZONTAL SCALE: 1"=1000'
VERTICAL SCALE: 1"=100'
JUNE 22, 1964

Exhibit "B"

V.N.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY


R-18-W
T 26 N
T 25 N
PAN AMERICAN
CONOCO
EPROC Tocito Dome
SINCLAIR
NAVAJO-P
NAVAJO-N
NAVAJO-U
NAVAJO
GYPSY
8,684
25,478
19,785
21,423
3.3 Miles
2.0 Miles
1.9 Miles
1866
NAVAJO-149
FLETCHER OIL
TEXACO
OPEN
NAVAJO-AL
NAVAJO-AR
NAVAJO-AO
NAVAJO-AU
CHAMPLIN
7
8
9
10
11
18
17
16
15
14
19
20
21
22
23
30
29
28
27
26
31
32
33
34
35
6
5
4
3
2
25 BOPD
pumping 50 BOPD
3170@-525
flowing Tops
150 pumping
LEGEND
PENN "D" GAS WELL
PENN "D" OIL WELL
DRY HOLE
LOCATION
WELL NUMBER
1866' DISTANCE BETWEEN WELLS
Barrels Cumulative Oil Prod. at Time Texaco AR No. 1 Completed → 21,423

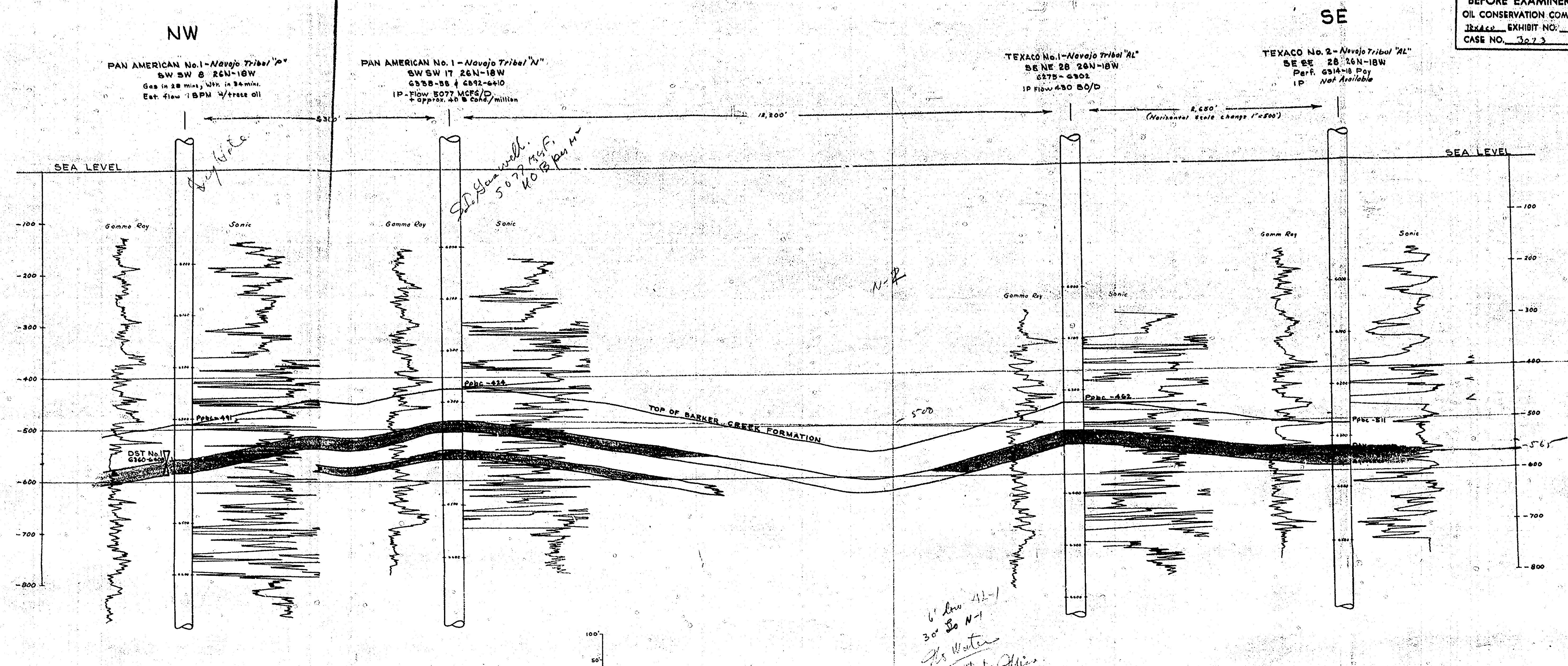
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Texaco EXHIBIT NO. A
CASE NO. 3073

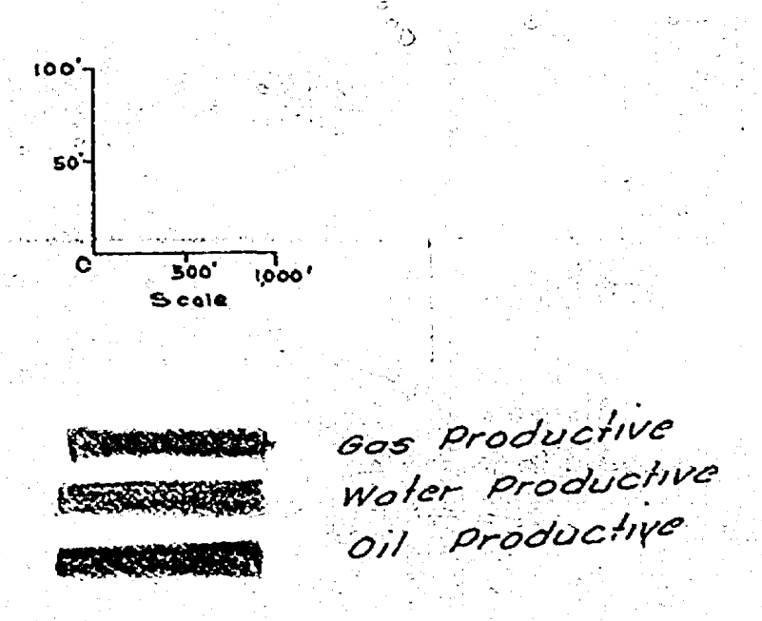
EXHIBIT "A"
TEXACO INC.
DENVER, COLORADO

FIELD MAP
TOCITO DOME

SAN JUAN COUNTY, NEW MEXICO
SCALE 1" = 2000' 7-19-65

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Texaco EXHIBIT NO. B
CASE NO. 3073


NW
SE
PAN AMERICAN No.1-Navajo Tribal "P"
SW SW 8 26N-18W
Gas in 28 mins, Wtr. in 34 mins.
Est. flow 1 BPM w/trace oil
PAN AMERICAN No. 1-Navajo Tribal "N"
SW SW 17 26N-18W
6358-88 & 6392-6410
IP-Flow 5077 MCFG/D
+ approx. 40 B cond./million
TEXACO No.1-Navajo Tribal "AL"
SE NE 28 26N-18W
6275-6302
IP Flow 430 BO/D
TEXACO No. 2-Navajo Tribal "AL"
SE SE 28 26N-18W
Perf. 6314-18 Pay
IP Not Available
6300'
13,200'
2,650'
(Horizontal scale change 1"=500')
SEA LEVEL
SEA LEVEL
Gamma Ray
Sonic
Gamma Ray
Sonic
Gamma Ray
Sonic
Gamma Ray
Sonic
-100
-200
-300
-400
-500
-600
-700
-800
100
200
300
400
500
600
700
800
Ppbc -491
Ppbc -424
Ppbc -462
Ppbc -511
DST No.1
6360-6409
TOP OF BARKER CREEK FORMATION
Gas well. 5077 MCF. 40 B per M
N-R
500
-565


100'
50'
0
500'
1000'
Scale
Gas Productive
Water Productive
Oil Productive

6' low AL-1
30' lo N-1
Its Water
[illegible]

Top Penn. 6210
Elevation 5713
-497

F.P. 362 B.O. [illegible]
[illegible] 1650-
C. 1700
1488 [illegible]

TEXACO INC.
DENVER, COLORADO

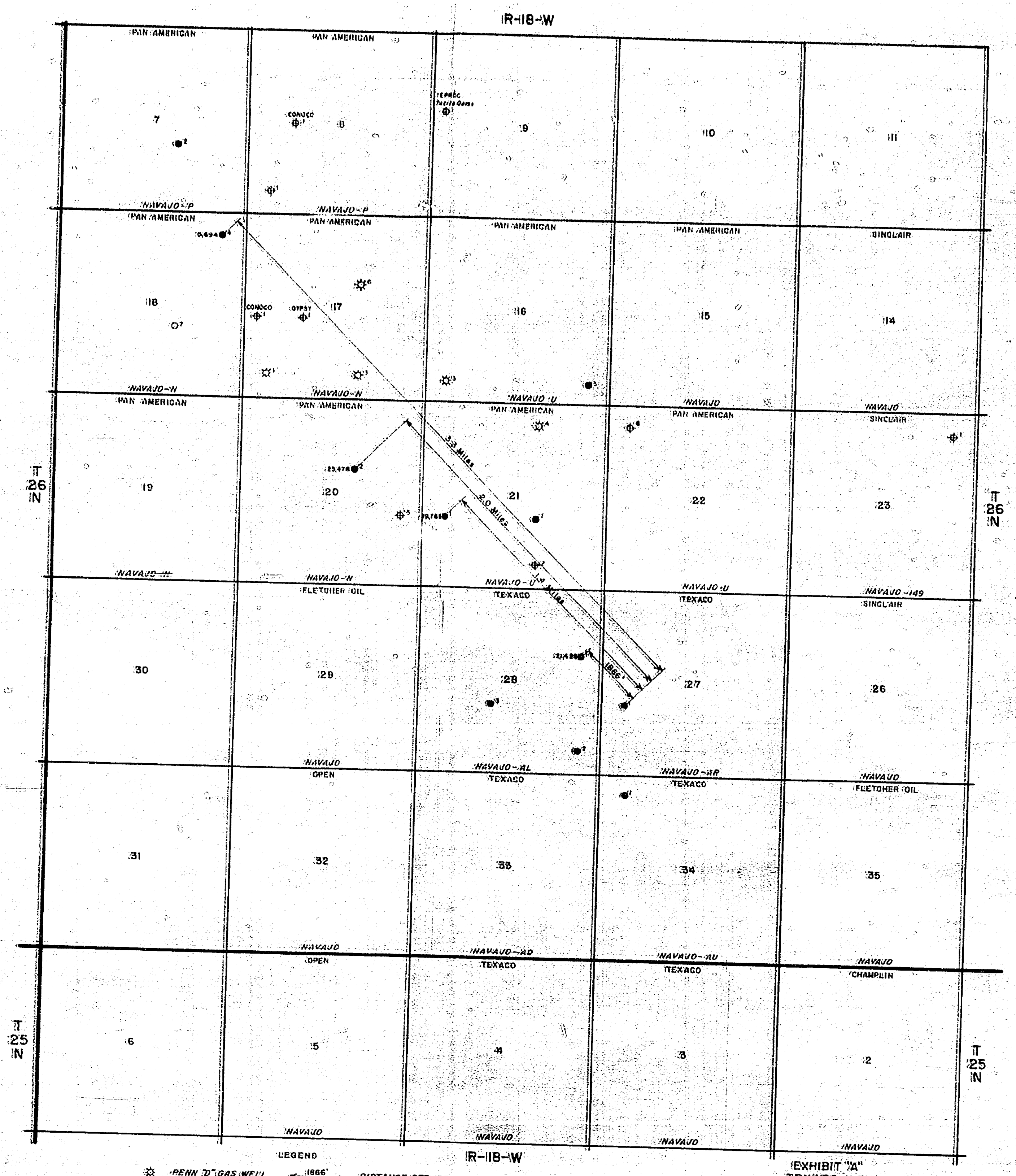
NW-SE STRUCTURAL CROSS SECTION
TOCITO DOME AREA

San Juan County, New Mexico

HORIZONTAL SCALE: 1"=1000'
VERTICAL SCALE: 1"=100'
JUNE 22, 1964

Exhibit "B"

V.R.M.C.F. MICROGRAPHICS
BEST AVAILABLE COPY


R-18-W
PAN AMERICAN
PAN AMERICAN
7
CONOCO
8
TEPROC Tocito Dome
9
10
11
NAVAJO-P
PAN AMERICAN
NAVAJO-P
PAN AMERICAN
PAN AMERICAN
PAN AMERICAN
SINCLAIR
18
CONOCO
GYPSY
17
16
15
14
NAVAJO-N
PAN AMERICAN
NAVAJO-N
PAN AMERICAN
NAVAJO-U
PAN AMERICAN
NAVAJO
PAN AMERICAN
NAVAJO
SINCLAIR
T 26 N
19
20
21
22
23
T 26 N
3.3 Miles
2.0 Miles
1.4 Miles
1866'
NAVAJO-N
NAVAJO-N
FLETCHER OIL
NAVAJO-U
TEXACO
NAVAJO-U
TEXACO
NAVAJO-149
SINCLAIR
30
29
28
27
26
NAVAJO
OPEN
NAVAJO-AL
TEXACO
NAVAJO-AR
TEXACO
NAVAJO
FLETCHER OIL
31
32
33
34
35
NAVAJO
OPEN
NAVAJO-AD
TEXACO
NAVAJO-AU
TEXACO
NAVAJO
CHAMPLIN
T 25 N
6
5
4
3
2
T 25 N
NAVAJO
NAVAJO
NAVAJO
NAVAJO
R-18-W

LEGEND

☼ PENN "D" GAS WELL

● PENN "D" OIL WELL

⊕ DRY HOLE

○ LOCATION

←1866'→ DISTANCE BETWEEN WELLS

Barrels Cumulative Oil Prod. at Time Texaco AR No 1 Completed → 21,425●1 WELL NUMBER

Case 3073

EXHIBIT "A"
TEXACO INC.
DENVER, COLORADO
FIELD MAP
TOCITO DOME
SAN JUAN COUNTY, NEW MEXICO
SCALE 1"=2000' 7-19-65

N.M.O.C.C. MICROGRAPHICS

BEST AVAILABLE COPY