

Date

WATER INJECTIVITY TEST
 LOWER GALLUP SAND
 Douthit "B" #3, NW SE Section 20-24N-13W
San Juan County, New Mexico

<u>Injection Pressure, psig</u>	<u>Injectivity Rate, BWPM</u>	<u>Injectivity Rate, BWPD</u>
600	1.3	1,872
750	6.1	8,784
910	9.2	13,248
1200	6.7	<u> </u>

BHP at 1300' datum = 1,477 psig

NW SE 20 24 13

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

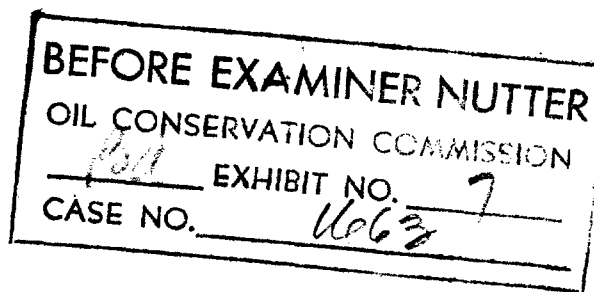
BA EXHIBIT NO. 8

CASE NO. 1663

CHEMICAL ANALYSIS OF
BRITISH-AMERICAN'S DOUTHIT WATER SUPPLY WELL #2
1440' FEL, 2200' FSL, Section 28-26N-13W
San Juan County, New Mexico

Total dissolved solids	3240 ppm
Sodium	937
Iron	11
Barium	0
Calcium	31
Magnesium	6
Chlorides	150
Bicarbonates	1165
Sulphates	940
Hydrogen Sulphides	13.6
Carbon Dioxide	12
Oxygen	0
 Precipitated solids	 217
Ferrous Sulphides	24.7
Calcium Carbonates	12.4
Silica	163.5
Organic	16.5
SG	1.004
γ_{H_2O}	8.1

In a closed system this supply water from the Cliff House-Merfee sands would be compatible with Gallup sand produced water and would have no detrimental effect upon the formation.

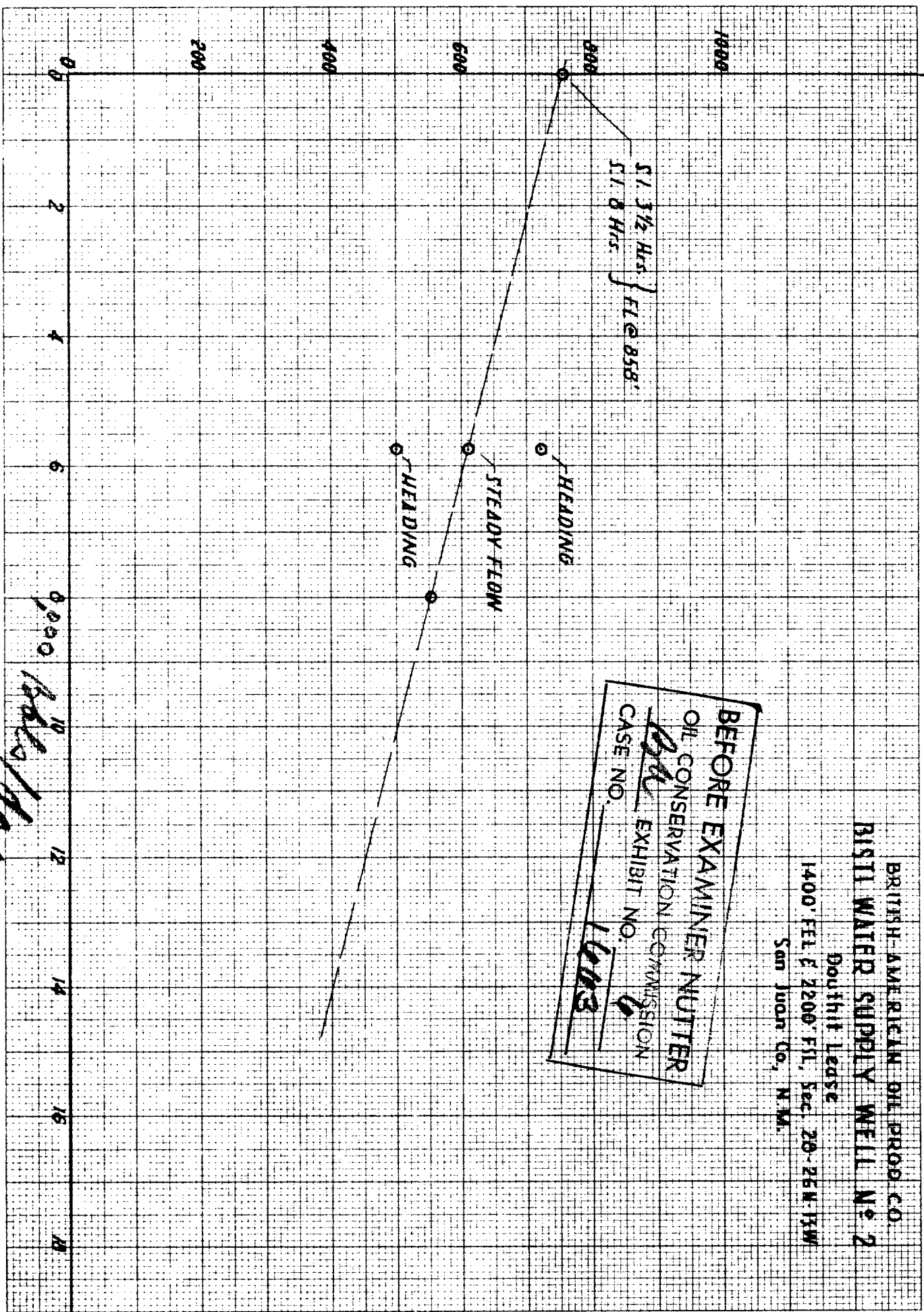




BRITISH-AMERICAN OIL PROD. CO.
BIG 11 WATER SUPPLY WELL No 2

Douhit Lease
1400' FEL. F. 2200' FIL, Sec. 20-25 N. 13W
San Juan Co., N.M.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
CASE NO. 14113
EXHIBIT NO. 10

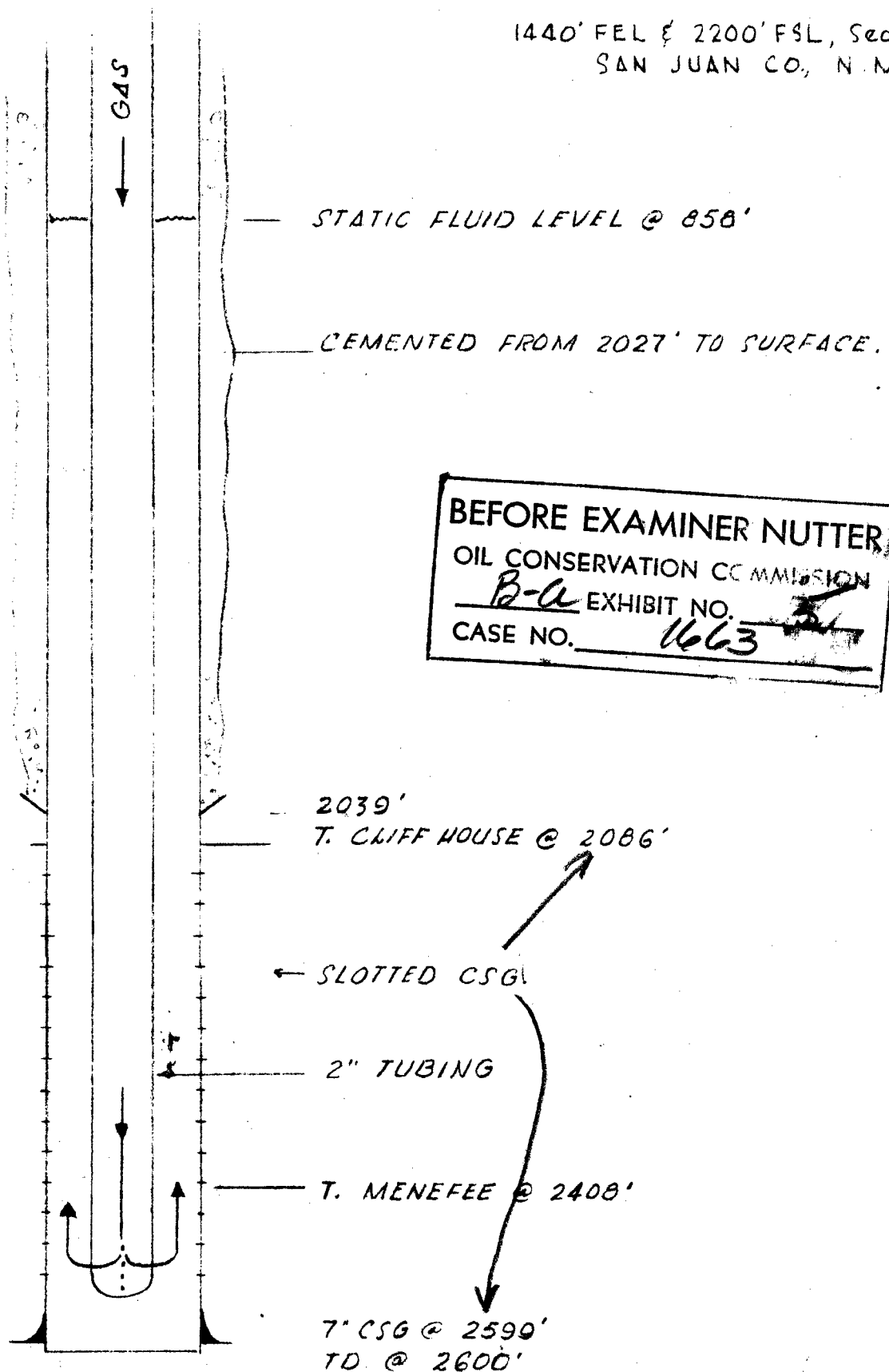


BW X 10³

*1000
1000/Day*

BRITISH-AMERICAN
DOUTHIT WATER SUPPLY WELL
NO. 2

1440' FEL & 2200' FSL, Sec. 28-2GN-13W
SAN JUAN CO., N.M.



LAW OFFICES OF
MODRALL, SEYMOUR, SPERLING, ROEHL & HARRIS

5111
SIMMS BUILDING

P. O. BOX 466

ALBUQUERQUE, NEW MEXICO

TELEPHONE CHAPEL 3-4514

JOHN F. SIMMS (1885-1954)

J. R. MODRALL
AUGUSTUS T. SEYMOUR
JAMES E. SPERLING
JOSEPH E. ROEHL
GEORGE T. HARRIS
DANIEL A. SISK
DEAN P. KIMBALL
LELAND S. SEDBERRY
BURNS H. ERREBO
ALLEN C. DEWEY

May 14, 1959

File
↓

Oil Conservation Commission
Mabry Hall
State Capitol
Santa Fe, New Mexico

Attention: Mr. Daniel S. Nutter

Re: Case No. 1663

Gentlemen:

Pursuant to your request at the hearing on the above matter, I am enclosing a written statement of The British-American Oil Producing Company, to be made a part of the record, wherein British-American agrees to injection of water into the entire perforated Lower Gallup sand in its Marye Nos. 2 and 5 instead of injection into the upper zone only as proposed at the hearing.

Very truly yours,

Burns H. Errebo

Burns H. Errebo

BHE:mbf
cc: Mr. George W. Murphy
The British-American
Oil Producing Company

(Enclosure)

THE BRITISH-AMERICAN OIL PRODUCING COMPANY

DENVER CLUB BUILDING

DENVER 1, COLORADO

PRODUCTION & ENGINEERING DEPT.

May 13, 1959

ADDRESS ALL CORRESPONDENCE TO
POST OFFICE BOX 180

New Mexico Oil and Gas Conservation Commission
107 Mabry Hall, Capitol Building
Santa Fe, New Mexico

Attention of Mr. D. S. Nutter

Re: British-American's Application To
Form a Barrier System Between The
Central Bisti Unit and Proposed
West Bisti Unit, Case Number 1663

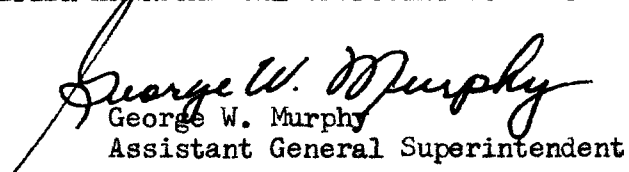
Gentlemen:

In our hearing before you on May 12, 1959, we requested authority to set a bridge plug in our Marye #2 and Marye #5 wells located in NE NE Section 12 and NE SE Section 1-T25N-R13W. These two wells will be converted to water injection wells. In our testimony, we requested authority to set a bridge plug below zone #1 of the lower Gallup sand thus eliminating zone #2 and zone #3 from water injection. Our opinion was that zone #2 and zone #3 contributed very little to primary production in the West Bisti Unit and was not developed west of the barrier.

In Sunray's application requesting authority to set up the barrier system, Case Number 1664, they requested authority to inject water into the entire lower Gallup sand. Our attorney made a statement for British-American that we would not oppose Sunray's proposition to inject water into the lower Gallup sand. Therefore, in compliance with your request, we are herein making the statement for the record that British-American is agreeable to not setting bridge plugs in the two water injection wells and that British-American is agreeable to injecting water into the entire perforated lower Gallup sand.

Very truly yours,

THE BRITISH-AMERICAN OIL PRODUCING COMPANY


George W. Murphy
Assistant General Superintendent

WR/flc

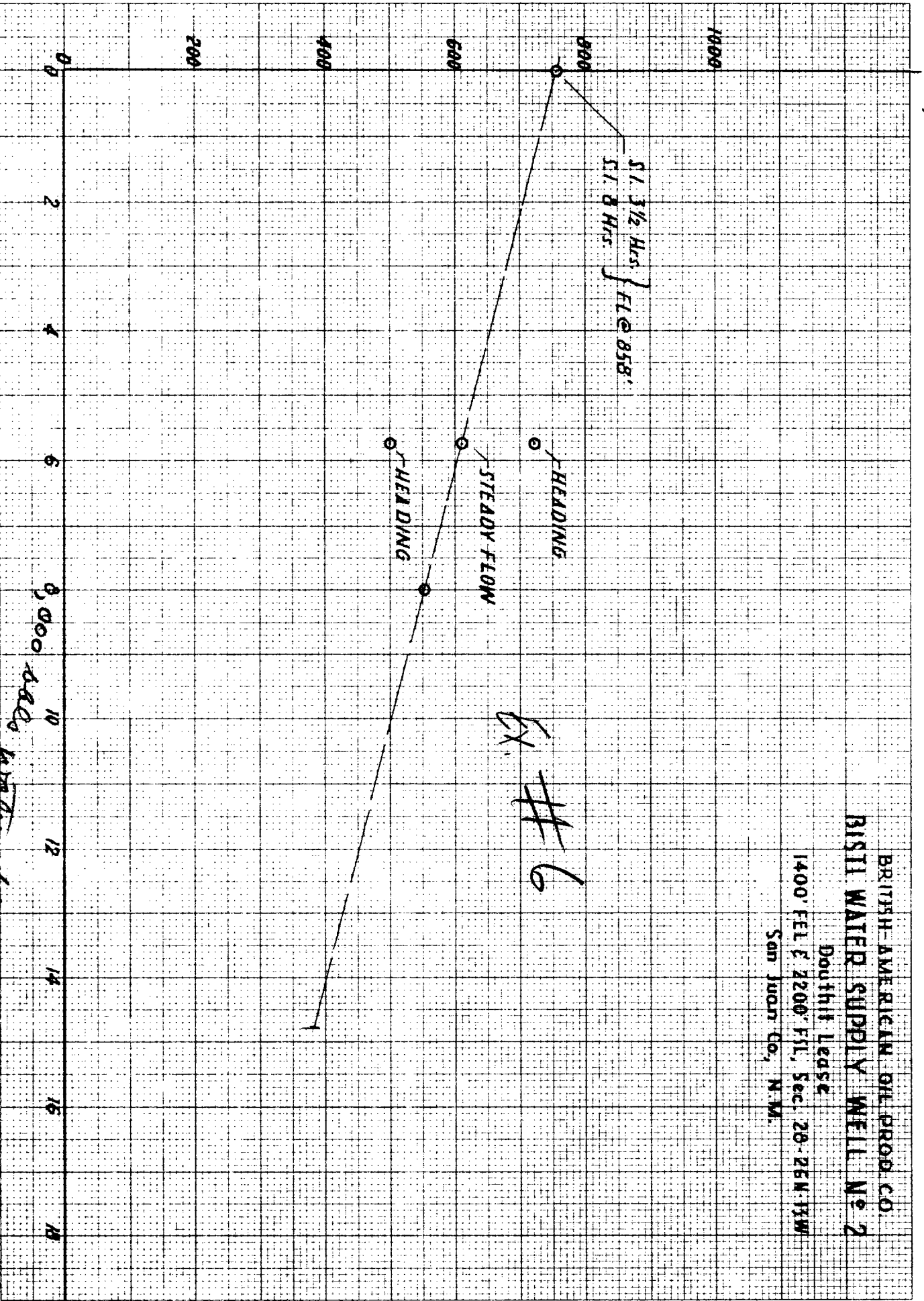
cc: Mr. F. A. Norris



BRITISH-AMERICAN OIL PROD. CO.
BISH WATER SUPPLY WELL No. 2

Douglas Lease
1400' FEL & 2200' FIL, Sec. 20-26N-13W
San Juan Co., N.M.

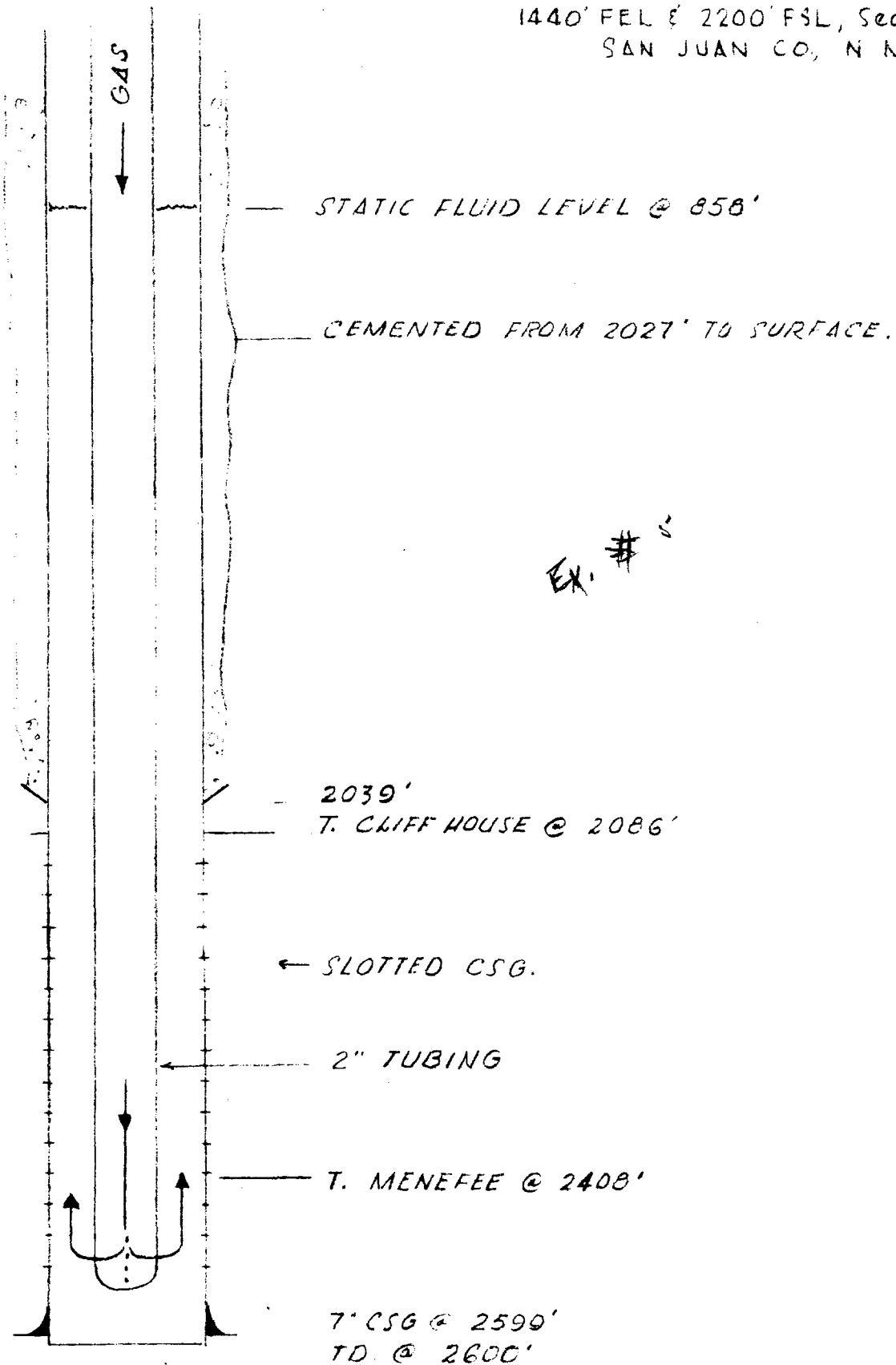
EX. # 6



BW x 10³

BRITISH-AMERICAN
DOUTHIT WATER SUPPLY WELL
NO. 2.

1440' FEL & 2200' FSL, Sec. 28-2GN-13W.
SAN JUAN CO., N.M.



BRITISH-AMERICAN

MARYE N^o 2

FL. 6256' GL

NE NE Sec. 12-25N-13W
SAN JUAN CO., N.M.

9 5/8" CSG @ 230' KB

cut to surf

TOC @ 4375'

*18' perf
10.7' microlayer pay*

GOR 3-1-59 TEST

22-B0 C-BW 1715/1

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

BA EXHIBIT NO. *2*

CASE NO. *1663*

T. GALLUP SD. # 4848'

upper bench

Perf. 4858'-4876'

5 1/2" M-L ZONE #1.

FRAC'D w/30,000# & 50,000 GAL.

12-5-58

Perf. 4880'-4898'

Perf. 4902'-4916'

FRAC'D w/30,000# & 20,000 GAL.

5-15-58

3rd bench

Perf. 4922'-4964'

4-80 g./ft. 4-30-58.

FRAC'D w/20,000# & 20,000 GAL.

*presently
pumped.*

PRD. @ 4970'

5 1/2" CSG. @ 4980'

T.D. @ 4982'

cut

BRITISH-AMERICAN
MARYE No 5

EL. 6207' GL
NE SE Sec. 1 - 25N-13W
SAN JUAN CO., N.M.

SONOLOG 5-1-59
BHP @ 1300' Datum - 835'
FL @ 4814'
CP = 685'

9 5/8" CSG. @ 225' KB

TOC @ 4270'

20' perf
14.7 microlog

T. GALLUP SD. 4817'

upper bench
Perf. 4820-40. 7-8-56
(11' M-L ZONE #1)

Perf. 4850-81. 7-6-56
middle bench

Perf. 4888'-4914'. 7-3-56
FRAC'D. w/15,000#/15,000 GAL.

3rd bench

NOTE:

NOW PROD. TOP ALLOWABLE.

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

BA EXHIBIT NO. 3

CASE NO. 4663

PBD @ 5003'

5 1/2" CSG. @ 5030'

TD @ 5031'

BRITISH-AMERICAN
MARYE No 5

EL. 6207' GL
NE SE Sec. 1 - 25N-13W
SAN JUAN CO., N.M.

SONOLOG 5-1-59
BHP @ 1300' Datum - 835 #
FL @ 4814'
CP = 685 #

9 5/8" CSG @ 225' KB

TOC @ 4270'

type packer

T. GALLUP SD. 4817'

Perf. 4820-40. 7-8-56
(11' M-L ZONE #1)

Perf. 4850-81. 7-6-56

Perf. 4888'-4914'. 7-3-56
FRAC'D. w/15,000#/15,000 GAL.

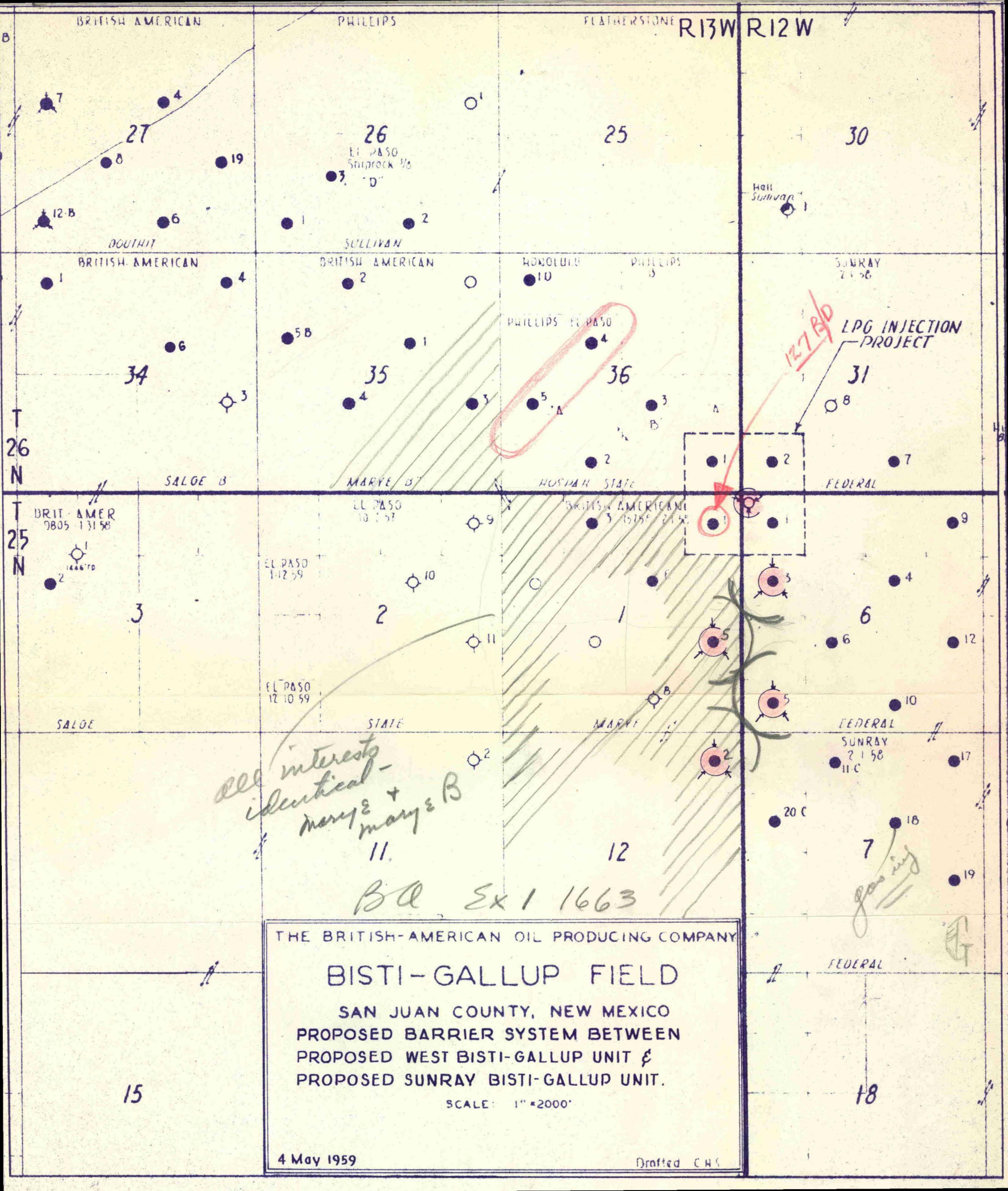
NOTE:

NOW PROD. TOP ALLOWABLE.

PBD @ 5003'

5 1/2" CSG @ 5030'
TD @ 5031'

3



BRITISH AMERICAN

PHILLIPS

FEATHERSTONE

R13W R12W

27

26

25

30

EL PASO
Shiprock 1/2
"D"

Hall
Sullivan

DOUTHIT

SULLIVAN

BRITISH AMERICAN

BRITISH AMERICAN

HONOLULU

PHILLIPS

SUNRAY

21 58

34

35

36

31

PHILLIPS EL PASO

LPG INJECTION
PROJECT

SALGE B

MARVE B

HOSHAR STATE

FEDERAL

BRIT AMER
9805 131 58

EL PASO
10 1 57

BRITISH AMERICAN
1515 21 58

EL PASO
11 2 59

EL PASO
12 10 59

SALGE

STATE

MARVE

FEDERAL

SUNRAY

21 58
H.C.

*all interests
identical -
Mary & Mary B
11.*

BA Ex 1 1663

gas in

THE BRITISH-AMERICAN OIL PRODUCING COMPANY

BISTI-GALLUP FIELD

SAN JUAN COUNTY, NEW MEXICO
PROPOSED BARRIER SYSTEM BETWEEN
PROPOSED WEST BISTI-GALLUP UNIT &
PROPOSED SUNRAY BISTI-GALLUP UNIT.

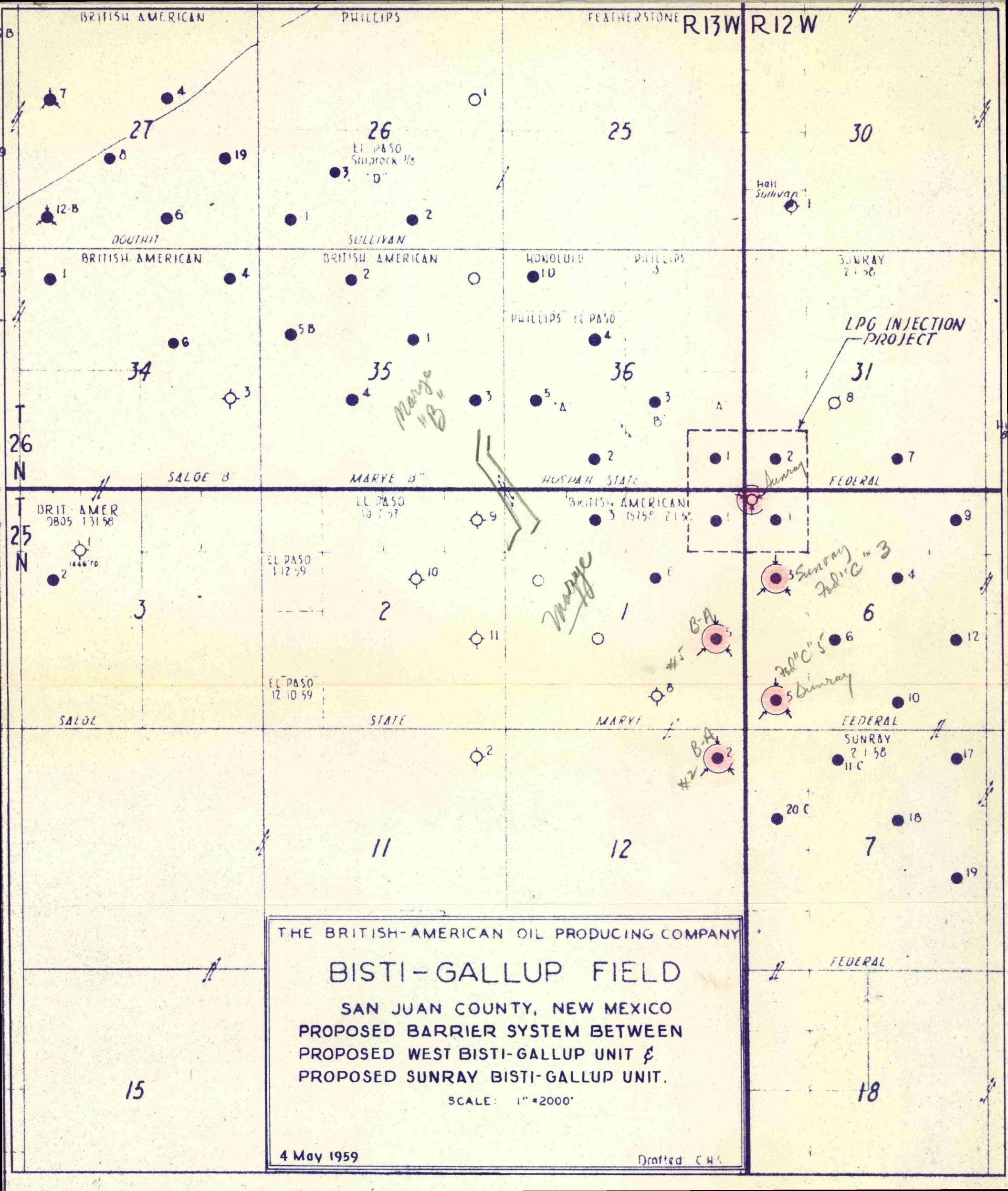
SCALE: 1" = 2000'

4 May 1959

Drafted CHS

15

18



THE BRITISH-AMERICAN OIL PRODUCING COMPANY

BISTI-GALLUP FIELD

SAN JUAN COUNTY, NEW MEXICO

PROPOSED BARRIER SYSTEM BETWEEN
PROPOSED WEST BISTI-GALLUP UNIT &
PROPOSED SUNRAY BISTI-GALLUP UNIT.

SCALE: 1" = 2000'

4 May 1959

Drafted C.H.S.

BRITISH-AMERICAN OIL PRODUCING CO.

INJECTION WELL HEAD ASSEMBLY

WATER BARRIER SYSTEM, BISTI-GALLUP FIELD

SAN JUAN COUNTY, NEW MEXICO

Prepared by: GBT

Date: 5-8-59

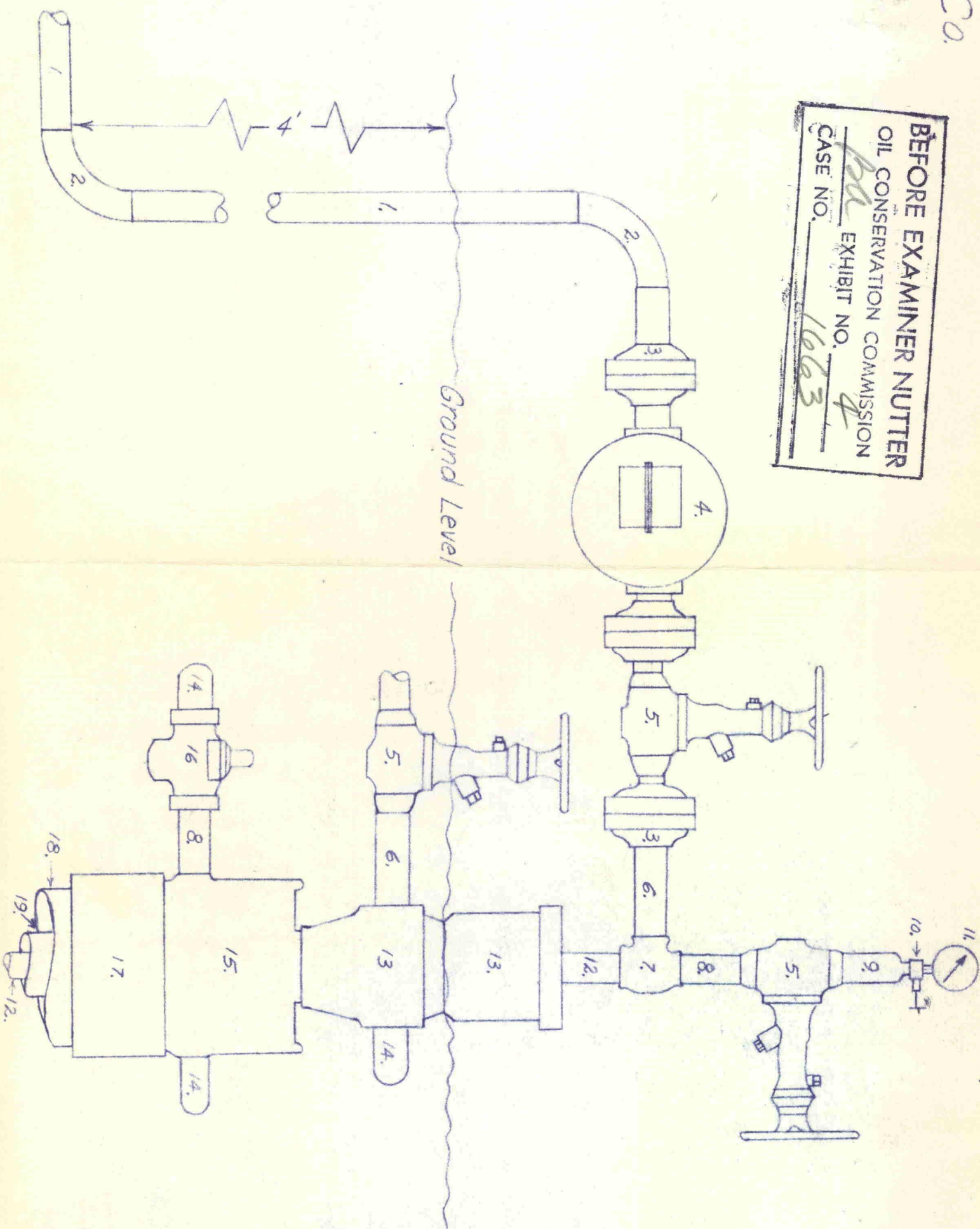
Checked by:

Scale: 1" = 10"

MATERIAL LIST

1. 2"-3.7" Line Pipe
2. 2" 90° Standard Welding Ells, 1500psi W.P.
3. 2" Welding Neck Companion Flange
4. 2" Floc Meter, Model F5H, 1500psi W.P.
5. 2" Orbit Valve, 1500psi WOG, W.P.
6. 2"x8" Thd. Nipple
7. 2" Tee, Extra Heavy
8. 2"x6" Thd. Nipple
9. 2"x½" Swage
10. ½" Needle Valve
11. Pressure Gauge, 1500psi x 4" dial
12. 2" EUE-4.7"-J55 Tubing
13. Norris-Hinderliter Tubing Head, 5½"x2", 4 inl, Model HM
14. 2" Bull Plug
15. Norris-Hinderliter Casing Head, 9½"x5½" Model YLS
16. 2" Nordstrom Plug Valve, 500psi WOG, W.P.
17. 9½" Combination Collar
18. 9½" ASW Casing
19. 5½"-14"-J55 Casing

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
CASE NO. <u>1663</u>	EXHIBIT NO. <u>4</u>



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE