



P. O. Box 1416
Roswell, New Mexico
July 26, 1967

N. M. O. C. C.
P. O. Box 2088
Santa Fe, New Mexico

Gentlemen:

Sunray DX Oil Company herewith requests administrative approval to convert the M. Dodd "A" #22 and the M. Dodd "B" Nos. 27, 28 and 29 to water injection service. These conversions are necessary for the expansion of the Metex Secondary Recovery Project approved by the Commission in Case No. 3343, Order No. R-3013, dated December 3rd, 1965. The subject wells are located in Sections 10, 11, and 14 of T-17-S, R-29-E, Eddy County, New Mexico.

In compliance with State Rule 701 E-5, the following data are submitted in triplicate.

- A. A plat of the area, showing proposed injection wells and location of other properties within the required radius of the project.
- B. Diagrammatic sketch of proposed injection well completion.
- C. Waterflood data containing pertinent information.
- D. Form C-116 indicating the producing capacity in the pilot producing well, M. Dodd "A" #16, prior and after pilot project.
- E. USGS Form 9-330 indicating the initial potential of Dodd "B" #17.
- F. Form C-116 indicating recent test of M. Dodd "B" #17.
- G. Logs are not available at this time.
- H. Address see list of operators in the area.

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July 26, 1967
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Previous expansions to the Metex Waterflood have been granted by Commission Orders NOS. WFX 254 and WFX 266.

In order to continue the development of the subject flood, it is felt that it is necessary to convert these wells to injection so that a thorough and efficient sweep of the reservoir is accomplished.

Yours truly,

SUNRAY DX OIL COMPANY

Don Harris for

John Hastings
District Engineer

JH/nsh

cc: State Engineer w/attachments
USGS - Artesia w/attachments
NMOCC - Artesia w/attachments
Off-set Operators as per addressee list - less attachments

SUNRAY DX OIL COMPANY

WATERFLOOD DATA

Lease: M. Dodd "A"

Field: Grayburg San Andres

Project: SDX Metex Waterflood Comm. Order No. R-3013

Well No.: 22

Location of well: 1980' FEL & 660' FSL, Sec. 14, T-17-S, R-29-E

Date well completed: Not drilled at this time

Present status of well:

Present producing formation: To be completed in Metex

Present producing interval: 2450 - 2475

Proposed status of well: Water Injection

Type of injection fluid: Fresh Water

Formation in which water is to be injected into: (Metex Zone) Grayburg

Top of formation: 2450 (Est.)

Bottom of formation: 2475 (Est.)

Proposed injection interval: 2450 - 75

Source of injection water: Yucca Water Co., Lovington, NEW Mexico

Anticipated volumes to be injected: 400 BPD

Anticipated injection pressure: 1000 PSIG

Maximum injection pressure: 1300 PSIG

Mailing address of Sunray DX District office which is responsible for this project: Sunray DX Oil Company, P. O. Box 1416, Roswell, N. Mex.

SUNRAY DX OIL COMPANY

WATERFLOOD DATA

Lease: M. Dodd "B"

Field: Square Lake

Project: SDX Metex Waterflood Comm. Order No. R-3013

Well No.: 27

Location of well: 1980' FSL and 660' FWL, Sec. 11, T-17-S, R-29-E

Date well completed: Not drilled yet

Present status of well:

Present producing formation: To be completed in Metex

Present producing interval:

Proposed status of well: Water Injection

Type of injection fluid: Fresh Water

Formation in which water is to be injected into: (Metex Zone) Grayburg Formation

Top of formation: 2450

Bottom of formation: 2475

Proposed injection interval: 2450-2475

Source of injection water: Purchased from Yucca Water Co., Lovington, New Mexico

Anticipated volumes to be injected: 300 BPD

Anticipated injection pressure: 1000 PSIG

Maximum injection pressure: 1300 PSIG

Mailing address of Sunray DX District office which is responsible for this project: Sunray DX Oil Company, P. O. Box 1416, Roswell, N. Mex.

SUNRAY DX OIL COMPANY

WATERFLOOD DATA

Lease: M. Dodd "B"

Field: Square Lake

Project: SDX Metex Water Flood Comm. Order No. R-3013

Well No.: 28

Location of well: 1980' FS & E, Sec. 10, T-17-S, R-29-E

Date well completed: Not drilled at this time

Present status of well:

Present producing formation: To be completed in Metex

Present producing interval: 2450-75 (Est.)

Proposed status of well: Injection

Type of injection fluid: Fresh Water

Formation in which water is to be injected into: (Metex Zone) Grayburg

Top of formation: 2450 (Est.)

Bottom of formation: 2475 (Est.)

Proposed injection interval: 2450 - 2475

Source of injection water: Yucca Water Company, Lovington, New Mexico

Anticipated volumes to be injected: 400 BPD

Anticipated injection pressure: 1000 PSIG

Maximum injection pressure: 1300 PSIG

Mailing address of Sunray DX District office which is responsible for this project: Sunray DX Oil Company, P. O. Box 1416, Roswell, N. Mex.

SUNRAY DX OIL COMPANY

WATERFLOOD DATA

Lease: M.Dodd "B"

Field: Square Lake

Project: SDX Metex Water Flood Project - Comm. No. R-3013

Well No.: 29

Location of well: 1980' FNL, 660 FEL, Sec. 10, T-17-S, R-29-E

Date well completed: Not completed at this time

Present status of well:

Present producing formation: Will be completed in Metex

Present producing interval: 2450 - 75 (EST.)

Proposed status of well: Water Injection

Type of injection fluid: Fresh Water

Formation in which water is to be injected into: (Metex Zone) Grayburg

Top of formation: 2450 (Est.)

Bottom of formation: 2475 (Est.)

Proposed injection interval: 2450 - 75

Source of injection water: Yucca Water Co., Lovington, New Mexico

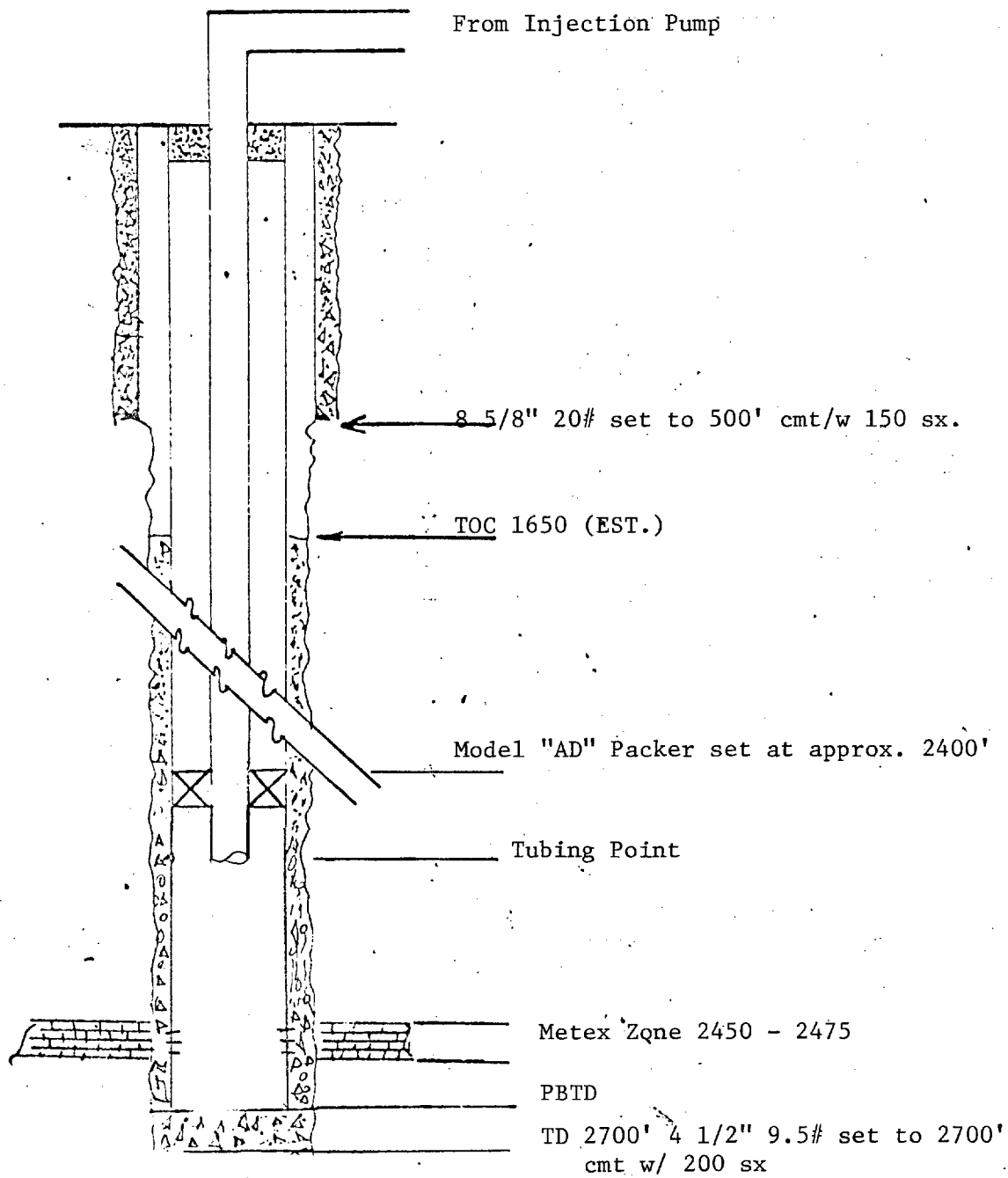
Anticipated volumes to be injected: 400 BPD

Anticipated injection pressure: 1000 PSIG

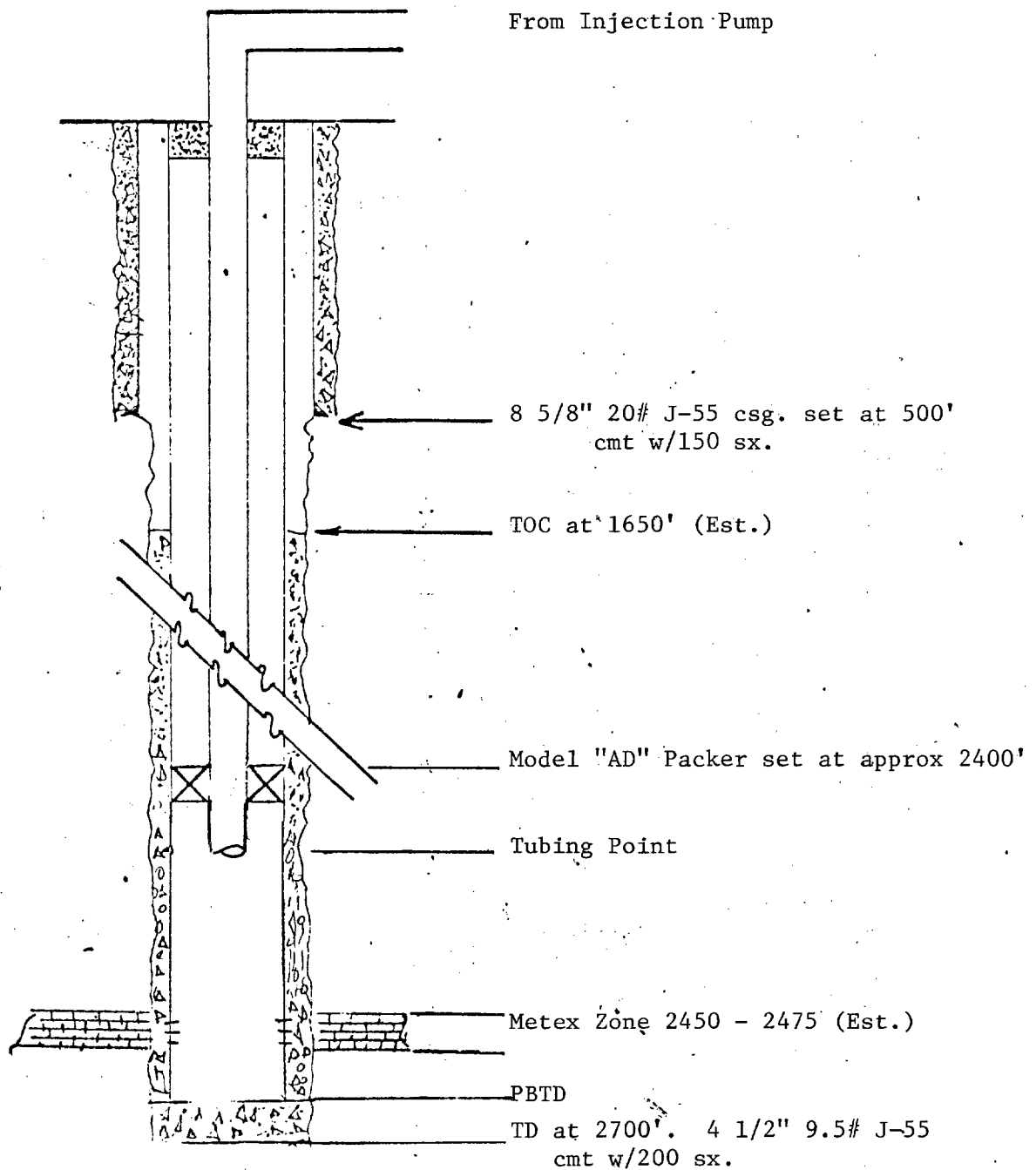
Maximum injection pressure: 1300 PSIG

Mailing address of Sunray DX District office which is responsible for this project: Sunray DX Oil Company, P. O. Box 1416, Roswell, N. Mex.

M. Dodd "A" #22
1980' FEL & 660' FSL
Sec. 14, T-17-S, R-29-E



M. Dodd "B" #27 (Proposed)
1980' FSL & 660' FWL
Sec. 11, T-17-S, R-29-E
Eddy County, New Mexico

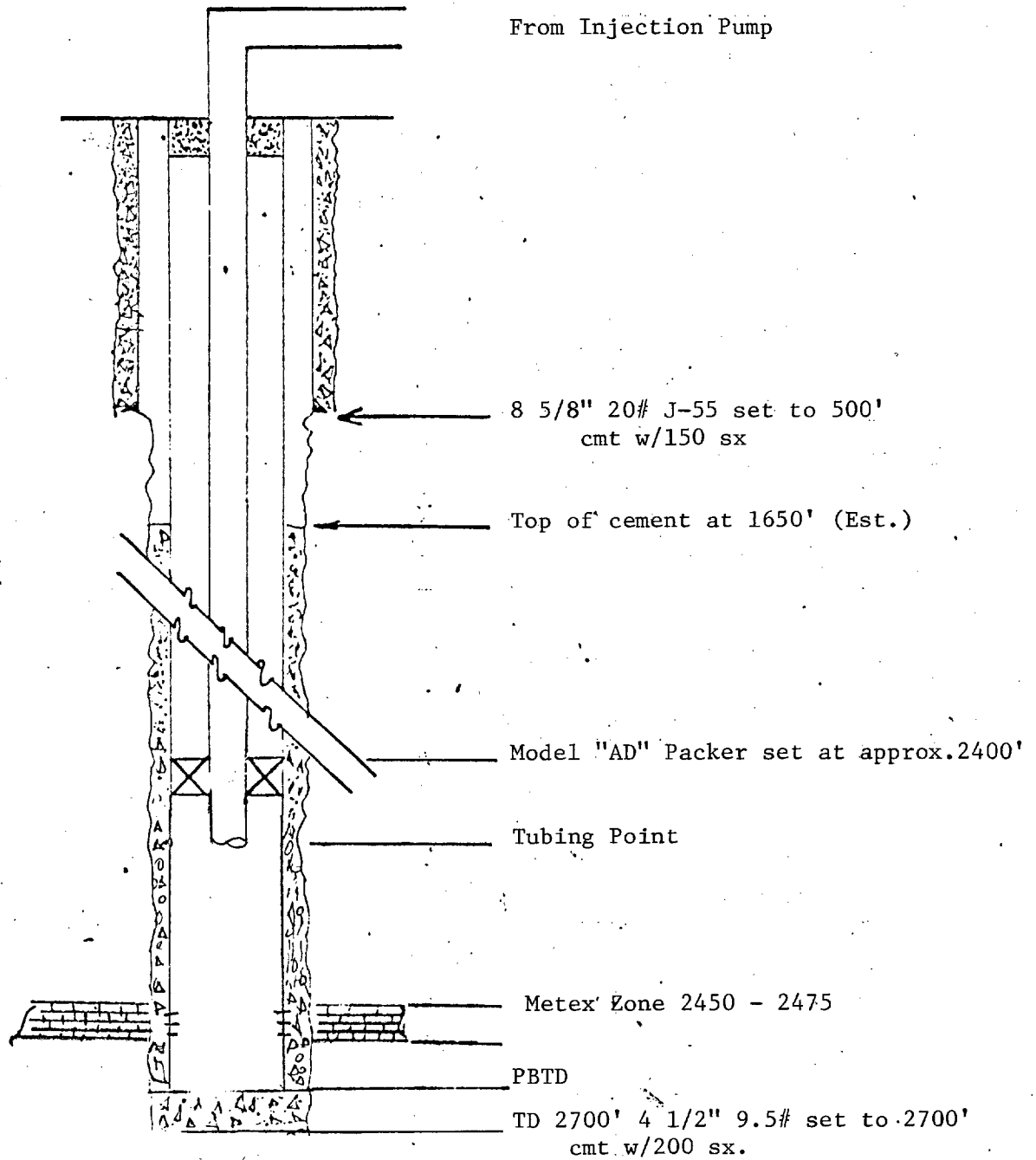


M. Dodd "B" #28

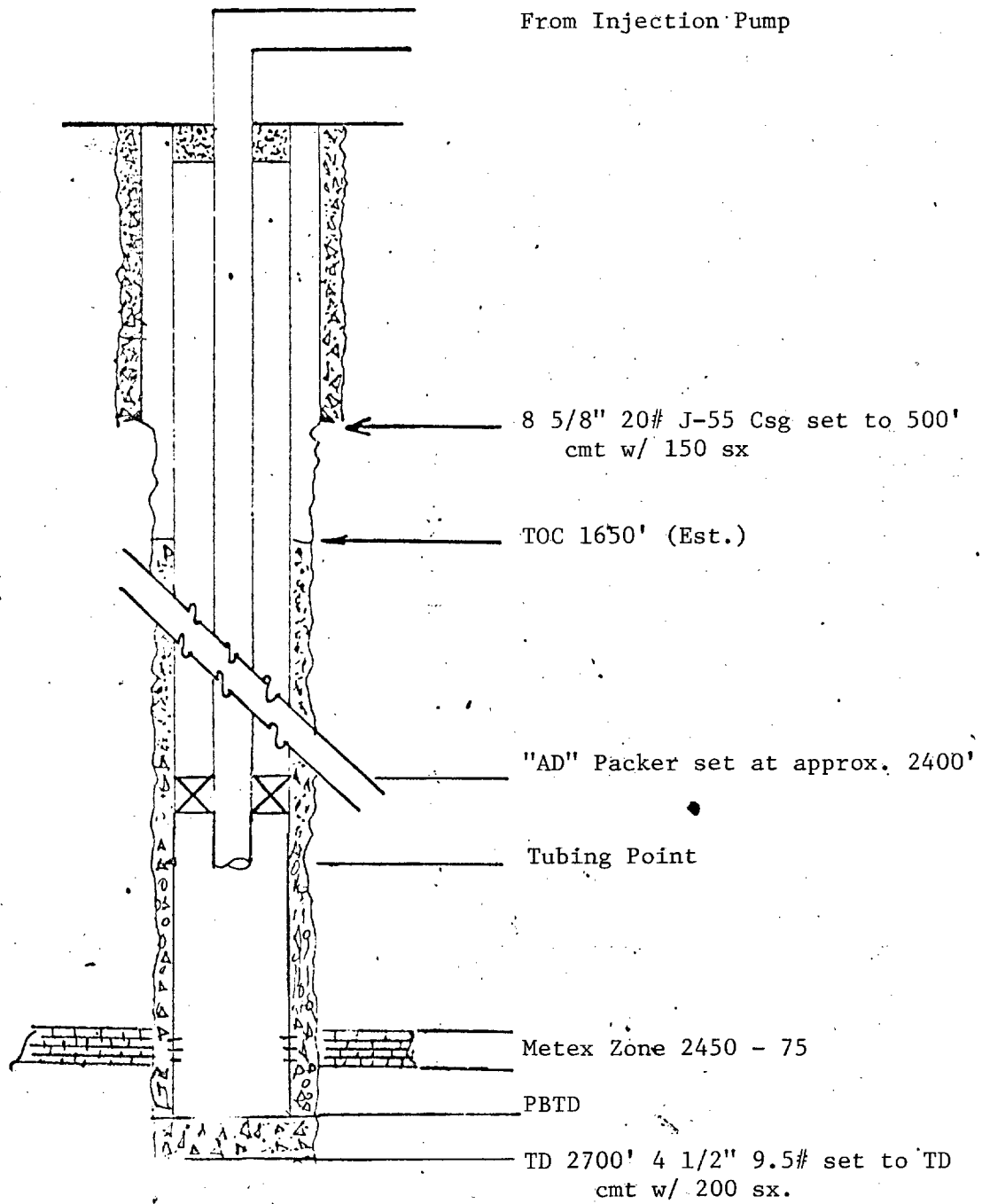
1980' FSL & 1980' FEL

Sec. 10, T-17-S, R-29-E

Eddy County, New Mexico



M. Dodd "B" #29
1980' FNL & 660' FEL
Sec. 10 T-17-S, R-29-E



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

5. LEASE DESIGNATION AND SERIAL NO.

C28731-B

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

M. Dodd "B"

9. WELL NO.

17

10. FIELD AND POOL, OR WILDCAT

Squaw Lake

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 14, T-17-S, R-29E

12. COUNTY OR PARISH

Eddy

13. STATE

New Mexico

1a. TYPE OF WELL:

OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

2. NAME OF OPERATOR

Surrey Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 1416, Roswell, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

1-29-67

16. DATE T.D. REACHED

2-2-67

17. DATE COMPL. (Ready to prod.)

2-16-67

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

3602 DF

19. ELEV. CASINGHEAD

3590

20. TOTAL DEPTH, MD & TVD

2700

21. PLUG, BACK T.D., MD & TVD

2700

22. IF MULTIPLE COMPL., HOW MANY*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

Matco 2436-46

25. WAS DIRECTIONAL SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR-Density

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	24.0	493	11"	250 SK REP.	
4 1/2"	9.50	2700	7 7/8"	250 SK INCOR REP.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2" EUE	2450	

31. PERFORATION RECORD (Interval, size and number)

1/Fr. 2436-46 Matco

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2436-46	500 gal BDA
2436-46	30,000 gal refined oil
	60,000 sand

33. PRODUCTION

DATE FIRST PRODUCTION 2-16-67		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pump				WELL STATUS (Producing or Shut-in) Producing	
DATE OF TEST 2-16-67	HOURS TESTED 24	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL. 72	GAS—MCF. 57.8	WATER—BBL. 2	GAS-OIL RATIO 603
FLOW, TUBING PRESS. P	CASING PRESSURE -	CALCULATED 24-HOUR RATE →	OIL—BBL. 72	GAS—MCF. 57.8	WATER—BBL. 2	OIL GRAVITY-API (CORR.) 36	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Sold

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Gamma Ray-Density Log

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

C.T. McClanahan

TITLE

Dist. Production Manager

DATE

2-20-67

*(See Instructions and Spaces for Additional Data on Reverse Side)

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Sunray DX Oil Company		Pool Square Lake		County Eddy											
Address P. O. Box 1416, Roswell, New Mexico				Type of Test - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/>											
LEASE NAME M. Dodd "B"				Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>											
WELL NO.	LOCATION				DATE OF TEST	STATES	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BBL.
	U	S	T	R							WATER BBL.S.	GRAV. OIL BBL.S.	GAS M.C.F.		
17	E	14	17S		3-7-67	P	-	-	50	24	20	36	75	94	1250
<p>NOTE:</p> <p>The above test indicates waterflood response on this well. This well is the center producing well of the 5-spot pattern resulting from conversion of the M. Dodd "B" No. 7 and 8 as authorized by Order WFX No. 254.</p> <p align="center">FOR USE AS EXHIBIT ONLY.</p>															

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

John B. Hastings
 (Signature)
 District Engineer
March 9, 1967
 (Date)

C-116
Revised 1-1-65

(Date)

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS - OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Sunray DX Oil Company		Pool Grayburg Jackson		County Eddy										
Address P. O. Box 1416, Roswell, New Mexico				TYPE OF TEST - (X)	Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION U S T R		DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLs. GRAV. OIL BBLs. GAS M.C.F.		GAS - OIL RATIO CU.FT/BBL			
M. Dodd "A"	16	A	15	17S 29E	3-3-65	P	-	3	24	0	36	3	5.2	1733
<p>NOTE:</p> <p>The above test was taken prior to waterflood response on this well. This well is the center pilot producing well in the SDX Metex Waterflood, Commission Order No. R-3013.</p> <p align="center">FOR USE AS EXHIBIT ONLY.</p>														

No well will be assigned an allowable greater than the amount of oil produced on the official test.
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

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Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

John B. Hastings
(Signature)
District Engineer

(Title)
March 8, 1967

(Date)

ADDRESSEE LIST

Dodd "A" & "B" Waterflood Project

<u>OPERATOR</u>	<u>ADDRESS</u>
Ambassador Oil Co.	200 Petr. Bldg., Abilene, Texas
Bassett and Birney	323 Carper Bldg., Artesia, N. M.
Collier Oils Inc.	P. O. Box 3988, Odessa, Texas
Continental Oil Co.	P. O. Box 460, Hobbs, N. M.
El Paso Nat. Gas Prod.	P. O. Box 3986, Odessa, Texas
Fair Oil Co.	P. O. Box 5445, Midland, Texas
O. F. Featherstone	236 Petr. Bldg., Roswell, N. M.
Gen. Amer. Oil Co.	P. O. Box 416, Loco Hills, N. M.
Gulf Oil Co.	P. O. Box 670, Hobbs, N. M.
International Oil & Gas	P. O. Box 427, Artesia, N. M.
E. J. McCurdy	1813 Clayton, Artesia, N. M.
Nearburg & Ingram	P. O. Box 1757, Roswell, N. M.
Newmont Oil Co.	Rowley Bldg., Artesia, N. M.
Sinclair Oil	P. O. Box 1920, Hobbs, N.M.
Skelly Oil Co.	P. O. Box 730, Hobbs, N. M.
Tenneco Oil Co.	18th Floor, Wilco Bldg., Midland, Texas
Texaco, Inc.	P. O. Box 728, Hobbs, New Mexico
Yates Petr. Corp.	309 Carper Bldg., Artesia, N. M.
Tom Boyd Drilling Co.	501 West Texas, Artesia, N. M.

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