BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION
APPLICATION FOR ADMINISTRATIVE APPROVAL
CHARLES B. GILLESPIE, JR.
FOR WATER DISPOSAL
THE
CHARLES B. GILLESPIE, JR. STATE "D" WELL NO. 3
Located 3000' FWL 330' FWL Sec. 1-T16S-R35E
Lea County, New Mexico

T A B L E O F C O N T E N T S

ENERGY AND MINERALS DEPARTMENT

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no

II. Operator: Charles B. Gillespie, Jr.

Address: P.O. Box 8, Midland, Texas 79702

Contact party: David Hastings Phone: (915) 683-1765

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, method of completion, and a schematic of any plugged well illustrating all plugging detail.

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OIL CONSERVATION DIVISION
SANTA FE

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: David Hastings Title Engineer

Signature: David Hastings Date: 3/12/84

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;

(3) the formation name and depth with expected maximum injection rates and pressures; and

(4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

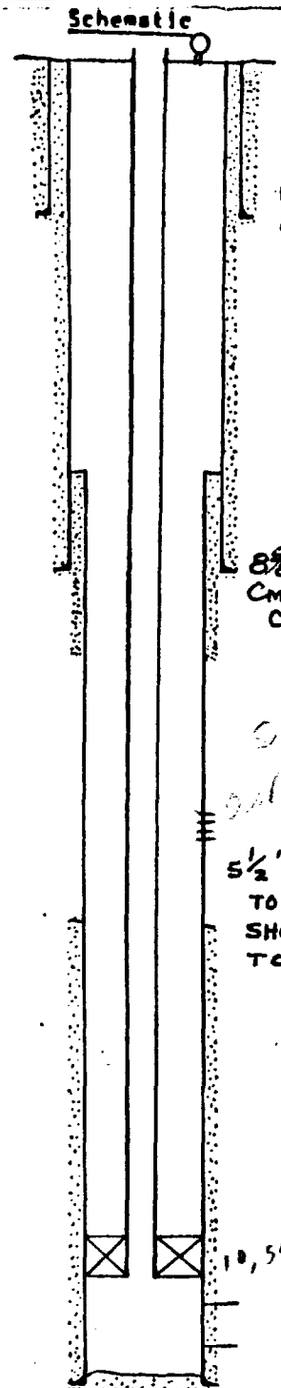
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

Case 8247

OPERATOR	LEASE			
Charles B. Gillespie, Jr.	State D			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
3	3000' FSL and 330' FWL	1	16S	35E

Schematic



Tabular Data

Surface Casing

Size 13 3/8" Cemented with 350 sx.

TOC Surface feet determined by cement circulated

Hole size 17½"

Intermediate Casing

Size 8 5/8" Cemented with 2400 sx.

TOC Surface feet determined by cement circulated

Hole size 11"

Long string

Size 5 1/2" Cemented with 600 sx.

TOC 6210' feet determined by temp. survey

Hole size 7 7/8"

Total depth 10615

Injection interval

10546 feet to 10598 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8" lined with plastic coating (material) set in a 5½ Baker Lock-Set (brand and model) packer at 10500 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Townsend Wolfcamp (Permo-Upper Penn)

2. Name of Field or Pool (if applicable) Townsend Wolfcamp (Permo-Upper Penn)

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? oil and gas production (Attachment C-108 III)

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) 12/26/68 Guiberson Model "A" with plug was set @ 10363 and 20 sx cement spotted on top. 5½ casing perforated from 6010-6040 w/ 4 holes per foot. Packer set at 4438'.

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No overlying production. No production other than Townsend Wolfcamp.

Insert

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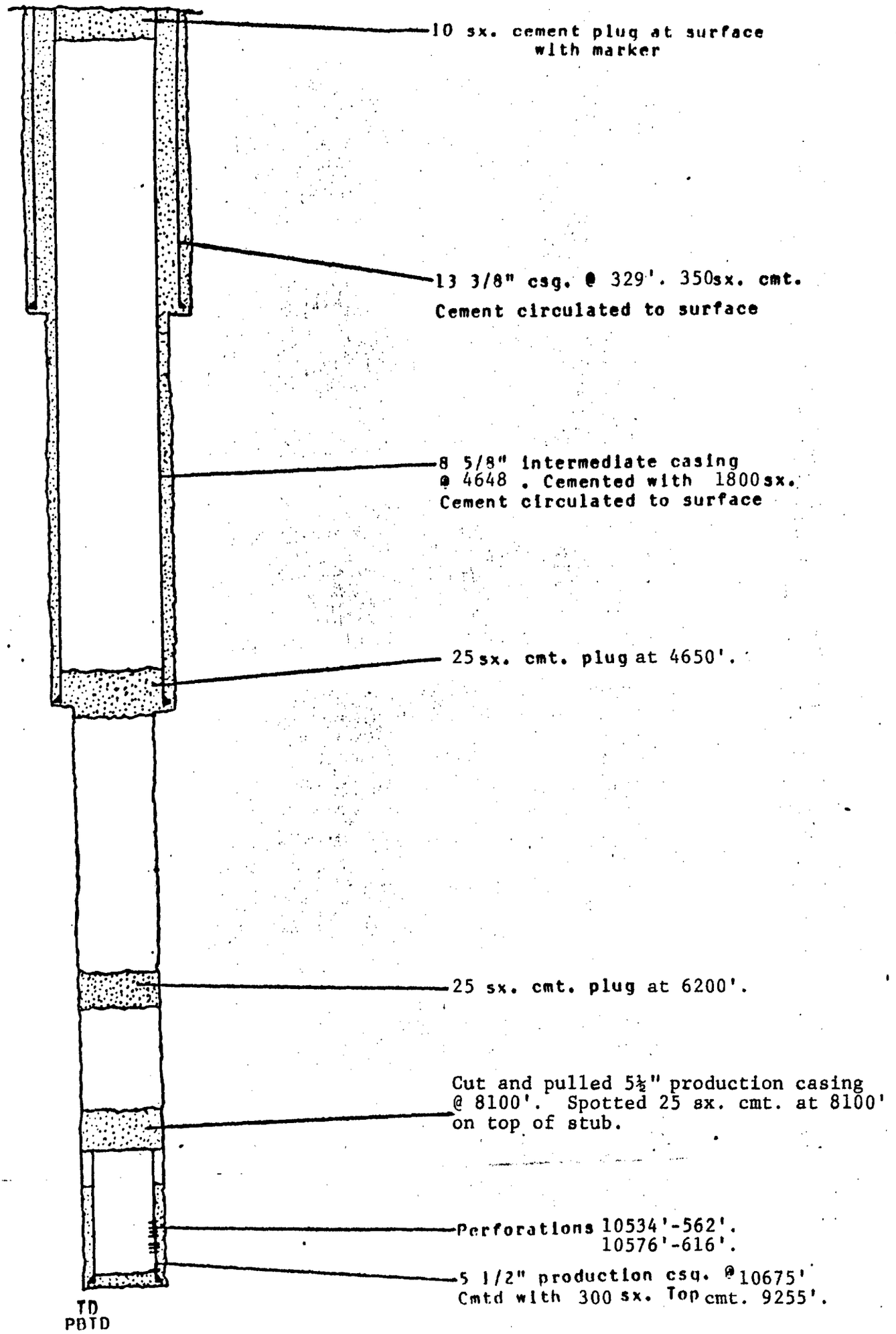
OPERATOR, LEASE NAME AND WELL NUMBER	LOCATION	CASING AND CEMENT			PERFORATIONS	POTENTIAL	CURRENT STATUS
		SURFACE	INTERMEDIATE	PRODUCTION			
Charles B. Gillespie, Jr. State D Well No. 1	990' FSL 330' FWL 1-16S-35E	13 3/8 @ 291' 350 sx cmt. Cmt. circ.	8 5/8 @ 4657' 2400 sx cmt. Cmt. circ.	5 1/2 @ 10637' 600 sx cmt. T. cmt. 7585'	10545'-54' 10560'-617' 10270'-10279'	408 BO 0 BW 1-25-56	PBTD 10306' Currently producing approx. 6 BOPD
Charles B. Gillespie, Jr. State D Well No. 2	1980' FSL 330' FWL 1-16S-35E	13 3/8 @ 295' 350 sx cmt. Cmt. circ.	8 5/8 @ 4653' 2300 sx cmt. Cmt. circ.	5½" liner 4469'- 10633' 600sx cmt T. cmt. 7413'	10571'-10605' 10544'-10561'	216 BO 0 BW 3-25-56	PBTD 10580' Currently producing approx. 8 BOPD
Charles B. Gillespie, Jr. State D Well No. 3	3000' FSL 330' FWL 1-16S-35E	13 3/8 @ 309' 350 sx cmt. Cmt. circ.	8 5/8 @ 4649' 2400 sx cmt. Cmt. circ.	5½" liner 4519'- 10601' 600sx cmt T. cmt. 6210' T.liner sq. 1/60 w/ 200 sx cmt.	10546'-10598' 6010'-6040'	192 BO 0 BW 5-19-56	Proposed disposal well Currently disposal well San Andres
Charles B. Gillespie, Jr. State D Well No. 4	990' FSL 1650' FWL 1-16S-35E	13 3/8 @ 294' 350 sx cmt. Cmt. circ.	8 5/8 @ 4645' 2500 sx. cmt. Cmt. circ.	5½" liner 4515'- 10667' 400sx cmt T. cmt. 8488'	10614'-10639'	96 BO 0 BW 7-24-56	T.D. 10667 Now TA
Charles B. Gillespie, Jr. State D Well No. 5	1980' FSL 2301 FWL 1-16S-35E	13 3/8 @ 290' 350 sx. cmt. Cmt. circ.	8 5/8 @ 4639' 2400 sx. cmt. Cmt. circ.	5½" liner 4459'- 10667' 600sx cmt T. cmt. 6555'	10624'-10664'	228 BO 0 BW 9-9-56	PBTD 10642' Currently producing approx. 14 BOPD
Charles B. Gillespie, Jr. State D Well No. 6	2970' FSL 2300' FWL 1-16S-35E	13 3/8 @ 299' 325 sx. cmt. Cmt. circ.	8 5/8 @ 4650' 2400 sx. cmt. Cmt. circ.	5½" liner 4497'- 10662' 600sx cmt T. cmt 6125'	10585'-614' 10623'-638' 10542'-571'	240 BO 0 BW 11-2-56	PBTD 10672' Currently producing approx. 30 BOPD
Charles B. Gillespie, Jr. State D Well No. 7	4290' FSL 2310' FWL 1-16S-35E	13 3/8 @ 302' 325 sx. cmt. Cmt. circ.	8 5/8 @ 4647' 2500 sx. cmt. Cmt. circ.	5½" liner 4467'- 10666' 600sx cmt T. cmt. 6450'	10565'-10641'	132 BO 0 BW 1-4-57	T.D. 10668' Now TA
Shell Oil Company State TD Well No. 2	1980' FSL 1980' FEL 2-16S-35E	13 3/8 @ 329' 350 sx. cmt. Cmt. circ.	8 5/8 @ 4648' 1800 sx. cmt. Cmt. circ.	5½ @ 10675' 300 sx. cmt. T. cmt. 9255'	10534'-562' 10576'-616'	279 BO 0 BW 9-21-55	Now P & A. See attachment b 1
Gulf Oil Corporation State TD Well No. 3 (formerly Shell Oil Co.)	990' FSL 990' FEL 2-16S-35E	13 3/8 @ 359' 900 sx. cmt. Cmt. circ.	8 5/8 @ 4672' 1800 sx. cmt. Cmt. circ.	5½ @ 10652' 366 sx. cmt. Calc. top 8912'	10528'-542' 10558'-596'	438 BO 0 BW 11-9-55	PBTD 10614' Currently producing approx. 12 BOPD.
Shell Oil Company State TD Well No. 4	990' FEL 1980' FSL 2-16S-35E	13 3/8 @ 351' 400 sx. cmt. Cmt. circ.	8 5/8 @ 4674' 2150 sx. cmt. Cmt. circ.	5½ @ 10659' 360 sx. cmt. Calc. top 8945'	10580'-610'	297 BO 0 BW 9-21-55	Now P & A. See attachment b 2

Completed as producing
oil well September 1955

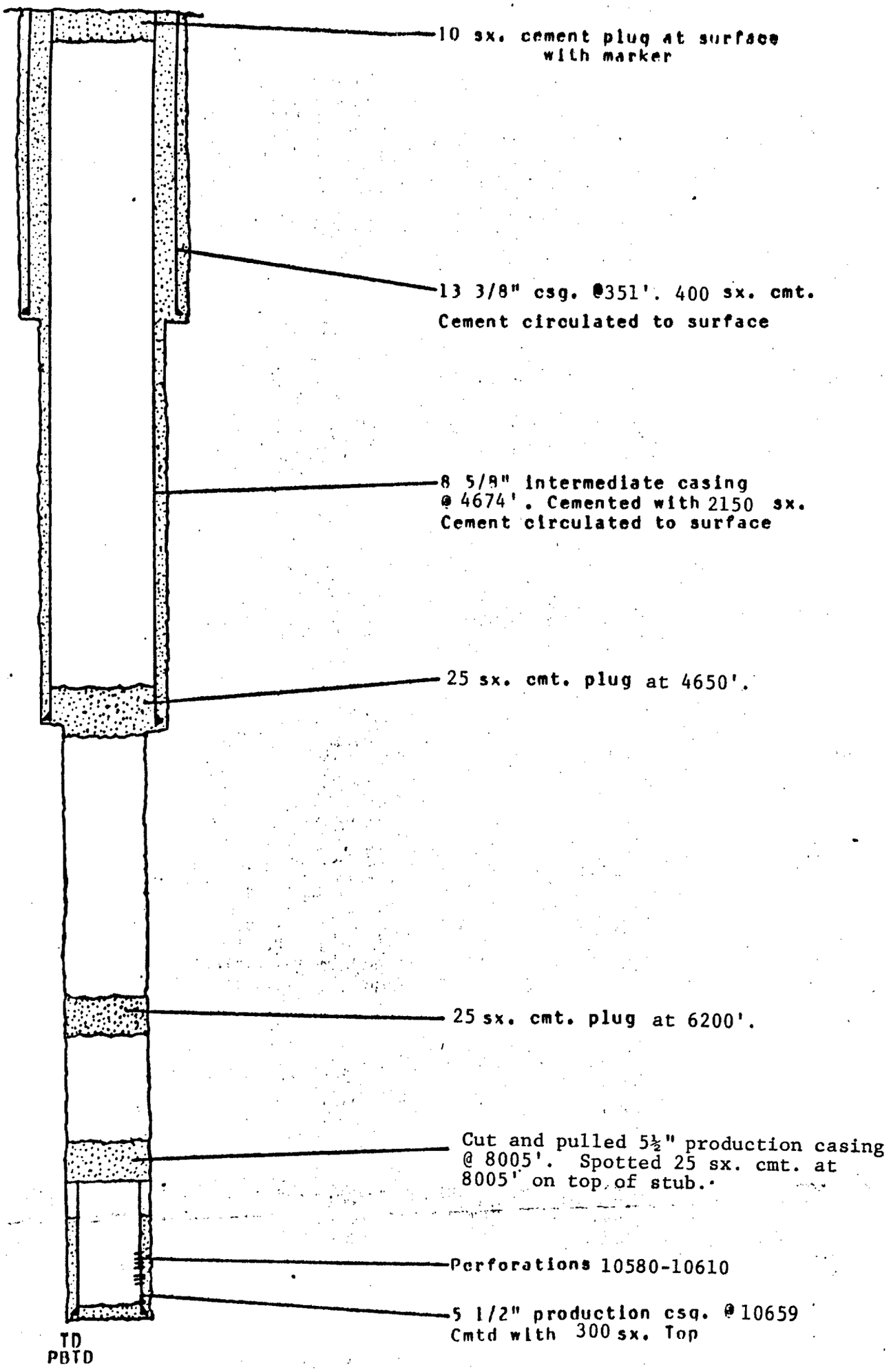
P & A 4-12-65



Shell Oil Company State TD #2
Location: 1980' FSL 1980' FEL Sec. 2-T16- R35E

Attachment C-108 VI (b) 1

Completed as producing
oil well January 1956
P & A 4-5-65



Shell Oil Company State TD #4
Location: 1980' FSL 990' FEL Sec. 2-T16S-R35E

Attachment C-108 VI (b)2

DATA SHEET

(Section VII, Form C-108)

1. Proposed Rates of Injection

   A. Average daily rate of injection: 200 barrels

   B. Maximum daily rate of injection: 350 barrels

2. Type of System

   System will be open.

3. Anticipated Injection Pressures

   It is anticipated that injection will be on a vacuum, and that no additional pressure will be needed. However, should surface pressure be necessary to accomplish injection, such pressures would not exceed 0.2 psi per foot of depth to the top of the injection zone at 10546 feet, or 2100 psi.

4. Source of Injection Water

   Source of the disposal water is production formation water from the Charles B. Gillespie, Jr. wells in Section 1-T-16S-R35E and Sections 5 & 6-T-16S-R36E. All producing from the Townsend Wolfcamp zone.

5. Disposal Zone Water Analysis

   Disposal is to be into the Townsend Wolfcamp Zone.

GEOLOGICAL DATA

(Section VIII, Form C-108)

Disposal is proposed by injection into the Townsend Wolfcamp formation in the perforated interval 10546-10598 in the Charles B. Gillespie, Jr. State D Well no. 3. Located 3000 feet from the South line and 330 feet from the West line of Section 1, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico.

The Townsend Wolfcamp formation in this well, as well as throughout the general area, is limestone of Wolfcampian stage of permian age. The top of the Townsend Wolfcamp formation in the proposed disposal well occurs at 10525', while the base of the formation is found at 10620' est. The Townsend Wolfcamp formation is productive of oil and gas in the general area.

Fresh water may be found in the Ogallala formation in the vicinity of the proposed well. This ground water is usually found at depths of less than 120 feet and all oil wells drilled in the area have surface casing set and cemented to a depth of at least 290 feet, and in most cases deeper.

There are no other known fresh water sands overlying the proposed disposal zone, and there are no known fresh water sands underlying the disposal zone anywhere in the vicinity.

STIMULATION PROGRAM

(Section IX, Form C-108)

The proposed injection well was originally drilled in 1956 as an oil well in the Townsend Wolfcamp Pool. 13 3/8" surface casing was set at 309' and cement circulated to surface. 8 5/8" intermediate casing was set at 4649' and cement circulated to surface. 5 1/2" liner 4519'-10601' was set and top of cement reported 6210' by temperature survey. Top of liner was squeezed on 1/60 with 200 sacks cement. On December 29, 1968 well was converted to SWD. Model "DA" plug was set in Model "AN" Packer at 10363'. 20 sacks cement were spotted from 10363'-10163'. The 5 1/2" casing was perforated from 6010'-6040' w/ 4 holes per foot. Packer was set at 4438'. Fluid is now injected into the San Andres formation from 6010'-6040'. The fluid injected is presently being produced on the Charles B. Gillespie, Jr. wells located in Section 1, T16S-R35E and Sections 5 and 6, T16S-R36E. All producing from the Townsend Wolfcamp zone. It is proposed that the present injection interval 6010'-6040' be squeezed. Plug and cement 10163'-10363' will be drilled out.

Well will then be cleaned out and perforations 10546'-10598' acidized with 2000 gallons 15% acid. The interval 10546'-10598' will be used as the disposal zone.

LOGGING AND TEST DATA

(Section X, Form C-108)

The proposed injection well was originally drilled as an oil well in the Townsend Wolfcamp pool in 1956.

The well was tested and potentialed 192 BBLS oil, 0 BBLS water, and a successful completion was made there. Since completion total Wolfcamp production for the well was 164,707 BBLS oil, 626,996 MCF gas, and 12,190 BBLS water.

The well was converted to salt water disposal in 1968. Injection at a depth of 6010'-6040'. The salt water is presently being produced on the Charles B. Gillespie, Jr. Snyder "B" and "C" lease located in Section 6, T-15-S, R-36-E and the State "D" lease located in Section 1, T-16-S, R-35-E, at the rate of 200 BBLS per day. Surface pressure has been necessary to accomplish injection. Average injection pressure has been 300-400 PSI.

The Halliburton Electric Log run on the subject well on 5-13-56, is included here as attachment (b) this data sheet, with the proposed disposal interval marked in red thereon.

FRESH WATER ANALYSIS

(Section XI, Form C-108)

As indicated by Attachment (b) to this Data Sheet there are two fresh water wells located within one mile of the proposed disposal well. The water well marked 1 is the T. G. Singleterry and water well marked 2 is the Lovington Airport water well. A ground search of the area failed to turn up any evidence or current use of any others. Attachment (c) is the analyses of these two water wells taken recently.

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P O BOX 1468
MONAHANS, TEXAS 79756
PH 943-3234 OR 563-1040

Martin Water Laboratories, Inc.

709 W. INDIANA
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

LABORATORY NO. 384219

TO: Mr. David Hastings
P.O. Box 8, Midland, Texas

SAMPLE RECEIVED 3-19-84

RESULTS REPORTED 3-19-84

COMPANY Charles B. Gillespie, Jr. LEASE As listed

FIELD OR POOL

SECTION ___ BLOCK ___ SURVEY ___ COUNTY Lea STATE NM

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Raw water - taken from T.G. Singleterry water well. 3-17-84

NO. 2 Raw water - taken from Lovington airport water well. 3-17-84

NO. 3

NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0012	1.0016		
pH When Sampled				
pH When Received	7.34	7.45		
Bicarbonate as HCO_3	205	303		
Supersaturation as $CaCO_3$				
Undersaturation as $CaCO_3$				
Total Hardness as $CaCO_3$	262	420		
Calcium as Ca	79	141		
Magnesium as Mg	16	17		
Sodium and/or Potassium	24	61		
Sulfate as SO_4	90	207		
Chloride as Cl	37	64		
Iron as Fe	0.23	0.08		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	450	792		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F.	19.00	11.00		
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The undersigned certifies the above to be true and correct to the best of his knowledge and belief.

Form No. 3

By Ronnie Tucker
Ronnie Tucker, B.S.

Attachment C-108 XI (c)

AFFIRMATIVE STATEMENT

(Section XII, Form C-108)

Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults or other hydrologic connection between the disposal zone and any underground source of drinking water.

PROOF OF

NOTICE TO OFFSET OPERATORS

P 652 035 377

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to GULF OIL CORPORATION	
Street and No.	
P.O. State and ZIP Code P.O. BOX 670 HOBBS, NM 88240	
Postage	$ 1.05
Certified Fee	.75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	.60
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$ 2.40
Postmark or Date	MAR 22 1984 USPO

★ U.S.G.P.O. 1983-403-517

PS Form 3800, Feb. 1982

Attachment C-108 XIV (a)

AFFIDAVIT OF PUBLICATION

State of New Mexico,

County of Lea.

I, Robert L. Summers

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 in a supplement thereof for a period

of One day ~~week~~

Beginning with the issue dated March 12, 19 84

and ending with the issue dated March 12, 19 84

Robert L. Summers
Publisher.

Sworn and subscribed to before me this 13 day of March 19 84

Jane Paulowsky
Notary Public.

My Commission expires 3-24, 19 87
(Seal)

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

OFFICIAL SEAL
Signature Jane Paulowsky
JANE PAULOWSKY
NOTARY PUBLIC - NEW MEXICO
NOTARY BOND FILED WITH SECRETARY OF STATE
My Commission Expires 3-24-87

(45)

LEGAL NOTICE
MARCH 12, 1984
NOTICE

Notice is hereby given pursuant to Rule 701 B 3 of the New Mexico Oil Conservation Division Rules and Regulations that it is the intent of Charles B. Gillespie, Jr., to utilize the Charles B. Gillespie, Jr., State D Well No. 3 located 3000 feet from the South line and 330 feet from the West line of Section 1, Township 16 South, Range 35 East, Lea County, New Mexico, for the underground disposal of production formation water from the Charles B. Gillespie, Jr. wells located in Sections 1, Township 16 South, Range 35 East, and Sections 5 and 6, Township 16 South, Range 36 East. Disposal will average 200 barrels per day but could go as high as 350 barrels per day. Maximum injection pressure will not exceed 2100 pounds per square inch. Questions regarding this proposal may be directed to: David Hastings, P. O. Box 8, Midland, Texas 79702 or 915-683-1765. Objections to this proposal or request for hearing on the matter together with the reasons therefore, must be filed in writing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501, within 15 days after date of publication of this notice.

Attachment C-108 XIV (b)