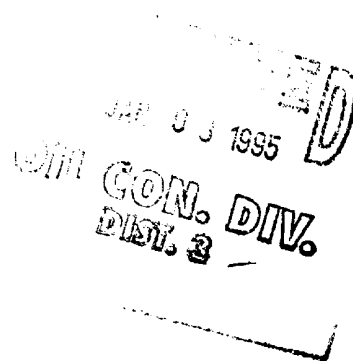




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX

FEB 8 1994

75 Hawthorne Street  
San Francisco, CA 94105



Certified Mail Receipt No: P 104 938 034

Bradley W. Salzman  
Tiffany Gas Company  
2901 East Twentieth Street  
P.O. Drawer 50  
Farmington, NM 87499

Dear Mr. Salzman:

Please find enclosed the final permit issued to Tiffany Gas Company for your USG No. 18-43 injection well. Because no comments were received within the public comment period, the permit will become effective on February 8, 1994. In addition to the final Permit, we are also enclosing the Statement of Basis.

A maximum injection pressure of 425 psig is permitted for this well. To increase this maximum allowable injection pressure, you must perform a valid step-rate test. The test must be witnessed by an EPA representative and the results submitted to EPA. Subsequently, a new maximum injection pressure will be established and incorporated into the permit as a minor permit modification requiring no further public comment. The permit modification will be accompanied by a letter of authorization to inject at the maximum injection pressure established by EPA.

If you have any questions regarding administrative procedures or the permit issuance process, please call Martin Zeleznik at 415/744-1837.

Sincerely,

Harry Seraydarian, Director  
Water Management Division

enclosures

ccs: Navajo Nation Environmental Protection Administration

Attn: Jim Walker (with enclosures)

BIA, Shiprock Agency

BIA, Navajo Area Office

USBLM, Farmington

GROUNDWATER POLLUTION CONTROL PROGRAM

PERMIT

Class II Water Injection Well

Permit No. NN294000002

Well Name: USG 18-43

Field Name: Hogback Field

San Juan County, New Mexico

Navajo Nation

Issued to:

Tiffany Gas Company  
2901 East Twentieth Street  
P.O. Box 50  
Farmington, New Mexico 87499

## TABLE OF CONTENTS

TABLE OF CONTENTS .....	2
PART I. AUTHORIZATION TO INJECT .....	4
PART II. SPECIFIC PERMIT CONDITIONS .....	5
A. WELL CONSTRUCTION .....	5
1. Casing and Cementing .....	5
2. Tubing and Packer Specifications .....	5
3. Monitoring Devices .....	5
4. Proposed Changes and Workovers .....	6
B. CORRECTIVE ACTION .....	6
C. WELL OPERATION .....	6
1. Commencement of Injection Operation .....	6
2. Mechanical Integrity .....	7
3. Injection Interval .....	8
4. Injection Pressure Limitation .....	8
5. Injection Volume (Rate) Limitation .....	9
6. Injection Fluid Limitation .....	9
D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS ..	9
1. Injection Well Monitoring Program .....	9
2. Monitoring Information .....	10
3. Recordkeeping .....	10
4. Reporting of Results .....	11
E. PLUGGING AND ABANDONMENT .....	11
1. Notice of Plugging and Abandonment .....	11
2. Plugging and Abandonment Plan .....	11
3. Cessation of Injection Activities .....	11
4. Plugging and Abandonment Report .....	12
F. FINANCIAL RESPONSIBILITY .....	12
1. Demonstration of Financial Responsibility .....	12
2. Insolvency of Financial Institution .....	12
PART III. GENERAL PERMIT CONDITIONS .....	13
A. EFFECT OF PERMIT .....	13
B. PERMIT ACTIONS .....	13
1. Modification, Reissuance, or Termination .....	13
2. Transfers .....	13
C. SEVERABILITY .....	14
D. CONFIDENTIALITY .....	14

E.	GENERAL DUTIES AND REQUIREMENTS .....	14
1.	Duty to Comply .....	14
2.	Penalties for Violations of Permit Conditions ...	14
3.	Need to Halt or Reduce Activity not a Defense ...	14
4.	Duty to Mitigate .....	15
5.	Proper Operation and Maintenance .....	15
6.	Duty to Provide Information .....	15
7.	Inspection and Entry .....	15
8.	Records of the Permit Application .....	16
9.	Signatory Requirements .....	16
10.	Reporting of Noncompliance .....	16
	APPENDIX A - Well Schematic .....	18
	APPENDIX B - Reporting Forms .....	19
	APPENDIX C - Plugging Plan .....	20

**PART I. AUTHORIZATION TO INJECT**

Pursuant to the Underground Injection Control Regulations of the U. S. Environmental Protection Agency codified at Title 40 of the Code of Federal Regulations, Parts 124, 144, 145, 146, 147 and 148,

Tiffany Gas Company  
2901 East Twentieth Street  
P.O. Box 50  
Farmington, New Mexico 87499

is hereby authorized to convert an existing oil producing well to a Class IID injection well, commonly known as the USG 18-43 well. The well is located in Section 18, T29N, R16W in San Juan County, New Mexico.

Injection shall be for the purpose of produced water disposal in accordance with the conditions set forth herein.


All conditions set forth herein refer to Title 40 Parts 124, 144, 146, 147 and 148 of the Code of Federal Regulations and are regulations that are in effect on the date that this permit becomes effective.

This permit consists of a total of 20 pages and includes all items listed in the Table of Contents. Further, it is based upon representations made by the permittee and on other information contained in the administrative record. It is the responsibility of the permittee to read and understand all provisions of this permit.

This permit and the authorization to inject are issued for a period up to the operating life of the facility unless terminated under the conditions set forth in Part III, Section B of this permit. The permit will expire upon delegation of primary enforcement responsibility for the UIC Class II Program to an appropriate agency of the Navajo Nation, unless the Navajo Nation agency has the appropriate authority and chooses to adopt and enforce this permit as a State permit.

Issued this 8<sup>th</sup> day of February

This permit shall become effective \_\_\_\_\_

  
Harry Seraydarian, Director  
Water Management Division

## PART II. SPECIFIC PERMIT CONDITIONS

### A. WELL CONSTRUCTION

1. Casing and Cementing. The existing construction history and well schematic details submitted with the application are hereby incorporated into this permit as Appendix A, and shall be binding on the permittee. The 13-3/8" surface casing has been cemented to surface from 313 feet, the 9-5/8" casing has been cemented to surface from 2260 feet, and the long string has been cemented from 300 feet (verified by a temperature survey) to a total depth of 7282 feet. Two layers of cement and casing are present across all USDWs and the injection interval in the Entrada Sandstone. All aquifers and oil productive intervals below the Entrada formation will be isolated by cement plugs and cement in the annulus of the long string casing. The casing and cement used in the construction of the well have been designed for the life expectancy of the well, and shall be maintained throughout the operating life of the well.
2. Tubing and Packer Specifications. Two and three-eighths (2-3/8) inches diameter injection tubing will be utilized, with the end of the tubing at approximately 2080 feet and the packer set at approximately the same depth inside the seven (7) inch long string casing. The casing/tubing annulus will be filled with corrosion-inhibited fluid. Injection between the outermost casing and the wellbore is prohibited.
3. Monitoring Devices. The operator shall install and maintain in good operating condition:
  - (a) A tap on the discharge line between the injection pump and the wellhead for the purpose of obtaining representative samples of the injection fluids;
  - (b) Two one-half (1/2) inch FIP fittings, isolated by plug or globe valves, and positioned to provide for either (1) the permanent attachment of one-half (1/2) inch MIP gauges, or (2) the attachments for equivalent "quick-disconnect" gauges at the wellhead on the injection tubing and on the tubing/casing annulus. The gauges used shall be of a design to provide (1) a full pressure range of 100 percent greater than the anticipated operating pressure, and (2) a certified deviation accuracy of five (5) percent or less; and
  - (c) A flow meter with measured cumulative volumes that are certified for a deviation accuracy of five (5)

percent or less throughout the range of injection rates allowed by the permit.

4. Proposed Changes and Workovers. The permittee shall give advance notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted injection well. Any changes in the well construction will require prior approval of the EPA and a permit modification under the requirements of 40 CFR 144.39. In addition, the permittee shall provide all records of well workovers, logging, or other subsequent test data, including required mechanical integrity testing, to EPA within sixty (60) days of completion of the activity. Appendix B contains samples of the appropriate reporting forms. Demonstration of mechanical integrity shall be performed within thirty (30) days of completion of workovers or alterations and prior to resuming injection activities, in accordance with Part II, Section C.1.(a).

#### **B. CORRECTIVE ACTION**

Within the one-half-mile-radius Area of Review (AOR), there are nine (9) plugged and abandoned wells (Navajo 7A-1, 7-4, 18-13, 18-21, 7-2, 18-1, 18-2, 18-5, and 18-10). There are eleven (11) Hogback Dakota oil producing wells (USG 18-55, 18-57, Navajo 18A-1, 18-3, 18-4, 18-6, 18-7, 18-8, 18-9, 18-11, and 18-12) within one-half mile of the proposed injection well. No corrective action will be required in the wells within the one-half-mile AOR. All 20 wells were properly constructed or plugged and abandoned in accordance with the provisions of 40 CFR 144.55 and 40 CFR 146.07. More importantly, no potential hydraulic connection with the injection zone exists through any of the wellbores since none of the wells in the AOR penetrated the Entrada formation. The deepest penetration is 866 feet, which compares to a depth of 2028 at the top of the Entrada formation in the subject well.

#### **C. WELL OPERATION**

1. Commencement of Injection Operations. Injection operations may commence after the effective date of this permit only if the permittee has complied with item (a) as follows:
  - (a) The permittee demonstrates that the well has mechanical integrity in accordance with 40 CFR 146.8 and has received written notice from the Director that such a demonstration is satisfactory. The permittee shall notify EPA of its intent to demonstrate mechanical integrity at

least thirty (30) days prior to such demonstration.

2. Mechanical Integrity.

(a) Method for Demonstrating Mechanical Integrity.

- (i) All injection wells must have and maintain mechanical integrity consistent with 40 CFR 146.8. The permittee has fulfilled the requirements listed in 40 CFR 146.8 for demonstrating the absence of fluid movement into a USDW through vertical channels adjacent to the injection wellbore. The permittee has submitted cementing records and a temperature survey that demonstrate the presence of adequate cement to prevent such migration.
- (ii) A demonstration of the absence of significant leaks in the casing, tubing and/or packer must be made by performing a tubing/casing annulus pressure test. This test shall be for a minimum of thirty (30) minutes at a pressure equal to the maximum allowable injection pressure. The frequency of testing and monitoring will be according to the schedule in paragraph (b) below. A well passes the mechanical integrity test if there is less than a five (5) percent change in pressure over the thirty (30) minute period.

(b) Schedule for Demonstrations of Mechanical Integrity.

- (i) A demonstration of mechanical integrity shall be made no less frequently than every five (5) years from the effective date of this permit, in accordance with 40 CFR 146.8 and paragraph (a) above. Casing annuli and injection pressures shall be monitored monthly and the results included in the annual report to the Director.
- (ii) Mechanical integrity shall also be demonstrated any time that a workover is conducted, the packer is reseated, the construction of the well is modified or when loss of mechanical integrity becomes evident during operation.
- (ii) It shall be the permittee's responsibility to arrange and conduct the mechanical integrity demonstrations. The permittee shall notify



the Director of its intent to demonstrate mechanical integrity at least thirty (30) days prior to each such demonstration. Results of the test shall be submitted to the Director as soon as possible but no later than sixty (60) days after the demonstration.

(iii) In addition to any demonstration made under paragraph (i) above, the Director may require a demonstration of mechanical integrity at any time during the life of the well.

(c) Loss of Mechanical Integrity. If (1), the well fails to demonstrate mechanical integrity during a test, or (2), a loss of mechanical integrity becomes evident during operation, or (3), a significant change in the annulus or injection pressure occurs during normal operating conditions, the permittee shall notify the Director in accordance with Part III, Section E.10 of this permit. Furthermore, injection activities shall be terminated immediately and operation shall not be resumed until the permittee has taken necessary actions to restore integrity to the well and EPA gives approval to recommence injection.

3. Injection Interval. Injection shall be permitted for the Entrada sandstone in the approximate subsurface interval of 2130 to 2190 feet KB depth. Injection perforations may be added or squeezed-off only within this interval. Alteration of the injection perforations and other rework operations must be properly reported (EPA Form 7520-12) and the well must demonstrate mechanical integrity before injection is resumed.

4. Injection Pressure Limitation.

(a) The injection pressure shall not exceed the formation fracture pressure as determined by a valid step-rate test. Injection pressure shall not exceed 425 psig (measured at the wellhead) before the step-rate test is conducted and approved by the EPA. The test must be conducted within 30 days of commencing injection.

(b) The Director will determine the maximum allowable injection pressure based upon the step-rate test results and other parameters reflecting actual injection operations.

(c) The results of the maximum allowable injection pressure determination as stated in paragraph (b) shall be made a part of this permit by minor

modification without further opportunity for public comment.

5. Injection Volume (Rate) Limitation.

- (a) The maximum injection rate shall be limited to 1000 bwpd. The proposed average injection rate is 600 bwpd.
- (b) The permittee may request an increase in the maximum rate allowed in paragraph (a). Any such request shall be made in writing to the Director.
- (c) Should any increase in rate be requested, the permittee shall demonstrate to the satisfaction of the Director that the increase in volume will not cause migration of formation or injected fluids into any USDW, nor cause any injected fluids to move beyond the Area of Review boundary.

6. Injection Fluid Limitation.

- (a) The permittee shall not inject any hazardous wastes as defined by 40 CFR §261, at any time during the operation of the facility.
- (b) The well shall be used only for the injection of water produced from the Hogback Dakota Formation. The total dissolved solids (TDS) of the injected fluid shall not exceed 1,400 ppm.
- (c) Fluids to be injected other than those described in paragraph (b), above, shall be limited to occasional minor amounts of well treatment fluids such as dilute acids and corrosion inhibiting fluids. The injection of any fluids other than those described in paragraph (b), above, shall be reported to the Director within thirty (30) days.

**D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS**

1. Injection Well Monitoring Program. Samples and measurements shall be representative of the monitored activity. The permittee shall utilize the applicable analytical methods described in Table I of 40 CFR §136.3, or in Appendix III of 40 CFR §261, or in certain circumstances, other methods that have been approved by the EPA Administrator. Monitoring shall consist of:

- (a) Analysis of the injection fluids. The analysis shall be performed:

- (i) annually for total dissolved solids, major ions, pH, specific conductivity, specific gravity; and
    - (ii) whenever there is a change in the source of injection fluids.
  - (b) Weekly observations of injection pressure, annulus pressure, flow rate and cumulative volume. Monthly observations will be adequate if the pressure applied to the tubing/casing annulus during mechanical integrity testing equals or exceeds the maximum injection pressure.
  - (c) Monthly recordings of injection pressure, annulus pressure, flow rate and cumulative volume.
2. Monitoring Information. Records of any monitoring activity required under this permit shall include:
- (a) The date, exact place, and time of sampling or field measurements;
  - (b) The name of the individual(s) who performed the sampling or measurements;
  - (c) The exact sampling method(s) used to take samples;
  - (d) The date(s) laboratory analyses were performed;
  - (e) The name of the individual(s) who performed the analyses;
  - (f) The analytical techniques or methods used by laboratory personnel; and
  - (g) The results of such analyses.
3. Recordkeeping.
- (a) The permittee shall retain records concerning:
    - (i) the nature and composition of all injected fluids until three (3) years after the plugging and abandonment has been carried out in accordance with the Plugging and Abandonment Plan shown in Appendix C.
    - (ii) all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five (5) years from

the date of the sample, measurement or report throughout the operating life of the well.

- (b) The permittee shall continue to retain such records after the retention period specified in paragraphs (a) (i) and (a) (ii) unless it delivers the records to the Director or obtains written approval from the Director to discard the records.
  - (c) The permittee shall maintain copies (or originals) of all pertinent observation records available for inspection at the facility.
4. Reporting of Results. The permittee shall submit an Annual Report to the Director summarizing the results of the monitoring required by Part II, Sections D.1-2. of this permit. Copies of all monthly records on flow rates, volumes, pressures and injected fluids, and any major changes in characteristics or sources of injected fluid shall be included in the Annual Report.

The first Annual Report shall cover the period from the effective date of this permit through December 31. Subsequently, the Annual Report shall cover the period of January 1 through December 31, and shall be submitted by January 31 of the following year. Appendix B contains Form 7520-11 which may be copied and used to submit the annual summary of monitoring.

#### **E. PLUGGING AND ABANDONMENT**

- 1. Notice of Plugging and Abandonment. The permittee shall notify the Director forty-five (45) days before further conversion, workover, or abandonment of the well. The Director may require that the plugging and abandonment be witnessed by an EPA representative.
- 2. Plugging and Abandonment Plan. The permittee shall plug and abandon the well as provided in the Plugging and Abandonment Plan in Appendix C. The EPA reserves the right to change the manner in which the well will be plugged if the well is modified during its permitted life or if the well is not consistent with EPA requirements for construction or mechanical integrity. The Director may ask the permittee to estimate and to update the estimated plugging cost periodically. Such estimates shall be based upon costs which a third party would incur to plug the well according to the plan.
- 3. Cessation of Injection Activities. After a cessation of operations of two (2) years, the permittee shall plug and abandon the well in accordance with the Plugging and Abandonment Plan, unless it:

- (a) has provided notice to the Director, and
  - (b) has demonstrated that the well will be used in the future, and
  - (c) has described actions or procedures, satisfactory to the Director, that will be taken to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment.
4. Plugging and Abandonment Report. Within sixty (60) days after plugging the well, the permittee shall submit a report on Form 7520-13 to the Director. The report shall be certified as accurate by the person who performed the plugging operation and the report shall consist of either: (1) a statement that the well was plugged in accordance with the plan, or (2) where actual plugging differed from the plan, a statement specifying the different procedures followed.

**F. FINANCIAL RESPONSIBILITY**

1. Demonstration of Financial Responsibility. The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the injection well as provided in the plugging and abandonment plan.
- (a) The subject well is currently covered by a Letter of Credit and an Irrevocable Standby Trust Agreement issued by the Citizens Bank, Farmington, New Mexico. The Letter of Credit is identified as No. 2197, for an aggregate amount of \$20,000. The Beneficiary named in the trust agreement is the United States Environmental Protection Agency.
  - (b) The permittee must provide proof to the EPA of the Letter of Credit renewal annually by November 4, the anniversary date of the Letter of Credit.
2. Insolvency of Financial Institution. The permittee must submit an instrument of financial responsibility acceptable to the Director within sixty (60) days after either of the following events occur:
- (a) the institution issuing the Letter of Credit and Irrevocable Standby Trust Agreement or other financial instrument files for bankruptcy; or
  - (b) the authority of the trustee institution to act as trustee, or the authority of the institution issuing the financial instrument is suspended or revoked.

### PART III. GENERAL PERMIT CONDITIONS

#### A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The permittee, as authorized by this permit, shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR §142 or otherwise adversely affect the health of persons. Any underground injection activity not authorized in this permit or otherwise authorized by permit or rule is prohibited. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the permittee's independent obligation to comply with all UIC regulations.

#### B. PERMIT ACTIONS

1. Modification, Reissuance, or Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 CFR Sections 124.5, 144.12, 144.39, and 144.40. The permit is also subject to minor modifications for cause as specified in 40 CFR §144.41. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.
2. Transfers. This permit is not transferable to any person except after notice is provided to the Director and the permittee complies with the requirements of 40 CFR §144.38. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the SDWA.

### C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

### D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the permittee, and
- Information which deals with the existence, absence, or level of contaminants in drinking water.

### E. GENERAL DUTIES AND REQUIREMENTS

1. Duty to Comply. The permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, or modification. Such noncompliance may also be grounds for enforcement action under the Resource Conservation and Recovery Act (RCRA).
2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to such actions pursuant to RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.
3. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.
5. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.
6. Duty to Provide Information. The permittee shall furnish the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
7. Inspection and Entry. The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
  - (a) enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions on this permit;
  - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (d) sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA any substances or parameters at any location.



8. Records of the Permit Application. The permittee shall maintain records of all data required to complete the permit application and any supplemental information submitted for a period of five (5) years from the effective date of this permit. This period may be extended by request of the Director at any time.
9. Signatory Requirements. All reports or other information requested by the Director shall be signed and certified by a responsible corporate officer or duly authorized representative according to 40 CFR §144.32.
10. Reporting of Noncompliance.
  - (a) Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
  - (b) Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.
  - (c) Twenty-four Hour Reporting.
    - (i) The permittee shall report to the Director any noncompliance which may endanger health or the environment. Information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning the EPA project officer. The following information shall be included in the verbal report:
      - (A) Any monitoring or other information which indicates that any contaminant may cause endangerment to an underground source of drinking water.
      - (B) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
    - (ii) A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a

description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

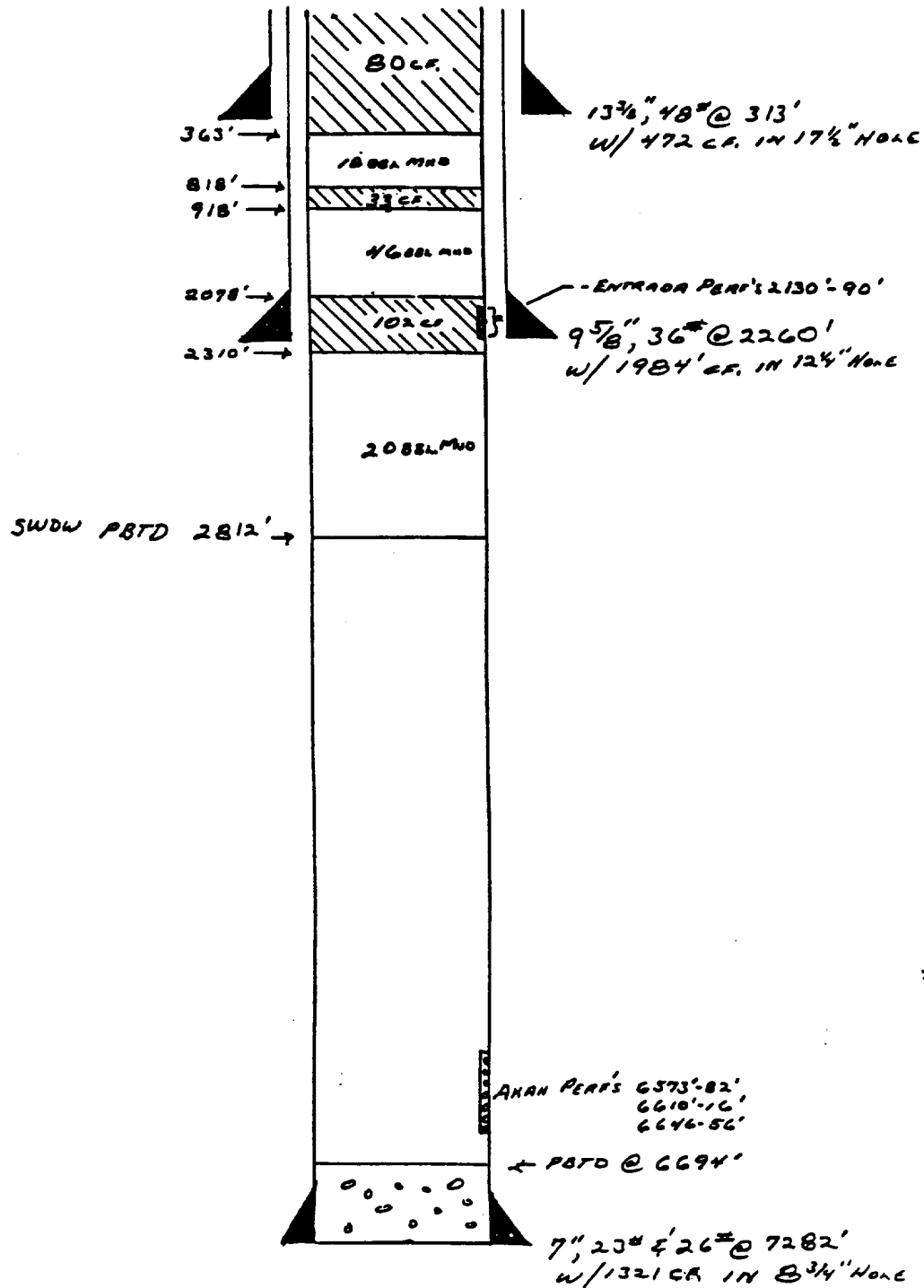
- (d) Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III, Section E.10.(c)(ii) of this permit.
- (e) Other Information. Where the permittee becomes aware that it failed to submit all relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the permittee shall submit such facts or information within two (2) weeks of the time such information becomes known.

## APPENDIX A - WELL SCHEMATIC

# P x A WELLBORE SCHEMATIC

ESTIMATED PLUGGING COST - \$20,000

TIFFANY GAS CO.  
USG SEC 18 #43  
1500' FNL & 1960' FNL  
SEC 18-T29N-R16W  
SAN JUAN COUNTY, NM  
LSC # I-89-IND-5B  
5189' KB, 5176' GR



## APPENDIX B - REPORTING FORMS

1. EPA Form 7520-7: Application to Transfer Permit
2. EPA Form 7520-8: Injection Well Monitoring Report
3. EPA Form 7520-12: Well Rework Record
4. EPA Form 7520-13: Plugging Record
5. Mechanical Integrity Test (MIT) Part I: Requirements for Internal Test.



## APPLICATION TO TRANSFER PERMIT

NAME AND ADDRESS OF EXISTING PERMITTEE

NAME AND ADDRESS OF SURFACE OWNER

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

N									
S									
W									E

STATE

COUNTY

PERMIT NUMBER

## SURFACE LOCATION DESCRIPTION

1/4 OF

1/4 OF

1/4 SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location \_\_\_\_\_ ft. from (N/S) \_\_\_\_\_ Line of quarter section

and \_\_\_\_\_ ft. from (E/W) \_\_\_\_\_ Line of quarter section

## WELL ACTIVITY

- ☐ Class I  
☐ Class II  
☐ Brine Disposal  
☐ Enhanced Recovery  
☐ Hydrocarbon Storage  
☐ Class III  
☐ Other

## WELL STATUS

- ☐ Operating  
☐ Modification/Conversion  
☐ Proposed

## TYPE OF PERMIT

- ☐ Individual  
☐ Area  
Number of Wells \_\_\_\_\_

Lease Name

Well Number

NAME(S) AND ADDRESS(ES) OF NEW OWNER(S)

NAME AND ADDRESS OF NEW OPERATOR

Attach to this application a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them.

The new permittee must show evidence of financial responsibility by the submission of surety bond, or other adequate assurance, such as financial statements or other materials acceptable to the director.

## CERTIFICATION

*I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)*

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED

NAME AND ADDRESS OF SURFACE OWNER

**PERMIT NUMBER**

### **SURFACE LOCATION DESCRIPTION**

### RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Location \_\_\_\_\_ ft. from (N/S) \_\_\_\_\_ Line of Quarter section

and \_\_\_\_\_ ft. from (E/W) \_\_\_\_\_ line of quarter section

## WELL ACTIVITY

**TYPE OF PERMIT**

**□ Individual:**

### Area

Number of Wells \_\_\_\_\_

**Lease Name**

Well Number

**TOTAL VOLUME INJECTED**

**TUBING — CASING ANNULUS PRESSURE  
(OPTIONAL MONITORING)**

**MAXIMUM PSIG**

22

MCF

MINIMUM PSIG

**MAXIMUM PSIG**

***I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).***

NAME AND OFFICIAL TITLE (Please print name and title)

**SIGNATURE**

DATE SIGNED \_\_\_\_\_



# WELL REWORK RECORD

WASHINGTON, DC 20460

Form Approved  
OMB No. 2040-0042  
Expires 3-31-95

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CONTRACTOR

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

COUNTY

PERMIT NUMBER

SURFACE LOCATION DESCRIPTION

1/4 OF

1/4 OF

1/4 SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location \_\_\_\_\_ ft. from (N/S) \_\_\_\_\_ Line of quarter section

and \_\_\_\_\_ ft. from (E/W) \_\_\_\_\_ Line of quarter section

WELL ACTIVITY

- ☐ Brine Disposal  
☐ Enhanced Recovery  
☐ Hydrocarbon Storage

Lease Name

Total Depth Before Rework

Total Depth After Rework

Date Rework Commenced

Date Rework Completed

TYPE OF PERMIT

☐ Individual☐ Area

Number of Wells \_\_\_\_\_

Well Number

## WELL CASING RECORD — BEFORE REWORK

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

## WELL CASING RECORD — AFTER REWORK (Indicate Additions and Changes Only)

Casing		Cement		Perforations		Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	

DESCRIBE REWORK OPERATIONS IN DETAIL  
USE ADDITIONAL SHEETS IF NECESSARY

WIRE LINE LOGS. LIST EACH TYPE

Log Types

Logged Intervals

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED

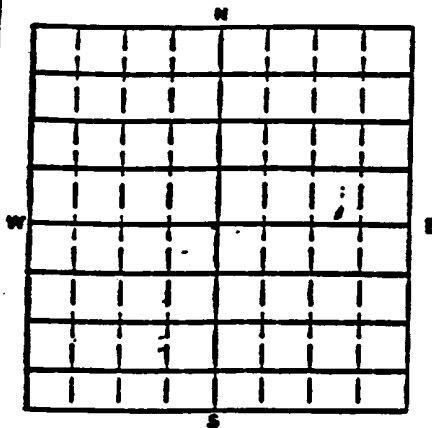




## PLUGGING RECORD

NAME AND ADDRESS OF PERMITTEE

NAME AND ADDRESS OF CEMENTING COMPANY

LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

COUNTY

PERMIT NUMBER

## SURFACE LOCATION DESCRIPTION

1/4 OF

1/4 OF

1/4 SECTION

TOWNSHIP

RANGE

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface

Location \_\_\_\_\_ ft. from (N/S) \_\_\_\_\_ Line of quarter section

and \_\_\_\_\_ ft. from (E/W) \_\_\_\_\_ Line of quarter section

## TYPE OF AUTHORIZATION

- ☐
- Individual Permit
- 
- ☐
- Area Permit
- 
- ☐
- Rule

Number of Wells \_\_\_\_\_

Lessee Name \_\_\_\_\_

Describe in detail the manner in which the fluid was placed in the method used in introducing it into the hole

## CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT/LB./FT.	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE

- |  |  |
|--|--|
| <b>WELL ACTIVITY</b>                         | <b>METHOD OF EMPLACEMENT OF CEMENT PLUGS</b>   |
| <input type="checkbox"/> CLASS I             | <input type="checkbox"/> The Balance Method    |
| <input type="checkbox"/> CLASS II            | <input type="checkbox"/> The Dump Saker Method |
| <input type="checkbox"/> Brine Disposal      | <input type="checkbox"/> The Two-Plug Method   |
| <input type="checkbox"/> Enhanced Recovery   | <input type="checkbox"/> Other                 |
| <input type="checkbox"/> Hydrocarbon Storage |  |
| <input type="checkbox"/> CLASS III           |  |

## CEMENTING TO PLUG AND ABANDON DATA:

PLUG #1

PLUG #2

PLUG #3

PLUG #4

PLUG #5

PLUG #6

PLUG #7

Size of Hole or Pipe in which Plug Will Be Placed (inches)

Depth to Bottom of Tubing or Drill Pipe (ft.)

Seals of Cement To Be Used (each plug)

Slurry Volume To Be Pumped (cu. ft.)

Calculated Top of Plug (ft.)

Measured Top of Plug (if tagged ft.)

Slurry Wt. (lb./Gal.)

Type Cement or Other Material (Class III)

## LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS

From	To	From	To

Signature of Cementer or Authorized Representative

Signature of EPA Representative

## CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (REF. 40 CFR 122.22)

NAME AND OFFICIAL TITLE (Please type or print)

SIGNATURE

DATE SIGNED

**MECHANICAL INTEGRITY TEST (MIT)  
PART I: REQUIREMENTS FOR INTERNAL TEST**

The U. S. Environmental Protection Agency (EPA) Region 9 requirements described below are effective as of May 1, 1992. For further reference, consult 40 CFR §146.8(b). Part I MIT may be demonstrated by one of two methods:

**METHOD A**

- 1) An annular pressure demonstration is performed at the system's maximum water injection pressure (pressure must be at least 300 psig).
- 2) The system's wells are tested at least once every five years or whenever packer reseating is needed. A test ensuing from packer reseating will be regarded as an official MIT demonstration.
- 3) Casing annuli and injections are monitored monthly and the results are included in the annual report to the director.

**METHOD B**

- 1) Test pressure is to be 1000 psig (it is not necessary to test to maximum water injection pressure).
- 2) Water injection pressure tests are conducted at least once every three years or whenever packer reseating is needed (see #2, Method A).
- 3) Casing annuli and injection pressure are monitored weekly and the results are included in the annual report to the director.

In applying either Method A or Method B, the operator must adhere to the following EPA specifications:

- All tests must last at least 30 minutes, during which time the pressure should not increase or decrease by more than 5%.
- A minimum differential pressure of 300 psig between tubing and tubing-casing annulus is to be maintained throughout the MIT.
- The EPA will consider alternative test parameters and frequencies when requested in writing. Requirements might be less stringent, for example, where there are no Underground Sources of Drinking Water (USDWs).
- The 30 days minimum notification period specified in federal regulations may be shortened by the EPA Regional Administrator. MIT information will be accepted as valid only if EPA has been given at least 14 days notice to make arrangements to witness the MIT.
- If a well fails the MIT, the well is to be shut in immediately and steps for remediation taken as soon as possible. The operator will still be bound to report any noncompliance as required in 40 CFR §144.28(b).
- Remediation may consist of squeeze cementing holes in the casing, running a liner inside the casing, or setting tandem packers to isolate a hole in the casing when it is not practical to squeeze the hole and the hole poses no danger to any USDWs. These and other alternatives will be considered on a case-by-case basis.
- If mechanical integrity is not achieved within the specified time period, the EPA may undertake an enforcement action. Time extensions to achieve compliance are permissible, but they must be justified and requested in writing.

**APPENDIX C - PLUGGING AND ABANDONMENT PLAN**



## PLUGGING AND ABANDONMENT PLAN

## NAME AND ADDRESS OF FACILITY

USG SECTION 18 #43  
Hogback

## NAME AND ADDRESS OF OWNER/OPERATOR

Tiffany Gas Company  
P.O. Box 50  
Farmington, NM 87499LOCATE WELL AND OUTLINE UNIT ON  
SECTION PLAT — 640 ACRES

STATE

NM

COUNTY

San Juan

PERMIT NUMBER

## SURFACE LOCATION DESCRIPTION

NE 1/4 OF SW 1/4 OF NE 1/4 SECTION 18 TOWNSHIP 29N RANGE 16W

## LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 1500 ft. from (N/S) N Line of quarter section  
and 1760 ft. from (E/W) W Line of quarter section

## TYPE OF AUTHORIZATION

- ☒
- Individual Permit
- 
- ☐
- Area Permit
- 
- ☐
- Rule

Number of Wells 1

## WELL ACTIVITY

- ☐
- CLASS I
- 
- ☒
- CLASS II
- 
- ☒
- Brine Disposal
- 
- ☐
- Enhanced Recovery
- 
- ☐
- Hydrocarbon Storage
- 
- ☐
- CLASS III

Lease Name USG Section 18

Well Number 43

## CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
3 3/8"	48#	-	313'	17 1/2"
9 5/8"	36#	-	2260'	12 1/4"
7"	23# & 26#	-	7282'	8 3/4"

## METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒
- The Balance Method
- 
- ☐
- The Dump Bailer Method
- 
- ☐
- The Two-Plug Method
- 
- ☐
- Other

## CEMENTING TO PLUG AND ABANDON DATA

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	7"	7"	7"				
Depth to Bottom of Tubing or Drill Pipe (ft.)	2310'	918'	363'				
Sacks of Cement To Be Used (each plug)	86.4	28	67.8				
Slurry Volume To Be Pumped (cu. ft.)	102	33	80				
Calculated Top of Plug (ft.)	1962'	768'	Surface				
Measured Top of Plug (if tagged ft.)			Surface				
Slurry Wt (Lb./Gal.)	15.6	15.6	15.6				
Type Cement or Other Material (Class III)	Class B	Class B	Class B				

## LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any)

From	To	From	To
Perf's 2130'	2190'		

Estimated Cost to Plug Wells

\$20,000.00

## CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

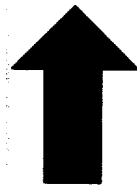
NAME AND OFFICIAL TITLE (Please type or print)

Joel B. Burr Jr., General Partner

SIGNATURE

DATE SIGNED

9-9-93



**LTR**



**Job separation sheet**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

RECEIVED  
MAY 23 1994

OIL CON. DIV.  
DIST. 3

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

TIFFANY GAS COMPANY

3. Address and Telephone No.

P.O. Drawer 3307, Farmington, NM 87499 505-327-4902

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1500' FNL & 1760' FWL  
Sec. 18-T29N-R16W 5189'KB & 5176'GR

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.

I-89-IND-58

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation

8. Well Name and No.

USG Section 18-43

9. API Well No.

30-045-26420

10. Field and Pool, or Exploratory Area

Hogback Pennsylvanian

11. County or Parish, State

San Juan Co., NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☒ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_
- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Subject well was plugged back as follows:

5/3/94 Spotted 206 cf cement inside 7" casing from 6694'-5970'. Akah perfs 6573'-6656'. Top of Akah @ 6450', Top of Desert Creek @ 6377' & Top of Ismay @ 6248'.

5/4/94 Tagged top of cement with tubing @ 5970'.  
Spotted 36cf cement inside 7" casing from 4195'-4030'. Top of Cutler @ 4136'.  
Set cement retainer @ 2807' & spotted 36cf cement inside 7" casing from 2807'-2642'.  
Top of Chinle @ 2747'.

Note: All cement used was Class 'B' neat and 9.5# mud was used between plugs.  
Herman Lujan with the Farmington BLM witnessed plug back operations.

14. I hereby certify that the foregoing is true and correct

Signed

Title Agent, Tiffany Gas Co.

Date 5/12/94

(This space for Federal or State office use)

Approved by

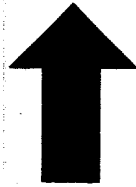
Conditions of approval, if any:

Title

MAY 13 1994

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side  
BIA/OCN



**LTR**



**Job separation sheet**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
Tiffany Gas Co.

3. Address and Telephone No.  
P.O. Box 50, Farmington, N.M. 87499

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
5009 GL  
~~1280' FEE - 670' FWL~~ 1500' FNL & 1760' FWL  
F Sec 18, T29N, R16W

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5. Lease Designation and Serial No.

I-89-IND-58

6. If Indian, Allottee or Tribe Name

Navajo Tribal

7. If Unit or CA, Agreement Designation

8. Well Name and No.

USG SEC. 18 #43

9. API Well No.

10. Field and Pool, or Exploratory Area

Hogback/Penn

11. County or Parish, State

San Juan, N.M.

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other See Below

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

In response to request from Minerals Department, The Navajo Nation, for Operator to submit plans for subject well as per 43 CFR 3165.3:

Operator plans to convert this well to a salt water disposal well. An application to do so has been filed with the EPA, San Francisco office and is currently pending.

**RECEIVED**  
JUN 7 1993  
OIL CON. DIV.  
DIST. 3

RECEIVED  
BLM  
MAY 24 PM 12:58  
670 FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct

Signed Sean L. Burr

Title Production Manager

Date 5/21/93

(This space for Federal or State office use)

**ACCEPTED FOR RECORD**

Approved by \_\_\_\_\_  
Conditions of approval, if any: \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

**MAY 25 1993**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FARMINGTON DISTRICT OFFICE

BY 221

\*See Instruction on Reverse Side

NMOCD





**LTR**



**Job separation sheet**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

**TIFFANY GAS CO.**

3. Address and Telephone No.

**P.O. Drawer 3307, Farmington, NM 87499 505-327-4902**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**1500' FNL & 1760' FWL**

**Sec. 18-T29N-R16W 5189'KB & 5176'GR**

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease, Designation and Serial No.

**I-89-IND-58**

6. If Indian, Allottee or Tribe Name

**Navajo**

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**USG Section 18-43**

9. API Well No.

**30-045-26420**

10. Field and Pool, or Exploratory Area

**Hogback Pennsylvanian**

11. County or Parish, State

**San Juan, NM**

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☒ Conversion to Injection

☒ Dispose Water

(Note: Report results of multiple completion or Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Subject well was converted to a Class II, Type 'D' Produced Water Disposal Well (EPA Permit No. NN294000002) to dispose of Hogback Dakota Formation Water produced from wells operated solely by Tiffany Gas Co. per the attachment:

**RECEIVED**  
OCT 13 1994  
**OIL CON. DIV.**  
DIST. 3

NOV 10 1994

OCT 16 1994

RECEIVED

14. I hereby certify that the foregoing is true and correct

Signed

Title **Agent, Tiffany Gas Co.**

(This space for Federal or State Office use)

Approved by

Title

Conditions of approval, if any:

Date **OCT 13 1994**

**ACCEPTED FOR RECORD**

**FARMINGTON DISTRICT OFFICE**

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

ATTACHMENT TO SUNDRY REPORT  
API #30-045-26420 WELL NAME - USG SECTION 18-43

5/4/94 Plugged well back to 2642'. ref. Sundry dated 5/12/94.

6/6/94 Pressure tested 7", 23# casing to 1000 psi for 15 min. with no pressure loss. Spotted 132 gallons 15% HCL from 2200-2120'. Perforated Entrada Disposal Zone from 2140-2180' w/2 JSPF. Pumped 65 bbls. Dakota Produced water down casing as follows:

BPM	PRESSURE (psi)	BBLs.
1	450	10
2	640	20
3	639	15
4	640	20

ISIP was 530 psi, 5 min. 318 psi. and 10 min. 261 psi. Shut well in.

7/13/94 38 day SI pressure 162 psi. Ran 67 jts. 2 7/8", 6.50#, EUE, J-55 "Seal Tite" PVC lined tubing w/7" plastic coated & PVC lined packer and S.S. 1.78" "R" nipple. SDON.

7/14/94 Pumped 70 bbls. packer fluid down casing/tubing annulus. Set packer @ 2079.5' K.B. w/ bottom of tail piece @ 2082'. Pressure tested annulus to 1000 psi for 15 min. with no pressure loss. Pumped 40 bbls. Dakota Produced water down tubing @ 1.5BPM & 350 psi & retested annulus to 1000 psi for 15 min. with no pressure loss. Shut well in.

9/20/94 thru 9/23/94 Installed injection flowline from pump facilities located @ 465' FSL & 1155' FWL, Sec. 7, T29N, R16W 5057' GR Elev., San Juan County, NM.to subject well.

9/23/94 Started disposal into well @ 360 BPD rate & 310 psi.

9/30/94 Conducted casing/tubing annulus M.I.T. with Jim Walker of the Navajo EPA as witness. Copy of test is attached.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1 Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2 Name of Operator

TIFFANY GAS CO.

3 Address and Telephone No.

P.O. Drawer 3307, Farmington, NM 87499 505-327-4902

4 Location of Well (Footage, Sec., T., R., M., or Survey Description)

1500' FNL & 1760' FWL  
Sec. 18-T29N-R16W 5189'KB & 5176'GR

FORM APPROVED

Budget Bureau No. 1004-0135  
Expires: March 31, 1993

5 Lease Designation and Serial No.

I-89-IND-58

6 If Indian, Allottee or Tribe Name

Navajo

7 If Unit or CA, Agreement Designation

8 Well Name and No.

USG Section 18-43

9 API Well No.

30-045-26420

10 Field and Pool, or Exploratory Area

Hogback Pennsylvanian

11 County or Parish, State

San Juan, NM

12 CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other

☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☒ Conversion to Injection  
☒ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Subject well was converted to a Class II, Type 'D' Produced Water Disposal Well (EPA Permit No. NN294000002) to dispose of Hogback Dakota Formation Water produced from wells operated solely by Tiffany Gas Co. per the attachment:

RECEIVED  
OCT 13 1994  
OIL CON. DIV.  
DIST. 3

RECEIVED  
OCT 13 1994  
OIL CON. DIV.  
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed

Title Agent, Tiffany Gas Co.

(This space for Federal or State office use)

Approved by

Conditions of approval, if any:

Title

ACCEPTED FOR RECORD

OCT 13 1994

FARMINGTON DISTRICT OFFICE

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side  
NMCCN

ATTACHMENT TO SUNDRY REPORT  
API #30-045-26420 WELL NAME - USG SECTION 18-43

- 5/4/94 Plugged well back to 2642'. ref. Sundry dated 5/12/94.
- 6/6/94 Pressure tested 7", 23# casing to 1000 psi for 15 min. with no pressure loss. Spotted 132 gallons 15% HCL from 2200-2120'. Perforated Entrada Disposal Zone from 2140-2180' w/2 JSPF. Pumped 65 bbls. Dakota Produced water down casing as follows:
- | BPM | PRESSURE (psi) | BBLs. |
|-----|----------------|-------|
| 1   | 450            | 10    |
| 2   | 640            | 20    |
| 3   | 639            | 15    |
| 4   | 640            | 20    |
- ISIP was 530 psi, 5 min. 318 psi. and 10 min. 261 psi. Shut well in.
- 7/13/94 38 day SI pressure 162 psi. Ran 67 jts. 2 7/8", 6.50#, EUE, J-55 "Seal Tite" PVC lined tubing w/7" plastic coated & PVC lined packer and S.S. 1.78" "R" nipple. SDON.
- 7/14/94 Pumped 70 bbls. packer fluid down casing/tubing annulus. Set packer @ 2079.5' K.B. w/ bottom of tail piece @ 2082'. Pressure tested annulus to 1000 psi for 15 min. with no pressure loss. Pumped 40 bbls. Dakota Produced water down tubing @ 1.5BPM & 350 psi & retested annulus to 1000 psi for 15 min. with no pressure loss. Shut well in.
- 9/20/94 thru 9/23/94 Installed injection flowline from pump facilities located @ 465' FSL & 1155' FWL, Sec. 7, T29N, R16W 5057' GR Elev., San Juan County, NM.to subject well.
- 9/23/94 Started disposal into well @ 360 BPD rate & 310 psi.
- 9/30/94 Conducted casing/tubing annulus M.I.T. with Jim Walker of the Navajo EPA as witness. Copy of test is attached.

API # 30-045-26470

TIFFANY GAS CO.  
USG SEC. 18 #43  
1500' FNL & 1760' FWL  
SEC 18-T29N-R16W  
SAN JUAN COUNTY, NM  
LSE # I-89-IND-5B  
5189' KB, 5176' GR

