



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105  
(WTR-9)

November 10, 1999

CERTIFIED MAIL P 389 854 167  
RETURN RECEIPT REQUESTED

John Cunningham  
Action Oil Company  
c/o J.C. Operating Co.  
P.O. Box 51  
Farmington, NM 87499

Re: Class IID UIC Permit No. NN299000021  
King Kong Well No. 20, Salt Creek Dakota Field  
San Juan County, New Mexico  
Navajo Nation

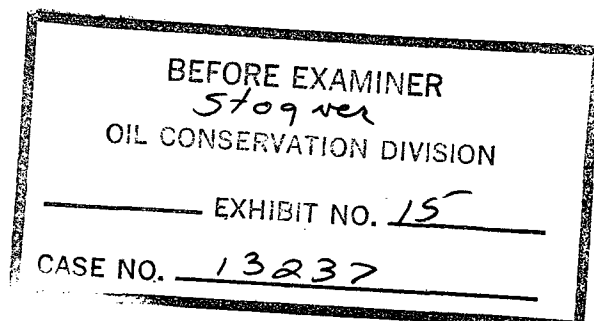
Dear Mr. Cunningham:

We enclose copies of the draft Permit, Statement of Basis, and Public Notice for the above well. The Public Notice will be published in the Farmington Daily Times on November 21, 1999, and the public comment period will be open for 30 days after that date.

All comments must be submitted in writing before December 21, 1999 to:

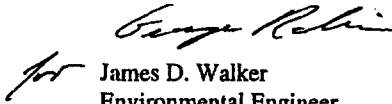
David Holguin  
USEPA Region IX  
Mail Code WTR-9  
75 Hawthorne Street  
San Francisco, CA 94105

If a request for a public hearing and substantive comments are not received, the draft permit will become effective on December 21, 1999. If you or members of the public request significant changes to the draft permit, the comments will be addressed and a revised permit may be issued. The permit would then become effective 30 days after issuance unless a petition for review by the Director is filed by a commenter or any person that participated in a hearing or takes issue with any changes in the Draft Permit.



If you have any question regarding administrative procedures or the permit issuance process, please call me at ( 505) 599-6317

Sincerely,

  
for James D. Walker  
Environmental Engineer  
Ground Water Office

enclosures

cc:

Derrith Watchman-Moore, Director  
Navajo Nation Environmental Protection Agency

Lee Otteni, Farmington District Manager  
U.S. Department of Interior  
Bureau of Land Management

Charmaine Hosteen, Program Manager  
Navajo Nation UIC Program

Jerry Thomas, Natural Resources Manager  
U.S. Department of Interior  
Bureau of Indian Affairs, Shiprock Agency

Genni Denetsone, Supervisor Realty Specialist  
U.S. Department of Interior  
Bureau of Indian Affairs, Navajo Area Office

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UNDERGROUND INJECTION CONTROL PROGRAM

PERMIT

Class IID Water Injection Well

Permit No. NN299000021

Well Name: Kirtland No. 20 SW

San Juan County, New Mexico

Navajo Nation  
Lease No. 12-20-063-639

Issued to:

Union Oil Company  
P.O. Box 51  
Farmington, NM 87401

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## PART I. AUTHORIZATION TO OPERATE AND 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,

Action Oil Company  
P.O. Box 51  
Farmington, NM 87401

is hereby authorized to operate an existing well commonly known as the King Kong No.20 SWD, a Class IID water disposal well. The well is located in Section 4, T30N, R17E in San Juan County, New Mexico.

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

That portion of the Dakota aquifer within one quarter mile of the well is hereby exempted from classification as an underground source of drinking water in accordance with 40 CFR §146.4(a) and (b)(1). It does not presently serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because of the hydrocarbon bearing formation. The vertical dimensions of the exempted area is defined as the interval between the upper and lower boundaries of the injection zone, which is the interval between 1050 to 1067 feet in the King Kong No.20 well.

All conditions set forth herein refer to Title 40 Parts 124, 144, 145, 146, 147, and 148 of the Code of Federal Regulations and are regulations that take effect on the date that this permit becomes effective.

This permit consists of a total of twenty (20) pages and includes a 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 of twenty (20) years 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 Tribal permit.

Issued this \_\_\_\_\_ day of \_\_\_\_\_

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

Alexis Krauss, Director  
Water Division

**Draft**

## PART II. SPECIFIC PERMIT CONDITIONS

### A. WELL CONSTRUCTION

1. Casing and Cementing. The construction details submitted with the permit application are incorporated into this permit as APPENDIX C. and shall be binding on the permittee. The well has been cased and cemented to prevent the movement of fluids behind the casing and this casing shall be maintained throughout the operating life of the well.
2. Formation Logging and Testing. Prior to commencing injection and annually thereafter, the static water level in the well shall be measured and reported to the Director.
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 injected fluids;
  - (b) Two one-half (1/2) inch pressure ratings, 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 at least ten percent greater than the anticipated operating pressure, and (2), a certified deviation accuracy of five (5) percent or less;
  - (c) Flow meters to measure cumulative volumes that are certified for deviation accuracy of five (5) percent 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 Part 144.39.

\*"Director", as used herein, refers to the Director, Water Division, U.S. EPA Region 9, San Francisco, CA.



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) of this permit.

## **B. CORRECTIVE ACTION**

No corrective action will be required on the area within the area of review (AOR). All wells within the AOR are properly constructed or plugged and abandoned according to the provisions of 40 CFR §144.5 and 40 CFR §146.

## **C. WELL OPERATION**

### **1. 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 must show that there are no significant leaks in the casing and tubing and that there is no significant fluid movement into USDWs through vertical channels adjacent to the injection wellbore.

(ii) The permittee must demonstrate that no significant leaks exist by means of a shut-in annulus pressure test. The casing/tubing annulus must be at pressure equal to the maximum allowable injection pressure for a period of 30 minutes with no more than a 5 percent change in pressure.

(iii) 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 proof of an adequate cementing record.

**Prohibition Without Demonstration.** Injection into this well may continue after the effective date of this permit only if:

- (i) the well has passed a mechanical integrity test in accordance with Part II Section C.1.(a) of this permit and

- (ii) the permittee has received written notice from the Director that the MIT demonstration is satisfactory.

The permittee shall notify the Director of intent to demonstrate mechanical integrity at least 30 days prior to the test.

(c) Subsequent Mechanical Integrity Demonstrations

- (i) A demonstration of mechanical integrity in accordance with provisions of USEPA SECTION IX MECHANICAL INTEGRITY TEST (MIT) REQUIREMENTS FOR INTERMITTENT TEST, of which is contained in Appendix B attached hereto, shall be conducted at least once every five years during the life of the well. Mechanical integrity shall also be demonstrated any time that a workover is conducted or a seal is broken at the wellhead assembly, or if construction of the well is modified, or when a loss of mechanical integrity becomes evident during operation.
- (ii) It shall be the permittee's responsibility to arrange and conduct mechanical integrity demonstrations. The permittee shall notify the Director of intent to demonstrate mechanical integrity at least thirty (30) days in advance of the demonstration. A subsequent notification must be given to the Navajo Nation UIC office at least 24 hours in advance of the MIT in order to arrange for a representative to witness the MIT. Results of the MIT shall be submitted to the Director as soon as possible, but not later than sixty (60) days after the demonstration.

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

- (d) 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 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.

2. Injection Intervals. Injection shall be permitted for the Dakota sandstone formation in the subsurface interval of 1050 to 1067 feet. Alteration of the injection interval and other rework operations must be properly reported (EPA Form 7520-12) and the well must demonstrate mechanical integrity before injection is resumed.

3. Injection Pressure Limitation. The injection pressure shall not exceed a surface (wellhead) injection pressure of 350 psig. The maximum allowable injection pressure was determined by EPA on the basis of a step-rate test.

Injection pressure at the wellhead may be increased only if a valid step-rate test has been conducted and approved by the EPA. The test will be evaluated and the maximum allowable injection pressure will be determined. The results of which will be incorporated into this permit as the maximum allowable injection pressure. This will be considered a minor permit modification and will not be open for further public comment.

4. Injection Volume (Rate) Limitation.

- (a) The maximum injection rate shall be limited to 300 barrels per day.
- (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 flow above or below the injection zone, nor cause any injected fluids to move beyond the area within one-half mile from the well, which defines the lateral extent of the Dakota aquifer.

5. 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 disposal of water produced in connection with Dakota formation oil production.
- (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. Injection of any fluids other than those described in paragraph (b) above shall be reported to the Director within 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 and specific gravity;
    - (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.
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 measurement;
  - (c) the exact sampling methods used to take samples;
  - (d) the date laboratory analyses were performed;
  - (e) the name of the individual(s) who performed the analyses;
  - (f) the results of analyses; 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 A,
    - (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 monthly observation records (Part II, Section D.1 of this permit) available for inspection at the lease 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, Section D.2 of this permit. Copies of all monthly records of rates, volumes, pressures, and injected fluid, and major changes in the 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 the permit through December 31, 1999 and shall be submitted by January 31, 2000. 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 completion, conversion, or abandonment of the well. The Director may require that the plugging and abandonment be witnessed by a representative.
- 2. Plugging and Abandonment Plan. The permittee shall plug and abandon the well as provided in the Plugging and Abandonment Schematic in Appendix A. 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 made consistent with EPA requirements for construction and mechanical integrity. The Director may ask the permittee to estimate and to update the estimate 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 & Abandonment Plan, unless it:

- (a) has provided notice to the Director;

- (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 and in accordance with 40 CFR §144.52(a)(7). The permittee shall not substitute an alternative demonstration of financial responsibility from that which the Director has approved, unless the permittee has submitted evidence of that alternative demonstration to the Director and the Director has notified the permittee in writing that the alternative demonstration is acceptable.

a) The subject well is covered by a Bureau of Indian Affairs collective bond issued by Far West Insurance company of Modland Hills, California in the sum of \$75,000, dated June 16, 1994 and approved by BIA June 16, 1994. The bond number is #90009281 and the beneficiary is the United States of America. The estimated cost to plug and abandon the well is \$3,000.

b) The financial responsibility mechanism shall be reviewed and updated periodically, upon request of the Director. The permittee may be required to change to an alternative method of demonstrating financial responsibility, such as a surety bond, letter of credit or trust fund which names EPA as the beneficiary. Any such change must be approved in writing by the Director prior to the change.

Insolvency of Financial Institution. In the event of the insolvency of the trustee or issuing institution of the financial mechanism, or a suspension or revocation of the authority of the trustee institution to act as trustee or the institution issuing the financial mechanism to issue

such an instrument, the permittee must submit an alternative demonstration of financial responsibility acceptable to the director within sixty (60) days after such event. Failure to do so will result in the termination of this permit pursuant to 40 CFR §144.40(a)(1).

3. Insolvency of Owner or Operator

An owner or operator must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he/she is named as debtor, as required under the terms of the guarantee.

**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, connect, plug, abandon, or conduct any other injection activity in a manner that allows the movement of fluid containing a contaminant into underground sources of drinking water. The presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR §141 or otherwise adversely affect the health of humans. Any underground injection activity not authorized by this permit or otherwise authorized by permit or law 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, any abridgment of State or local law or regulation. 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 or substantial endangerment to human health or the environment. It does not serve as a shield to the permittee's independent obligation to comply with all UIC regulations.

**B. PERMIT ACTIONS**

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 may only be transferred 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 for any provision of this permit to any circumstance is found invalid, the remainder of this permit shall not be affected.

**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 a 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 determined 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,
- Information which, with the existence, absence, or level of contaminants in the water body, is necessary for the permittee to comply with the permit.

**E. GENERAL PROVISIONS AND REQUIREMENTS**

1. **Duty to Comply.** The permittee shall comply with all conditions of the 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.



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, training, and adequate laboratory and process control, 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 the 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 authorized representative, upon the presentation of credentials and proper documents as may be required by law, to:
  - (a) enter the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of 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 activities 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 proposed reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than thirty 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 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:

Any monitoring or other information which indicates that any contaminant may cause dangerment to an underground source of drinking water.
    - (ii) 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.
    - (iii) 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 II, Section D.1 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 the facts or information within two (2) weeks of the time such information becomes known.

**draft**

**APPENDIX B    Reporting Forms and Instructions**

- 1.EPA Form 7520 -7:APPLICATION TO TRANSFER PERMIT
- 2.EPA Form 7520-10:WELL COMPLETION REPORT
- 3.EPA Form 7520-11:ANNUAL WELL MONITORING REPORT
- 4.EPA Form 7520-12:WELL REWORK RECORD
- 5.EPA Form 7520-13:PLUGGING RECORD
- 6.MECHANICAL INTEGRITY TEST (MIT) PART I: REQUIREMENTS FOR  
INTERNAL TEST

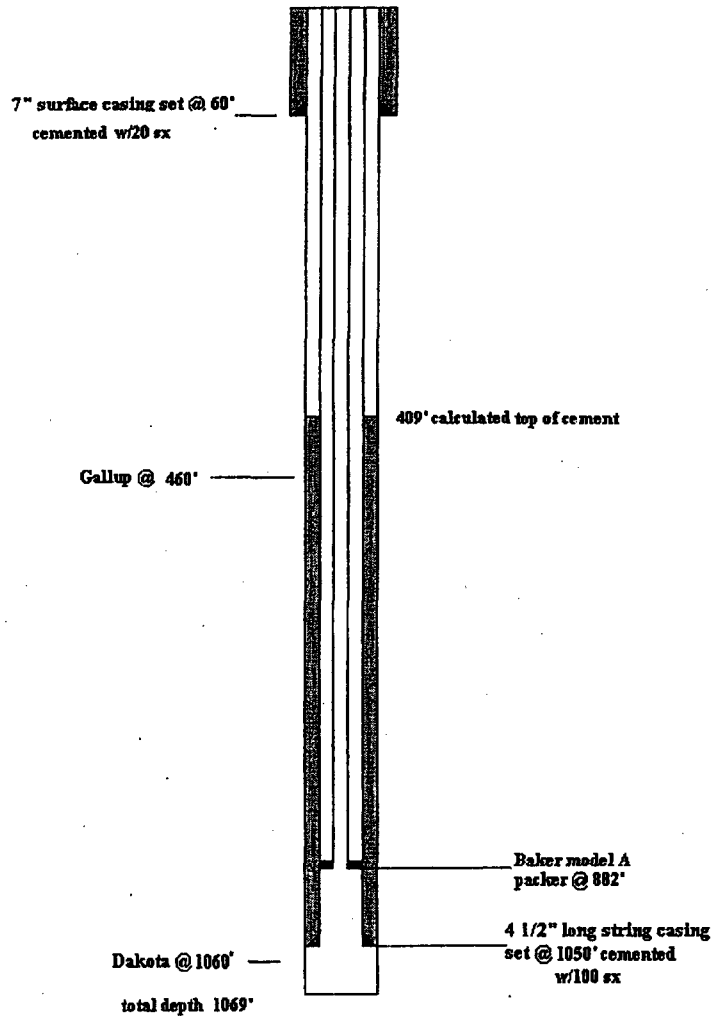
APPENDIX C. WELL SCHEMATIC

ACTION OIL CO. KING KONG #20

SECTION 4 T30N R17W

SAN JUAN COUNTY, NEW MEXICO

Well Schematic



**STATEMENT OF BASIS  
CLASS II PERMIT APPLICATION  
ACTION OIL COMPANY**

UIC Permit NN299000021  
Salt Creek Dakota Field  
San Juan County, New Mexico  
LEASE NO.14-20-0603-639

**CONTACTS:**

John Cunningham  
Action Oil Company  
P.O. Box 51  
Farmington, New Mexico 87401-0051  
Telephone No. (505) 327-9931

James D. Walker  
United States Environmental Protection Agency  
c/o BLM, Farmington District Office  
1235 La Plata Hiway  
Farmington, New Mexico 87401  
Telephone No. (505) 599-6317

**BACKGROUND INFORMATION**

Action Oil Company, "applicant", is applying for a permit to operate a salt water disposal well in the Salt Creek Field in San Juan County, New Mexico on the Navajo Indian Reservation.

The EPA has decided to approve this permit, pending public review and comment, and is now issuing a Draft Permit. The permit will be issued for a period of twenty (20) years unless the permit is terminated for reasonable cause (40 CFR §§144.39, 144.40, and 144.41). The permit will be reviewed by EPA every five years.

The source of the injection water will be water produced from the Dakota formation in association with oil production. The total dissolved solids (TDS) content of this water is approximated 5,000 mg/l. The water will be returned to its source by injection into the Dakota formation at a depth of 1050 to 1067 feet.

The applicant has notified all interested parties within the ½ mile radius area of review, which includes the local landowners, land-users, Navajo Nation, Bureau of Land Management, Bureau of Indian Affairs, and the State of New Mexico. There are no other operators in the Salt Creek Field.

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This Statement of Basis describes the specific permit conditions and the bases for those conditions under authority of the Underground Injection Control (UIC) regulations promulgated for Class IID injection wells on Navajo Nation lands and the UIC provisions of the Safe Drinking Water Act.

#### Aquifer Exemption Requirement

If the total dissolved solids (TDS) concentration in an aquifer is less than 10,000 mg/l, EPA considers that aquifer to be an underground source of drinking water (USDW) and is therefore protected under the Safe Drinking Water Act and the federal UIC regulations. Since the TDS concentration in the Dakota aquifer at this location is approximately 5,000 mg/l, the aquifer qualifies as a USDW except for the fact that it is oil and gas productive. EPA is therefore approving an exemption for the Dakota aquifer, within one quarter mile radius of the King Kong #20 well, in accordance with 40 CFR §146.4 (a) and (b)(1). It does not currently serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because it is hydrocarbon bearing. There are no drinking water wells within ½ mile of the King Kong #20 well.

#### SPECIFIC PERMIT CONDITIONS

##### Part II

##### SECTION A. WELL CONSTRUCTION

##### Casing and Cementing:

The wellbore schematic diagrams can be seen in APPENDIX C of the permit.

The surface casing is 7 inches in diameter, set at 60 feet, and cemented with 20 sacks to the surface. The long string casing is 4 ½ inches in diameter, set at 1050 feet and is cemented with 100 sacks from 1050 feet to a depth of approximately 409 below ground surface (bgs). The tubing is 2 7/8 inches in diameter and is set in a Baker model "A" production packer at 882 feet.

The Dakota injection zone is overlain by a confining layer composed primarily of Mancos shale and limestone which is approximately 350 feet thick, and underlain by a confining layer composed primarily of Morrison formation shale and siltstone at least 100 feet thick. Based on hydrogeological and nearby well data, it is believed that USDWs may exist within the Gallup formation at a depth of approximately 460 feet bgs and within the Morrison formation at approximately 1230 feet bgs. The possible USDW in the Gallup formation is protected by the cement sheath, casing, tubing and packer placed in the wellbore to isolate the injected fluids from USDWs. The depth of the #20 well does not extend to the Morrison formation, but an injection pressure that exceeds the fracture pressure of the Dakota formation could cause a fracture that would reach the Morrison formation and result in potential endangerment of a USDW.

---

#### Formation Logging and Testing:

The static fluid level must be measured and reported to EPA annually for the purpose of determining the extent of pressure buildup in the injection zone over time.

#### Monitoring Devices:

The operator is required to install FIP fittings with cut-off valves to allow an inspector to obtain injection pressure measurements. A flowmeter shall be installed for measuring flow rates and cumulative volumes injected. A sampling tap shall be installed on the injection pump discharge line for the purpose of periodically obtaining representative samples of the injection fluid.

#### SECTION B. CORRECTIVE ACTION

The applicant submitted the required construction and plugging and abandonment information on wells within the one-half mile radius Area of Review (AOR) with the permit application. No corrective action is required of the permittee because all of the wells within the AOR have been properly constructed or adequately plugged and abandoned to prevent the movement of fluid into USDWs.

#### SECTION C. WELL OPERATION

##### Mechanical Integrity:

The construction details and cement records satisfy the requirements of 40 CFR 146.07(c)(2) for demonstrating the absence of significant fluid movement into underground sources of drinking water.

A mechanical integrity test (MIT) of the casing and tubing will be conducted prior to commencement of injection operations in the well and every five years thereafter. This test will involve conducting a pressure test to ensure there are no significant leaks in the tubing and casing. The pressure test will require applying a pressure of at least 350 psig (maximum allowable injection pressure) in the tubing/casing annulus for 30 minutes with no more than 5% change in pressure. A differential of at least 300 psig between the tubing and tubing/casing annulus will be maintained throughout the test.

Demonstrations of mechanical integrity of the injection tubing and casing will also be conducted within 30 days after any workovers or alterations of the wellbore and prior to resuming injection.

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#### Injection Pressure Limitations:

The wellhead injection pressure shall not exceed 350 psig. The maximum allowable injection pressure was established by an analysis of formation fracture pressure, which was determined from a valid step-rate test of the well. An EPA representative was present to witness the test and performed the analysis of test results that established the maximum allowable injection pressure.

Injection pressure may be increased only if a valid step-rate test is conducted and witnessed by an EPA representative and shall not exceed the fracture pressure of the injection zone as determined by EPA from the analysis of step-rate test results.

#### Injection Volume:

The proposed average injection rate is 150 barrels per day and the maximum injection rate is 300 barrels per day. The cumulative volume that would be injected into the Dakota formation, assuming the average injection rate is applied over the 20 year term of the permit, equals 1,095,000 barrels, which compares to an estimated 1,988,000 barrels of storage volume in the exempted portion of the aquifer. This calculation is based on a homogeneous aquifer, radial flow, average porosity of 16%, thickness of 17 feet, and water saturation of 75% in the injection zone. Since fluid withdrawals will exceed the volume of fluid injected, outward migration of injected fluid will be contained within the area of influence of the existing producing wells in the field, all of which are located within the 1/4 mile radius of the disposal well. Flow direction of injected water will be preferentially oriented toward the oil producing wells in the Salt Creek Dakota formation.

#### SECTION D - MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

The permittee is required to sample and analyze the water quality of the injected fluids at annual intervals and whenever the source of the injection fluid changes. The water samples shall be analyzed for TDS, major ions, pH, specific conductivity, and specific gravity. Measurements of the injection pressure, annulus pressure, and injection rate must be observed weekly and recorded at least once per month. The permittee is required to submit an Annual Report to EPA summarizing the monitoring of injection rates, volumes, pressures, and injected fluid, and any major changes in the characteristics or sources of injected fluid.

#### SECTION E - PLUGGING AND ABANDONMENT

We have reviewed and modified the plugging and abandonment plan submitted by the applicant. The modified plan is incorporated into the permit as Appendix A. The current estimated cost of plugging and abandoning the well is \$3,000.

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## SECTION F - FINANCIAL RESPONSIBILITY

The applicant has furnished a BIA collective bond in the sum of \$75,000, which is sufficient to guarantee costs of plugging and abandoning the subject well and all other existing wells on the lease in the event the permittee fails to properly plug and abandon all of those wells when that becomes necessary. The Director will review and may require updating of the financial responsibility mechanism periodically as plugging and abandonment costs increase or as other circumstances may require.

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**PUBLIC NOTICE OF ISSUANCE OF  
AN UNDERGROUND INJECTION CONTROL (UIC) CLASS IID PERMIT  
TO ACTION OIL COMPANY**

**Purpose of Public Notice**

The U.S. Environmental Protection Agency (EPA) is soliciting public comments on its proposal to issue an Underground Injection Control (UIC) permit to Action Oil Company, for the operation of an existing Class IID injection well located in the Salt Creek Dakota Field, approximately five miles north of Shiprock, in Section 4, Township 30N, Range 17W. A complete permit application has been submitted by the company. Action Oil Company was previously granted an emergency permit to avoid a substantial delay in production of oil or gas resources that would occur if the emergency permit were denied. Emergency authorization to inject remains in effect until the EPA issues a final decision on the permit application.

The address of the applicant is:

John Cunningham  
Action Oil Company  
P.O. Box 51  
Farmington, New Mexico 87401

**Background**

EPA has completed its review of the application for an Underground Injection Control (UIC) permit for the King Kong #20 well submitted by Action Oil Company. The #20 well is a former producing oil well completed in the Dakota formation. The purpose of the well is to inject produced water which is directly associated with the production of oil and gas on the King Kong lease into the Dakota formation.

King Kong #20 will inject produced water into the Dakota formation between 1050 and 1067 feet below ground surface. If the total dissolved solids (TDS) concentration in an aquifer is less than 10,000 mg/l, EPA considers that aquifer to be an underground source of drinking water (USDW) and is therefore protected under the Safe Drinking Water Act and the federal UIC regulations. Since the TDS concentration in the Dakota aquifer at this location is approximately 5,000 mg/l, the aquifer is a USDW. EPA proposes to approve an exemption for the Dakota aquifer, within one quarter mile radius of the King Kong #20 well, in accordance with 40 CFR §146.4 (a) and (b)(1). It does not currently serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because it is hydrocarbon bearing. There are no drinking water wells within 1/2 mile of the King Kong #20 well.

The maximum allowable injection pressure shall be 350 psig measured at the wellhead, in accordance with federal UIC regulations at 40 CFR §144.28(f)(3)(ii) and §147.3006(a), and based on an evaluation by EPA of formation fracture pressure determined from a valid step-rate test. The maximum allowable injection pressure is subject to change if a subsequent step-rate test is conducted and it is determined that the fracture pressure of the Dakota formation is greater or less than 350 psig. The maximum injection rate permitted is 300 barrels per day. The well

---

passed a mechanical integrity test to the satisfaction of EPA, prior to commencement of injection. Injection will not result in the movement of fluid into a USDW. The injection zone is overlain by a confining layer composed primarily of shale which is approximately 350 feet thick, and is underlain by a confining layer composed primarily of shale at least 100 feet thick.

EPA has made a preliminary determination to approve this permit application. This action is being taken as provided by Part C of the Safe Drinking Water Act and pursuant to Title 40 of the Code of Federal Regulations (CFR) Parts 124, 144, 146, and 147.

#### **Public Comments**

All non-proprietary data submitted by the applicant and the Draft Permit prepared by EPA are contained in the administrative record for this injection well. The information is available at the location listed below:

US Environmental Protection Agency, Region IX  
Ground Water Office (WTR-9)  
75 Hawthorne Street, San Francisco, CA 94105  
Attention: David Holguin  
Telephone: (415) 744-1836

Public comments are encouraged and accepted, in writing, for a period of 30 days after publication of the notice of preliminary decision on the permit application and aquifer exemption. A copy of the Draft Permit and a Statement of Basis will be made available for public review at the main branch of the Farmington Library. A copy of the Draft Permit and Statement of Basis may be requested by contacting Mr. Holguin at the above address or by telephone.

A request for a public hearing may be made during the 30 day comment period. It should be in writing and should state the nature of the issues proposed to be raised at the hearing. A PUBLIC HEARING WILL BE HELD ONLY IF SIGNIFICANT INTEREST IS SHOWN.

#### **Final Permit Decisions and Appeal Process**

After the close of the public comment period, EPA will issue a final permit decision, and will notify all commenters regarding this decision. The final decision may be to issue, deny or modify the permit. The final decision shall become effective thirty (30) days after the final permit is issued, unless no commenters request a substantial change in the Draft Permit and no substantial changes are made from the Draft Permit to the Final Permit, in which case the permit shall become effective immediately upon issuance.

Within thirty (30) days after the final permit decision has been issued, any person who filed comments on the Draft Permit, participated in a public hearing, or takes issue with any changes in the Draft Permit, may petition the Director to review the permit decision. Commenters are referred to 40 CFR Sections 124.15 through 124.20 for procedural requirements of the appeal process.

---

BLM CONDITIONS OF APPROVAL

Operator Action Oil Company Well Name 20 King Kong  
Legal Location 1650' FSL/ 330' FWL Sec. 4, T. 30 N, R. 17 W.  
Lease Number 14-20-0603-639 Field Inspection Date n/a

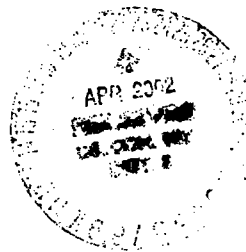
The following stipulations will apply to this well unless a particular Surface Managing Agency or private surface owner has supplied to the BLM and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in the assessments or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity.

An agreement between operator and fee land owner will take precedence over BLM surface stipulations unless (In reference to 43 CFR Part 3160) 1) BLM determines that operator's actions will affect adjacent Federal or Indian surface, or 2) operator does not maintain well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance, or 3) no such agreement exists, or 4) in the event of well abandonment, minimal Federal restoration requirements will be required.

**STANDARD STIPULATIONS FOR ALL WORKOVERS:** All surface areas disturbed during workover activities and not in use for production activities, will be reseeded the first July-September period after the well has been put back into production. This should occur in the first 12 months after completion of workover activities.

**SPECIAL STIPULATIONS FOR THIS SITE:**

1. Pits will be fenced during work-over operation.
2. All disturbance will be kept on existing pad.
3. Empty and reclaim pit after work completed.
4. Pits will be lined with an impervious material at least 8 mils thick.





NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
ASTRO DISTRICT OFFICE  
1000 P.O. BOX 300 ROAD  
ASTRO NM 87410  
(800) 854-4170 FAX: (505) 854-4170  
<http://www.nm.gov/energy/oilconservation/>

MECHANICAL INTEGRITY TEST REPORT  
(TA or UIC)

JK Well Service

Date of Test 7-19-1999 Operator Action Oil Co. API # 30-0 45-09899

Property Name King Kong Well # 20 Location: Unit 4 Sec 4 Twn 30 Rge 17

Land Type:

State \_\_\_\_\_  
Federal \_\_\_\_\_  
Private \_\_\_\_\_  
Indian X

Well Type:

Water Injection X  
Salt Water Disposal \_\_\_\_\_  
Gas Injection \_\_\_\_\_  
Producing Oil/Gas \_\_\_\_\_  
Pressure observation \_\_\_\_\_

Temporarily Abandoned Well (Y/N): \_\_\_\_\_ TA Expires: \_\_\_\_\_

Casing Pres. \_\_\_\_\_ Tbg. SI Pres. \_\_\_\_\_ Max. Inj. Pres. \_\_\_\_\_  
Bradenhead Pres. \_\_\_\_\_ Tbg. Inj. Pres. \_\_\_\_\_  
Tubing Pres. 0  
Int. Casing Pres. \_\_\_\_\_

Pressured annulus up to 365 psi. for 30 mins. Test passed failed

REMARKS: Pressure held steady - 0 psi drop

This well has been converted to injection.

OFF CON DIV

RECEIVED  
JUL 19 1999

By [Signature]  
(Operator Representative)

Witness Bruce Math  
(NMOCD)

(Position)

REVISED (11-17-98)

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  
ACTION OIL CO.

3. Address and Telephone No.  
P.O. BOX 51 FARMINGTON, NM 87401 (505-327-9971)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SEC. 4 T30N R17W  
1650' FSL & 330' FWL

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

5. Lease Designation and Serial No.

14200403 439

6. If Indian, Allottee or Tribe Name

Navajo Tribal

7. If Unit of CA, Agreement Designation

King Kd19

8. Well Name and No.

#20

9. API Well No.

30045 87027

10. Field and Pool, or Exploratory Area

SALT CREEK DAKOTA

11. County or Parish, State

SAN JUAN

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

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                           |   |
|--|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment     | <input type="checkbox"/> Change of Plans                    |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Recompletion    | <input type="checkbox"/> New Construction                   |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Plugging Back   | <input type="checkbox"/> Non-Routine Fracturing             |
|  | <input type="checkbox"/> Casing Repair   | <input type="checkbox"/> Water Shut-Off                     |
|  | <input type="checkbox"/> Altering Casing | <input checked="" type="checkbox"/> Conversion to Injection |
|  | <input type="checkbox"/> Other           | <input type="checkbox"/> 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.)

1. TOH W/F Rods & TUBING
2. TIH W/F CASING SCRAPED
3. TIH W/F MODEL "A" BAKER Packer & 2 7/8" EUE @ 900'
4. GET Ready FOR INJECTION

3a) Pressure test the casing

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

RECEIVED  
BLM  
99 MAY 13 AM 10:43  
070 FARMINGTON, NM

Will need EPA approval before injection can be commenced.

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

Signed [Signature]  
(This space for Federal or State office use)

Title OPERATOR

Date 5/12/99

Approved by [Signature]  
Conditions of approval, if any:

Title Inspector

Date 5/14/99

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

OPERATOR



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

AUG 02 1999

REPLY TO: WTR-9

CERTIFIED MAIL P 424 455 143  
RETURN RECEIPT REQUESTED

John Cunningham  
Action Oil Company  
P.O. Box 51  
Farmington, NM 87401

Re: Class II Emergency Permit No. NN299000021  
King Kong Well No. 20, Salt Creek Dakota Field  
San Juan County, New Mexico  
Navajo Nation

Dear Mr. Cunningham:

Regulations at 40 C.F.R. §144.34 provide for issuance of temporary emergency permits. Action Oil Company has requested an emergency permit for the subject well in order to avoid a substantial delay in production of oil or gas resources that the Company states will occur unless a temporary emergency permit is granted.

In accordance with the provisions of those regulations, an emergency permit is issued to Action Oil Company for injection of produced water into King Kong Well No. 20, located at 1650 ft. FSL, 330 ft. FWL, Section 4, Township 30N, Range 17W. The effective date of the emergency permit is July 19, 1999, at which time oral authorization was given by EPA for commencement of injection, under the authority of regulations at 40 CFR §144.34(b)(6).

The Dakota injection interval, within one quarter mile (1320 feet) radius of the King Kong #5 injection well, is exempted as an underground source of drinking water (USDW) in accordance with 40 CFR §146.4(a) and (b)(1). The exemption was granted because the Dakota injection zone does not currently serve as a source of drinking water and it cannot now and will not in the future serve as a source of drinking water because it is hydrocarbon producing within the exempted area. Since the King Kong #20 well is located well within the exempted area, approximately 206 feet from the King Kong #5 well, it is authorized under this temporary permit to inject into the Dakota injection interval until such time as a final permit determination is issued.

---



As permittee, you are authorized to inject for purposes of disposal of produced water under the following conditions:


1. Injection will not result in the movement of fluid into an Underground Source of Drinking Water (USDW).
2. Mechanical integrity of the well must be demonstrated to the satisfaction of the EPA. This condition has been met because the well passed a mechanical integrity on July 19, 1999.
3. The permittee is authorized to inject produced water into the Dakota formation at injection intervals of 1050 to 1067 ft. below land surface. The injectate is water produced in association with the production of oil from Dakota wells in the Salt Creek Dakota Field. The maximum injection rate will be 150 barrels per day.
4. The operating water injection pressure at the wellhead shall not exceed 210 psig. Injection pressure at the wellhead may be increased only if a valid step-rate test has been conducted and approved by the EPA. The test will be evaluated and a maximum allowable injection pressure will be determined by EPA.
5. During the emergency authorization period, the owner/operator shall comply with all applicable UIC regulations at 40 C.F.R. §§144, 146; and 147, Subpart HHH.

A complete permit application has been submitted. Emergency authorization to inject shall remain in effect until the EPA issues a final decision on the permit application. Failure to abide with the above conditions is a violation of the Safe Drinking Water Act and may result in enforcement action.

Unauthorized conversion and injection into this well was observed prior to the issuance of this permit and before a mechanical integrity test had been performed on the well, which are violations of the Safe Drinking Water Act and Underground Injection Control regulations at 40 CFR §§144.11, 144.31 and 144.51(q). The operator was required to discontinue injection into the well on July 9, 1999. EPA reserves the right to initiate possible enforcement action against the operator for those violations.

If you have any questions regarding the conditions and term of this emergency permit, please contact James Walker of my staff at (505) 599-6317.

Sincerely yours,

 28 July 99  
Alexis Strauss, Director  
Water Division

---

cc:

Derrith Watchman-Moore, Director  
Navajo Nation Environmental Protection Agency

Lee Otteni, District Manager  
U.S. Department of Interior, Bureau of Land Management

Charmaine Hosteen, Environmental Specialist III  
Navajo Nation EPA, UIC Program

Jerry Thomas, Natural Resources Manager  
Bureau of Indian Affairs, Shiprock Agency

Genni Denetsone, Supervisor Realty Specialist  
Bureau of Indian Affairs, Navajo Area Office

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# ANNULAR PRESSURE TEST

(Mechanical Integrity Test)

Operator ACTION OIL Date of Test 7-19-99  
Well Name KINGKONG UNIT WLL #20 EPA Permit No. \_\_\_\_\_  
Location SEC 4, T30 N, R17 W Tribal Lease No. 14120603639  
State and County SAN JUAN COUNTY, NEW MEXICO

Continuous Recorder? YES ☒ NO ☐ Pressure Gauge? YES ☒ NO ☐  
Bradenhead Opened? YES ☐ NO ☒ Fluid Flow? YES ☐ NO ☒

| TIME     | ANNULUS PRESSURE, psi<br><small>0-1000 psi gauge</small> | TUBING PRESSURE, psi<br><small>0-1000 psi gauge</small> |
|----------|--|---|
| 10:35 Am | 365  | 360   |
| 10:40 Am | 365  | 360   |
| 10:45 Am | 365  | 360   |
| 10:50 Am | 365  | 360   |
| 10:55 Am | 365  | 360   |
| 11:00 Am | 365  | 360   |
| 11:05 Am | 365  | 360   |

MAX. INJECTION PRESSURE: 350 PSI  
MAX. ALLOWABLE PRESSURE CHANGE: 18.25 PSI (TEST PRESSURE X 0.05)  
REMARKS: Passed Failed? If failed, cease injection until well passes MIT (40CFR§144.21(c)(6)).

Passed MIT

24 hr. Chart recorder.

JOHN C. COWAN  
COMPANY REPRESENTATIVE: (Print and Sign)  
McClure & Co.

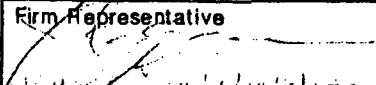
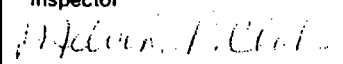
7-19-99  
DATE

INSPECTOR: (Print and Sign)

DATE

**U.S. ENVIRONMENTAL PROTECTION AGENCY**

**NOTICE OF INSPECTION**

|  |   |  |  |
|--|---|--|--|
| <b>Address (EPA Regional Office)</b><br>Region 9<br>Environmental Inspection Agency<br>75 Hawthorne Street (WTR-9)<br>San Francisco, CA 94105  |   | <b>Inspection Contractor</b><br>NAVAJO EPA<br>Groundwater Pollution Control Pgm.<br>P.O. Box 1979<br>Shiprock, NM 87420-1979 | <b>Firm To Be Inspected</b><br>ACTION OIL<br>P.O. Box 51<br>Farmington, NM 87401 |
| <b>Date</b> 7-19-99<br><b>Hour</b> 10 Am   | Notice of inspection is hereby given according to Section 1445(b) of the<br>Safe Drinking Water Act (42 U.S.C. §300 f et seq.). |  |  |
| <b>Reason For Inspection</b><br><p>For the purpose of inspecting records, files, papers, processes, controls and facilities, and obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water Act and any applicable permit or rule.</p> <p align="center">ACTION OIL, KING KUNG UNIT WELL #20, Passed MIT</p> |   |  |  |
| Section 1445(b) of the SDWA (42 U.S.C. §300 j-4 (b) is quoted on the reverse of this form.   |   |  |  |
| Receipt of this Notice of Inspection is hereby acknowledged.   |   |  |  |
| <b>Firm Representative</b><br>   | <b>Date</b><br>7-19-99  | <b>Inspector</b><br>                     |  |

USEPA - Region IX (White)

NEPA-GPCP (Yellow)

Operator (Pink)

VI.

WELLS WITHIN AREA OF REVIEW ( 1/2 mile radius)

OPERATOR: OVERLAND OIL & GAS CORPORATION.

LEASE NAME: King Kong WELL NO. : 20

FIELD NAME Salt Creek

LOCATION OF WELL : Unit Letter L, 1650' FSL 330' FWL  
Sec. 4, T-30N, R-17W, San Juan County, New Mexico

Type of Lease: D.I.A. Navajo Tribal

WELL STATUS: Pumping oil well

PRODUCING FORMATION: Salt Creek Dakota

SPUD DATE: Sept 10, 1959 COMPLETION DATE: Sept. 20, 1959

TOTAL DEPTH: 1070 PLUG BACK T.D. 1070

CASING RECORD:

| SIZE   | WT.  | DEPTH | CEMENT & TOP OF CEMENT |
|--------|------|-------|------------------------|
| 7"     | 20#  | 60'   | 20 Sacks               |
| 4 1/2" | 9.5# | 1064  | 70 Sacks               |

TUBING RECORD:

| SIZE   | DEPTH | PACKER DEPTH | FORMATION:  |
|--------|-------|--------------|-------------|
| 2 3/8" | 1060  | none         | NO LOG FILE |

STIMULATION AND TREATMENT

Natural

T.P. TEST: