

**PERMIT**

**1-15-2002**



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

January 15, 2002

**Lori Wrotenbery**  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 5357 7263**

Mr Mike Talovich  
Key Energy Services, Inc. Four Corners Div  
P O Box 900  
Farmington, NM 87499

**RE: Approval of Discharge Plan UIC-CLI-005**  
**Class I Non-Hazardous Oil Field Waste Disposal Well**  
**API No. 30-045-28653**  
**San Juan County, New Mexico**

Dear Mr. Talovich

The groundwater discharge plan renewal for the Key Energy Services, Inc. Four Corners Div (Key) Class I non-hazardous oil field waste disposal well UIC-CLI-005 located in SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within 30 working days of receipt of this letter.**

The original Order SWD-457 was issued January 13, 1992, the discharge plan was approved on August 26, 1996 by the OCD with an expiration date of August 26, 2001. The discharge plan renewal application dated April 18, 2001 submitted pursuant to Section 5101.B 3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan renewal application was submitted pursuant to Section 5101.B 3 of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge plan is renewed pursuant to Section 5101 A and 3109 C. Please note Section 3109.G, which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Key of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does it relieve Key of its responsibility to comply with any other governmental authority's rules and regulations.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered non-hazardous to wildlife including migratory birds.

Mr Mike Talovich  
January 15, 2002  
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Please note that Section 3104 of the regulations requires that when a plan has been approved, discharges must be consistent with the terms and conditions of the plan Pursuant to Section 3107 C Key is required to notify the Director of any facility expansion, production increase, pressure increase, or process modification that would result in any change in the discharge of water quality or volume

Pursuant to Section 3109 H 4, this plan is for a period of five (5) years. **This approval will expire August 26, 2006** and Key should submit an application for renewal in ample time before this date Note that under Section 5101 F of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved.

The discharge plan for the Key Class I non-hazardous oil field waste disposal well is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$100 00 plus a flat fee of \$4500 00 for Class I injection wells. The OCD has not received the \$4500 00 flat fee. The flat fee may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year

**Please make all checks payable to: Water Quality Management Fund  
C/o: Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505.**

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail WPRICE@state.nm.us On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review

Sincerely,



Roger C Anderson  
Environmental Bureau Chief  
RCA/lwp

Attachment-1

xc OCD Aztec Office  
David Catanach, UIC Director, OCD Santa Fe

**ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
KEY ENERGY SERVICES, INC., CLASS I WELL  
API No. 30-045-28653  
SW/4 NW/4 Section 2, Ts 29 N, R 12 West  
SAN JUAN COUNTY, NEW MEXICO  
DISCHARGE PLAN APPROVAL CONDITIONS  
January 15, 2002**

- 1 Payment of Discharge Plan Fees The \$100 dollar filing fee has been paid. The \$4500.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. Commitments: Key will abide by all commitments submitted in the discharge plan renewal application dated April 18, 2001, all previous commitments including OCD Order SWD-457 and these conditions for approval.
- 3 Maximum Injection Pressure The maximum operating injection pressure at the wellhead will be 2850 psi in accordance with OCD Order SWD-457. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 2850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.  
  
Key shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.
- 4 Mechanical Integrity Testing: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually and any time the tubing is pulled or the packer is resealed. An approved pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Key for the life of the well.
- 5 Annulus Key shall install and maintain pressure controls and continuous monitoring devices pursuant to WQCC NMAC 20 6 2 5207 B.2.
- 6 Continuous Monitoring and Recording Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, and annular pressure. Mechanical charts are to be maintained at Key for the life of the well.

- 7 Maintenance Records. All routine maintenance work on the well will be recorded and maintained at Key for the life of the well.
- 8 Wastes Permitted for Injection Injection will be limited to approved fluids as permitted under OCD Order SWD-457 and non-hazardous oil field waste fluids as permitted under OCD 711 permit NM-01-009 All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in condition number nine (9)
- 9 Chemical Analysis of Injection Fluids The following analyses of injection fluids will be conducted on a quarterly basis:
  - a Aromatic and halogenated volatile hydrocarbon scan by EPA method 8260C GC/MS including MTBE. Semi-Volatile Organics GC/MS EPA method 8270B including 1 and 2-methylnaphthalene
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity
  - c Total heavy metals using the ICAP scan (EPA method 6010/ICPMS) and Mercury using Cold Vapor (EPA method 7470)
  - d EPA RCRA Characteristics for Ignitability, Corrosivity and Reactivity

Records of all analyses will be maintained at Key for the life of the well

- 10 Quarterly Reporting. The following reports will be signed and certified in accordance with WQCC section 5101.G and submitted quarterly to both the OCD Santa Fe and Aztec Offices
  - a Results of the chemical analysis of the injection fluids (number 9)
  - b Monthly average, maximum and minimum values for injection pressures, flow rate and flow volume, and, annular pressure
  - c Monthly volumes of injected fluids pursuant to OCD Rule 1115

- 11 Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.
- 12 Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
13. Above Ground Tanks All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.
- 14 Above Ground Saddle Tanks Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
15. Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency notification information.
- 16 Below Grade Tanks/Sumps All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must be tested to demonstrate their mechanical integrity no later than March 15, 2002 and every year from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.
- 17 Underground Process/Wastewater Lines All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than March 15, 2002 and every 5 years, from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.

18. Well Workover Operations OCD approval will be obtained from the Director prior to performing remedial work or any other workover Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103 A ) with appropriate copies sent to the OCD Aztec District Office
19. Housekeeping All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure A record of inspections will be retained on site for a period of five years
20. Spill Reporting All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office Key shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
21. Transfer of Discharge Plan The OCD will be notified prior to any transfer of ownership, control, or possession of the well and associated facilities A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.
22. Closure The OCD will be notified when operations of the well are discontinued for a period in excess of six months Prior to closure of the well and associated facilities a closure plan will be submitted for approval by the Director Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure
23. Plugging Bond and /or Letter of Credit Key shall have in effect a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal.  
  
Key shall submit a proposal to amend Bond No. U272355 to reflect the current owner and adjust for inflation Please submit for OCD approval by April 15, 2002.
24. Training All personnel associated with operations at the Key Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal All training documentation shall be maintained at Key for the life of the well
25. OCD Inspections Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.
26. Storm Water Plan Submit a Stormwater run-off plan for OCD approval by April 15, 2002

27 Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

Rule 712 Waste: Pursuant to Rule 712, disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge plan, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

28. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

29. Certification. Key Energy Services, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Key Energy Services, Inc. further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by: KEY ENERGY SERVICES, INC

HAL STONE  
Company Representative- print name

Hal Stone Date 2-15-02  
Company Representative- Sign

Title VICE PRESIDENT TRUCKING DIVISION



**Key Energy Services, Inc.**

Four Corners Division

P O Box 900

5651 US Highway 67

Falmington, NM 87499

Phone 505-327-4935

Fax 505-327-4962

RECEIVED  
FEB 19 2002  
Environmental Bureau  
Oil Conservation Division

February 15, 2002

Mr Wayne Price  
NMOCD  
1220 South ST Francis Drive  
Santa Fe, New Mexico 87505

**RE: Discharge Plan UIC-CLI-005  
Class I Non-Hazardous Oil Field Waste Disposal**

Dear Mr Price

Please find enclosed check for \$4500 00 for the Discharge Plan fee and signed Permit

Key Energy is in the process of compiling various information that will address several requirements in the Attachment section (page 6) of the plan This information will be forth coming in the near future

If there is any additional information required, please contact me at 505-334-6416 or e-mail at [disposal@cyberport.com](mailto:disposal@cyberport.com)

Best Regards,

Michael Talovich  
Key Energy Services  
Facility Manager

Cc Mr Stone KEY

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. 0094736 dated 2/12/2002  
or cash received on \_\_\_\_\_ in the amount of \$ 4,500<sup>00</sup>  
from KEY ENERGY SERVICES, INC.

for CLASS I MIC-CLI-005

Submitted by: <sup>(Primary Name)</sup> WAYNE PRICE . Date: <sup>(DP No.)</sup> 2/26/02

Submitted to ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee \_\_\_\_\_ New Facility \_\_\_\_\_ Renewal

Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 2002

To be deposited in the Water Quality Management Fund.

Full Payment  or Annual Increment \_\_\_\_\_

THE FACE OF THIS DOCUMENT IS PRINTED BLUE - THE BACK CONTAINS A SIMULATED WATERMARK

 <b>KEY ENERGY SERVICES, INC.</b> Central Processing Payment Center 6 Delta Drive, Suite 4400 Midland, Texas 79705 (915) 571-7320	<b>PNC BANK, NATIONAL ASSOCIATION</b> JEANETTE, PA Check Date <u>2/12/2002</u> No. <u>0094736</u>
<b>\$ 4,500.00</b>	
PAY <u>Four Thousand Five Hundred Dollars and No Cent</u>	
TO THE ORDER OF <u>WATER QUALITY MANAGEMENT FUND</u>	
<u>Philip M. Bunt</u> AUTHORIZED SIGNATURE IF OVER \$10,000.00	

⑈0094736⑈ ⑆043000096⑆ 1011569715⑈

**APPLICATION**

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance  Disposal Storage  
Application qualifies for administrative approval?  Yes  No
- II. OPERATOR: Coleman Oil & Gas  
ADDRESS: P.O. Box 443 Farmington NM 87499
- CONTACT PARTY: Chuck Badsgard PHONE: 327-0416
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project:  Yes  No  
If yes, give the Division order number authorizing the project #SWD-457
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed,
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water, and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/1 or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Chuck Badsgard TITLE: Vice-President  
SIGNATURE: *Chuck Badsgard* DATE: 5/6/86
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal \_\_\_\_\_

III. WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

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

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

OIL CONSERVATION DIVISION  
STATE OF NEW MEXICO  
2040 S. PACHECO  
SANTA FE NEW MEXICO 87505

APPLICATION FOR DISPOSAL WELL MODIFICATION  
FROM CLASS II TO CLASS I

COLEMAN OIL & GAS INC.  
P.O. BOX 443  
FARMINGTON NM 87499  
ATTN: CHUCK BADSGARD  
PHONE: 505-327-0416

PREPARED BY:  
CREATIVE FUTURE TECHNOLOGIES  
P.O. BOX 364  
FARMINGTON NM 87499  
PHONE: 505-632-0662

MAY 3, 1996

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- IX. Stimulation Program
- X. Well Test Data
- XI. Fresh Water Data
- XII. Affirmative Statement & Contingency Plan
- XIII. Proof of Notice
- XIV. Certification
- XV. Attachments

## I. Purpose

This discharge plan proposes to reclassify the existing Coleman Oil and Gas disposal well from a Class II to a Class I facility. This will allow additional sources of Oil & Gas produced wastes at this commercial facility however shall still be RCRA exempt.

## II. Operator

Coleman Oil & Gas  
P.O. Box 443  
Farmington NM 87499  
Attn: Chuck Badsgard  
Phone: 505-327-0416

## III. Well Data

### A. Description

- 1.) Lease name; Sunco Disposal Well#1  
Location; Section 2, T29N, R12W  
Drawing; See attached "Exhibit A"
- 2.) Casing and Cementing; surface casing is 8 5/8" 24# K-55 set at 209' in 12-1/2" hole with 150 sacks of B cement 2% CaCl<sub>2</sub> and 1/4# floccel circulated back to surface taking 180 cubic feet, long string 5-1/2" 15.5# K-55 set at 4762' with DV tool at 2244.17' cementing; first stage with 230 sx 65/35 Pozmix, 6% gel 5# sx Gilsonite, 1/4# sx Celoflake, and tailed with 265 sx class "B" with 5# sx Gilsonite and 1/4# Celoflake; second stage was cemented with 465 sx 65/35 Pozmix 6% gel and tailed with 50 sx class "B" neat cement with 2% Calcium Chloride. See attached "Exhibit B #1"
- 3.) Tubing Size and Depth; 2-7/8" J-55 8rd plastic lined set at 4281'; See attached "Exhibit B #2"
- 4.) Packer Information; 5-1/2' Arrow model XL-W retrievable seal bore with plastic coated bottom 2.688" seal bore set at 4282'

### B. Formation

- 1.) Point Lookout 4380' to 4480'

- 2.) Interval perforated at 4350' to 4460' with 2 SPF and 220 holes; See attached "Exhibit C"
- 3.) Well was drilled for injection only.
- 4.) No other perforations.
- 5.) The depth of the next higher oil and gas producing zone is Pictured Cliffs at 2285' and the next lower is the top of the Dakota at 6550'.

#### **IV. Expansion of Existing Well**

- A. Currently operating under order #SWD-457

#### **V. Map Identifying Leases**

- A. 1/2 Mile radius; See attached "Exhibit D"
- B. One mile radius; See attached "Exhibit D"

#### **VI. Area of Review Well Data**

- A. Chart; See attached "Exhibit E"
- B. Hydrogeological Calculation; See attached "Exhibit F"

#### **VII. Proposed Operation**

- 1.) Injection rate; 2000-2800 BPD
- 2.) System; open
- 3.) Injection pressure; 2850 PSI; See attached "Exhibit G"
- 4.) Water sources shall include Oil & Gas produced Class I non-hazardous RCRA exempt; See attached "Exhibit H"
- 5.) Injection zone does not produce oil and gas and has an estimated TDS of 17,180 MG/L based on an analysis taken from the McGrath #4 well located in Unit B, Section 34, T30N, R12W; See attached "Exhibit I"

#### **VIII. Injection Zone Data**

The injection zone is the Point Lookout Sandstone of the Mesa Verde formation. It is a light to medium

**XIV. Certification**

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Chuck BAOSGARD TITLE: Vice-President  
SIGNATURE: Chuck Baosgard DATE: 5/6/96

**ATTACHMENTS**

Exhibit A

Exhibit B #1

Exhibit B #2

Exhibit C

Exhibit D

Exhibit E

Exhibit F

Exhibit G

Exhibit H

Exhibit I

Exhibit J

Exhibit K

**OIL CONSERVATION DIVISION**

P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

**DISTRICT I**  
 P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
 P.O. Drawer DD, Artesia, NM 88210

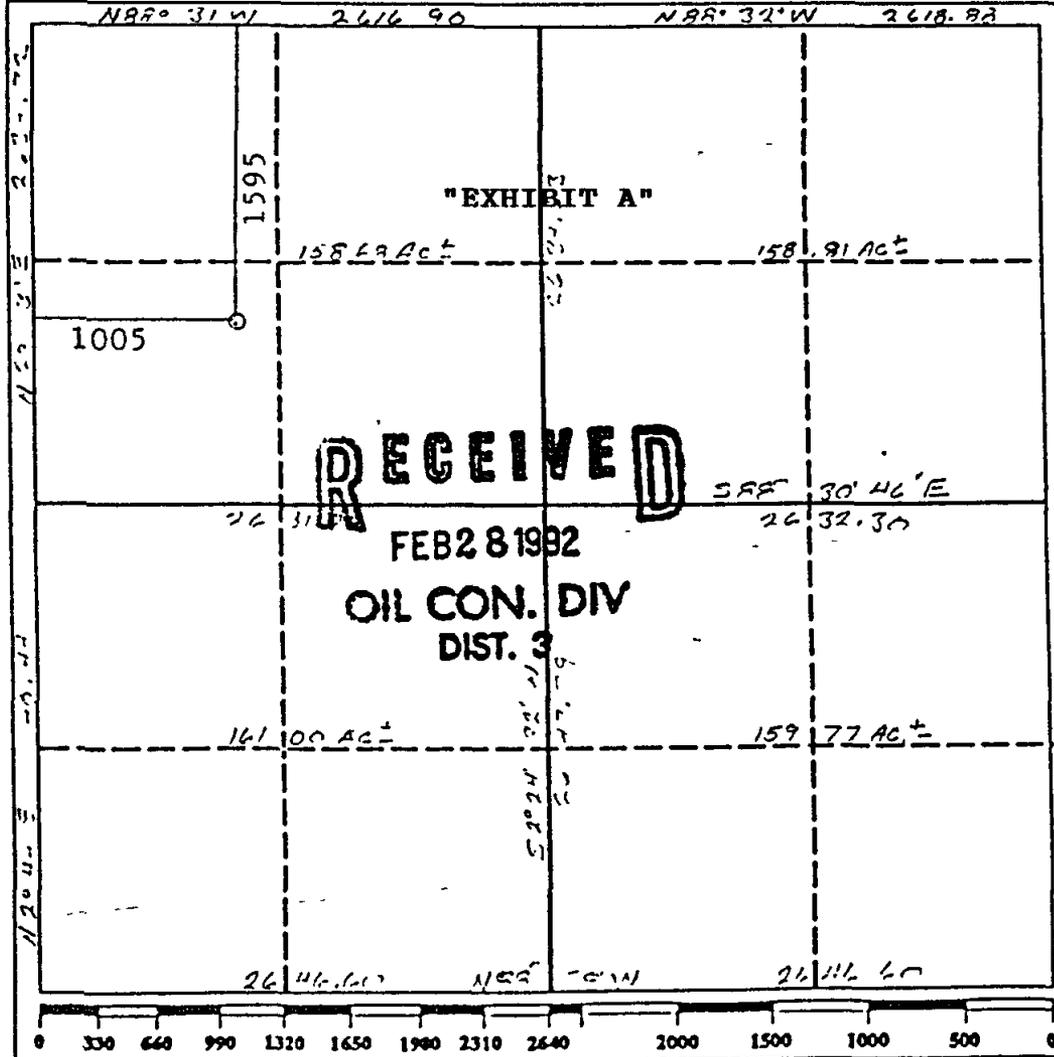
**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**  
 All Distances must be from the outer boundaries of the section

Operator <b>COLEMAN DRILLING OIL &amp; GAS</b>			Lease <b>Sunco Disposal</b>		Well No <b>1</b>
Unit Letter <b>E</b>	Section <b>2</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>NMPM</b>	<b>SAN JUAN</b>

Actual Footage Location of Well  
**1595** feet from the **NORTH** line and **1005** feet from the **WEST** line  
 Ground level Elev. **5859**  
 Producing Formation **MV**  
 Pool **Flora Vista**  
 Dedicated Acreage: **N/A** Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
 Yes  No If answer is "yes" type of consolidation \_\_\_\_\_  
 If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary) \_\_\_\_\_  
 No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: *Ron Mahan*  
 Printed Name: **RON MAHAN**  
 Position: **CONTRACTS MGR**  
 Company: **COLEMAN O & G**  
 Date: **2/28/92**

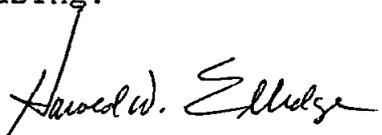
**SURVEYOR CERTIFICATION**  
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: **June 4, 1991**  
 Signature: *Georgio B. Tullas*  
 Professional Surveyor  
 Registered Professional Land Surveyor  
 Certificate No. **9672**

Coleman Oil & Gas  
Sunco Well #1  
Unit E, Section 2, T29N, R12W  
San Juan County, New Mexico

DRILLING HISTORY

02-02-92 Ran 138 jts 15.5# K-55 ST&C and LT&C casing measuring 4768.40' and landed at 4762' KB. Ran centralizers mid first joint, top of 3rd, 5th, 7th, 9th, 11th, 67th, and 69th joints. DV tool was run in top of 68th joint and is at 2244.17' KB. Ran cement basket above and below DV tool. Rig up Western Company and cemented 1st stage with 230 sx 65/35 Pozmix, 6% gel, 5 #/sx gilsonite, and 1/4#/sx celoflake and tailed in with 265 sx Class "B" with 5 #/sx gilsonite and 1/4#/sx celoflake. Preceded job with 20 bbls mud flush. Full returns throughout job. Bumped plug with 1500 psi at 4:00 p.m. Dropped bomb and opened Baker DV tool with 500 psi. Circulated out good amount of cement from above DV tool. Waited 4 hrs and cemented 2nd stage with 465 sx 65/35 Pozmix, 6% gel and tailed in with 50 sx Class "B" neat cement with 2% calcium chloride. Preceded job with 20 bbls mud flush. Full returns through job, circulated 25 bbls good cement to surface. Tool closed with 2500 psi and held good. Plug down 9:05 p.m. Set slips and cut off casing.

  
Harold W. Elledge  
Petroleum Engineer

"EXHIBIT B #1"

**"EXHIBIT B #1 CONTINUED"**

Pipe Tally  
Coleman Oil & Gas

Sunco Well #1

5 1/2" 15.5# LT&C & ST&C Casing

2/2/92

Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM	Jt.	Length	CUM
1	42.55	42.55	51	41.76	1926.50	101	1.79	2517.83	151	32.40	2550.23	201	28.96	4143.22	251	32.72	4801.12
2	40.46	83.01	52	41.52	1968.02	102		2517.83	152	32.29	2582.52	202	31.41	4174.63	252	41.78	4842.90
3	42.02	125.03	53	41.75	2009.77	103	B	2517.83	153	27.91	2610.43	203	30.39	4205.02	253	21.00	4863.90
4	35.46	160.49	54	41.72	2051.49	104	a	2517.83	154	30.44	2640.87	204	31.37	4236.39	254		4863.90
5	34.50	194.99	55	41.76	2093.25	105	k	2517.83	155	30.73	2671.60	205	29.44	4265.83	255	l	4863.90
6	39.58	234.57	56	41.72	2134.97	106	e	2517.83	156	31.25	2702.85	206	28.08	4293.91	256	e	4863.90
7	43.50	278.07	57	33.45	2168.42	107	r	2517.83	157	33.18	2736.03	207	32.38	4326.29	257	f	4863.90
8	32.94	311.01	58	28.68	2197.10	108		2517.83	158	31.37	2767.40	208	32.42	4358.71	258	t	4863.90
9	35.59	346.60	59	30.30	2227.40	109	D	2517.83	159	29.84	2797.24	209	39.88	4398.59	259		4863.90
10	30.55	377.15	60	31.63	2259.03	110	V	2517.83	160	28.36	2825.60	210	33.12	4431.71	260		4863.90
11	21.40	398.55	61	33.77	2292.80	111		2517.83	161	32.45	2858.05	211	32.18	4463.89	261	o	4863.90
12	34.96	433.51	62	31.26	2324.06	112	T	2517.83	162	30.56	2888.61	212	30.70	4494.59	262	u	4863.90
13	36.24	469.75	63	31.03	2355.09	113	o	2517.83	163	31.35	2919.96	213	30.55	4525.14	263	t	4863.90
14	35.51	505.26	64	42.88	2397.97	114	o	2517.83	164	31.73	2951.69	214	32.28	4557.42	264		4863.90
15	35.69	540.95	65	29.33	2427.30	115	l	2517.83	165	30.30	2981.99	215	32.22	4589.64	265		4863.90
16	21.45	562.40	66	27.75	2455.05	116		2517.83	166	32.06	3014.05	216	32.33	4621.97	266		4863.90
17	36.15	598.55	67	28.62	2483.67	117		2517.83	167	30.28	3044.33	217	40.85	4662.82	267		4863.90
18	41.58	640.13	68	29.68	2513.35	118		2517.83	168	30.84	3075.17	218	33.03	4695.85	268		4863.90
19	41.78	681.91	69		2513.35	119		2517.83	169	32.65	3107.82	219	39.85	4735.70	269		4863.90
20	21.91	703.82	70		2513.35	120		2517.83	170	30.70	3138.52	220	32.70	4768.40	270		4863.90
21	33.94	737.76	71	2.69	2516.04	121		2517.83	171	29.34	3167.86	221		4768.40	271		4863.90
22	25.13	762.89	72		2516.04	122		2517.83	172	31.20	3199.06	222		4768.40	272		4863.90
23	41.77	804.66	73	s	2516.04	123		2517.83	173	32.76	3231.82	223		4768.40	273		4863.90
24	36.15	840.81	74	h	2516.04	124		2517.83	174	32.69	3264.51	224		4768.40	274		4863.90
25	41.80	882.61	75	o	2516.04	125		2517.83	175	32.55	3297.06	225		4768.40	275		4863.90
26	41.62	924.23	76	e	2516.04	126		2517.83	176	29.66	3326.72	226		4768.40	276		4863.90
27	41.78	966.01	77	&	2516.04	127		2517.83	177	28.36	3355.08	227		4768.40	277		4863.90
28	41.84	1007.85	78	f	2516.04	128		2517.83	178	32.14	3387.22	228		4768.40	278		4863.90
29	41.74	1049.59	79	l	2516.04	129		2517.83	179	31.67	3418.89	229		4768.40	279		4863.90
30	40.92	1090.51	80	o	2516.04	130		2517.83	180	32.30	3451.19	230		4768.40	280		4863.90
31	33.86	1124.37	81	a	2516.04	131		2517.83	181	30.59	3481.78	231		4768.40	281		4863.90
32	41.89	1166.26	82	t	2516.04	132		2517.83	182	31.92	3513.70	232		4768.40	282		4863.90
33	41.72	1207.98	83	c	2516.04	133		2517.83	183	33.01	3546.71	233		4768.40	283		4863.90
34	41.48	1249.46	84	o	2516.04	134		2517.83	184	29.61	3576.32	234		4768.40	284		4863.90
35	41.74	1291.20	85	l	2516.04	135		2517.83	185	29.13	3605.45	235		4768.40	285		4863.90
36	41.84	1333.04	86	l	2516.04	136		2517.83	186	28.61	3634.06	236		4768.40	286		4863.90
37	41.82	1374.86	87	a	2516.04	137		2517.83	187	34.11	3668.17	237		4768.40	287		4863.90
38	41.08	1415.94	88	r	2516.04	138		2517.83	188	41.18	3709.35	238		4768.40	288		4863.90
39	41.84	1457.78	89		2516.04	139		2517.83	189	41.16	3750.51	239		4768.40	289		4863.90
40	41.84	1499.62	90		2516.04	140		2517.83	190	32.97	3783.48	240		4768.40	290		4863.90
41	41.88	1541.50	91		2516.04	141		2517.83	191	28.73	3812.21	241		4768.40	291		4863.90
42	42.58	1584.08	92		2516.04	142		2517.83	192	28.54	3840.75	242		4768.40	292		4863.90
43	41.45	1625.53	93		2516.04	143		2517.83	193	29.39	3870.14	243		4768.40	293		4863.90
44	30.73	1656.26	94		2516.04	144		2517.83	194	28.25	3898.39	244		4768.40	294		4863.90
45	36.15	1692.41	95		2516.04	145		2517.83	195	29.56	3927.95	245		4768.40	295		4863.90
46	32.62	1725.03	96		2516.04	146		2517.83	196	40.28	3968.23	246		4768.40	296		4863.90
47	41.81	1766.84	97		2516.04	147		2517.83	197	41.18	4009.41	247		4768.40	297		4863.90
48	34.45	1801.29	98		2516.04	148		2517.83	198	41.16	4050.57	248		4768.40	298		4863.90
49	41.75	1843.04	99		2516.04	149		2517.83	199	30.64	4081.21	249		4768.40	299		4863.90
50	41.70	1884.74	100		2516.04	150		2517.83	200	33.05	4114.26	250		4768.40	300		4863.90
col1884.74			631.30			1.79			1596.43			654.14			95.50		
cum1884.74			2516.04			2517.83			4114.26			4768.40			4863.90		

float & shoe 2.69 Joints #1 thru #56 are LT&C, the rest are ST&C

68 jts 2513.35

dv tool 1.79

70 jts 2250.57'

DV tool at 2244.17' KB

Anticipated PBYD 4717' KB

CIRC CEMENT



"EXHIBIT B #2 CONTINUED"  
PIPE RECORD

COLEMAN OIL & GAS LEASE SURCO DISPOSAL WELL NO. 1 7/28 1994

PIPE TALLY - Show every piece of equipment going into the hole in the order run.

COLUMN 1		COLUMN 2		COLUMN 3		COLUMN 4		COLUMN 5		COLUMN 6		COLUMN 7		COLUMN 8	
GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.
JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET
	55		610		87		569		110		468		90		166
2 3/8" x 5 1/2" W/L ENTRY GUIDE		2 3/8" PLASTIC LINED PUP JOINT		2 3/8" x 1.78" SS "F" NIPPLE		2 3/8" PLASTIC LINED PUP JOINT		5 1/2" x 2.688" TUBING ADAPTOR BOTTOM		5 1/2" x 2.688" ARROW "XL-W" RET. SEAL BORE PACKER		2.688" x 5 1/2" ARROW J-LATCH		2 7/8" x 5 1/2" ARROW T-2 ON/OFF TOOL W/ 1.67" FINN	
	55		610		87		569		110		468		90		166

Jts. on rack before running

Jts. left on rack after running

No. Jts. run

COLUMN NO.	ITEM	JTS.	O.D.	WEIGHT	GRADE	THREAD	MAKE	FEET
1	WIRELINE ENTRY GUIDE	-	2 3/8"	-	-	-	MTN STATES	55
2	PLASTIC LINED PUP JOINT	1	2 3/8"	-	-	-	MTN STATES	610
3	1.78" STAINLESS "F" NIPPLE	-	2 3/8"	-	-	-	MTN STATES	87
4	PLASTIC LINED PUP JOINT	1	2 3/8"	-	-	-	MTN STATES	569
5	TUBING ADAPTOR BOTTOM	-	2 1/16"	-	-	-	MTN STATES	110
6	ARROW XL-W RETRIEVABLE PACKER	-	5 1/2"	-	-	-	ARROW	468
7	ARROW J-LATCH	-	2 1/16"	-	-	-	ARROW	90
8	ARROW T-2 ON/OFF TOOL	-	2 7/8"	-	-	-	ARROW	166

REMARKS	TOTAL
*ASTERISK DESIGNATES CENTRALIZER ON JOINT	2155
TOP PACKER @ 4280.93' KB - BOTTOM @ 4299.92' KB	JOINTS NOT RUN
PUP JOINTS USED TO SPACE WITHIN AN A.B.	
Modified w/ Teflon Rings	TOTAL
	TOP ROTARY DRIVE BUSHING TO TOP OF CASING HEAD FLANGE (+)
	SET AT
	CO. REP

"EXHIBIT B #2 CONTINUED"  
PIPE RECORD

~~Colerigan~~ Colerigan Oil & Gas LEASE Sunco Disposal

WELL NO. 1

7/28 1994

PIPE TALLY - Show every piece of equipment going into the hole in the order run.

COLUMN 1		COLUMN 2		COLUMN 3		COLUMN 4		COLUMN 5		COLUMN 6		COLUMN 7		COLUMN 8	
GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.	GRADE	WT.
JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET	JOINT NO.	FEET						
	29 55		64 30		61 30		62 25		TAKEN OUT		6 22		46		76
	58 05		64 05		63 20		63 65		31 -		10 15				
	65 10		63 30		63 90		61 65		31 12						
	62 45		62 95		62 85		63 85		31 02						
	63 40		61 95		62 90		65 10		31 48						
	62 78		60 80		63 50		65 10		32 58						
	65 28		64 55		60 30		61 55		31 33						
	63 20		62 60		64 60		62 65		188 53						
	62 63		64 -		62 35		505 80								
	62 75		63 60		63 55										
	62 55		61 70		63 63		New PIPE								
	59 62		57 95		64 35		29 97 in								
	61 90		61 25		62 50		32 52 in								
	63 60		65 15		61 15		32 53 in								
	62 05		63 45		63 75		29 98 out								
	65 10		61 15		62 65		31 54 out								
	63 80		63 70		61 90		62 45 in								
	65 25		65 05		63 90		31 50 in								
	65 -		63 30		61 75		188 97 in								
	62 75		61 10		65 -										
	1226 81		1255 70		1259 03						16 37		46		76

Jts. on rack before running      Jts. left on rack after running      No. Jts. run

COLUMN NO.	ITEM	JTS.	O D	WEIGHT	GRADE	THREAD	MAKE	FEET
1	Tubing	39	2 7/8	65	J-55	8 5/8	SALTA	1226 81
2	Tubing	40	"	"	"	"	SALTA	1255 70
3	Tubing	40	"	"	"	"	SALTA	1259 03
4	Tubing	16	"	"	"	"	SALTA	505 80
5	Pup Joint	2	"	"	"	"	SALTA	16 37
6	End Pin x Pin Nipple	1	"	"	"	"	MT STATES	46
7	Donut Hanger	1	"	"	"	"	A-1	76

REMARKS	TOTAL	FEET
*ASTERISK DESIGNATES CENTRALIZER ON JOINT	PAGE 1 & PAGE 2	4286 48
-	JOINTS NOT RUN TRADE OUT	46
.....	BAD JOINTS w/new	..
	TOTAL	4286 92
	TOP ROTARY DRIVE BUSHING TO TOP OF CASING HEAD FLANGE (+)	13 00
	Bottom Packer Assm.	4299 92
	CO REP	

"EXHIBIT C"



**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting  
Lease Management  
Contract Pumping

204 N Auburn  
Farmington New Mexico 8740  
(505) 327-4992

COLEMAN OIL & GAS  
SUNCO DISPOSAL WELL #1

8 5/8" 24.0 #, K-55  
SET AT 209'

MOUNTAIN STATES ARROW SET 1 PACKER AT 4206'

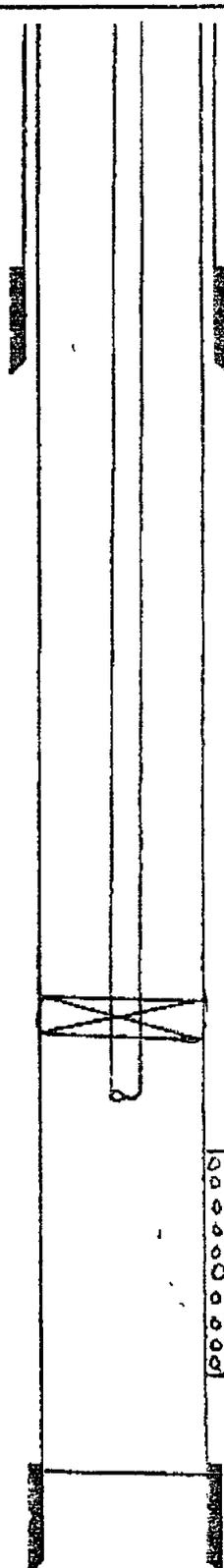
136 JTS 2 7/8, 6.5 #, J55, PLASTIC COATED TBG SET AT 4295'. (ONE JOINT BELOW  
PACKER)

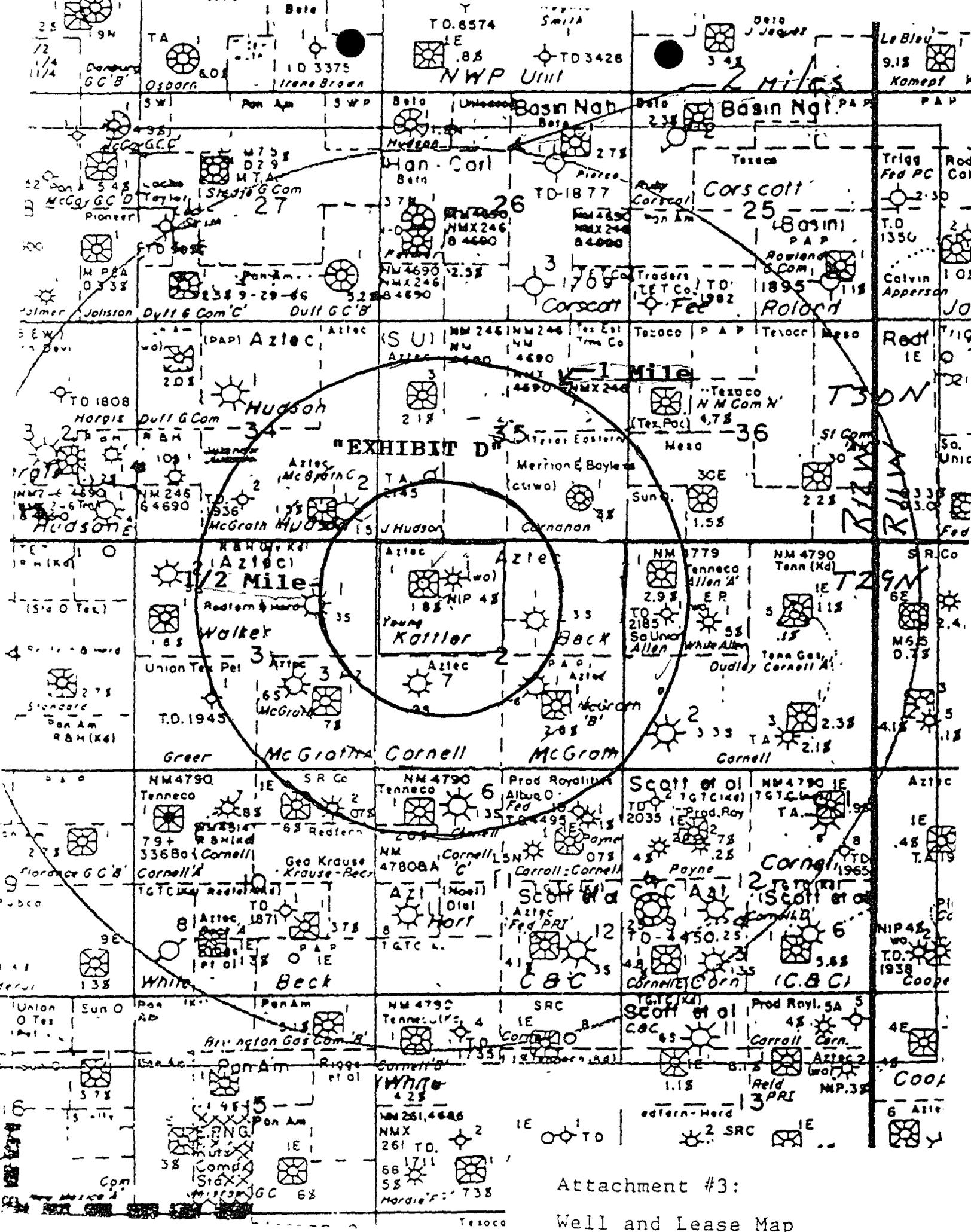
PERFS 4350 - 4460  
2 SPF 220 TOTAL HOLES

7870 - 4706'

5 1/2", 15.5 #, K-55  
SET AT 4760

Paul Tompkins 10/19/93





Attachment #3:  
Well and Lease Map

EXHIBIT E

RECORD#	API NUMBER	UL	SEC	TWN	RGE	WELL NAME	WELL #	OPERATOR	POOL	TYPE	DATE	DEP
1	30-045-08851	D	01	29N	12W	Allen A	1	Amoco	Basin Dak	CO	4-25-62	6786
7	30-045-26014	L	01	29N	12W	Allen A	1E	Amoco	Basin Dak	CO	4-12-85	6625
12	30-045-08839	D	02	29N	12W	Young	1	Meridian	Basin Dak	CO	8-13-61	6740
15	30-045-08704	J	02	29N	12W	McGrath B	1	Meridian	Basin Dak	CO	12-3-61	6720
21	30-045-08712	I	03	29N	12W	McGrath A	1	Meridian	Basin Dak	CO	4-29-64	6689
79	35-045-13092	D	11	29N	12W	Cornell C	1	Amoco	Basin Dak	CO	12-6-61	6604
21211	30-045-26141	G	34	30N	12W	Duff Gas Com	1E	Amoco	Basin Dak	CO	1-7-85	6608
21212	30-045-08945	P	34	30N	12W	McGrath C	1	Meridian	Basin Dak	CO	3-6-63	6637
21213	30-045-11770	E	35	30N	12W	Hudson	3	Meridian	Basin Dak	CO	8-15-66	6750
21214	30-045-08946	P	35	30N	12W	Carnahan	1	Merion	Basin Dak	ZA12	1-19-60	6760
21215	30-045-08946	P	35	30N	12W	Carahan Com	1	Merion	FL Mesa V	ZA	1-61	6760
21216	30-045-25844	P	35	30N	12W	Carahan Com	2	Merrion	Basin Dak	CO	7-23-84	6780

\*The completion records are also attached.

EXHIBIT F

Calculated Area of Review by Hydrologic Equation

$$\sqrt{\frac{QT}{L \cdot \theta_d \cdot (1-SW) \cdot \pi}} = r$$

Where:

Q = volume of fluid in ft<sup>3</sup>/yr  
 T = life of project  
 h = reservoir height  
 $\theta_d$  = reservoir porosity  
 SW = water saturation  
 $\pi$  = pi  
 r = radius

Q = 5.615 ft<sup>3</sup>/bbl \* 2000 bbl/day \* 365 days/year  
 Q = 4,098,950 ft<sup>3</sup>/year  
 T = 20 years  
 L = 100 ft  
 $\theta_d$  = .14  
 SW = .30  
 $\pi$  = 3.14

$$r = \sqrt{\frac{(4,098,950)(20)}{(100)(.14)(1-.30)\pi}} = \sqrt{\frac{81,979,000}{30,772}} = 1632'$$

\*\*Calculated Area of Review is 1632'

Chucks copy

1-3-94

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



"Exhibit G"

BRUCE KING  
GOVERNOR

December 22, 1993

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE NEW MEXICO 87504  
(505) 827-5800

ANITA LOCKWOOD  
CABINET SECRETARY

Walsh Engineering & Production Corporation  
204 North Auburn  
Farmington, NM 87401

Attention: Paul C Thompson

RE: *Injection Pressure Increase, Coleman Sunco Disposal Well No. 1, Section 2, Township 29 North, Range 12 West, San Juan County, New Mexico*

Dear Mr Thompson

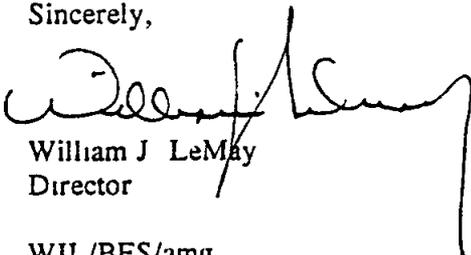
Reference is made to your request dated December 8, 1993 to increase the surface injection pressure on the above referenced well. This request is based on a step rate tests conducted on this well on December 7, 1993. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well

Well and Location	Maximum Injection Surface Pressure
Coleman Sunco Disposal Well No 1 1595' FNL - 1005' FWL Unit E, Section 2, Township 29 North, Range 12 West	2850 psig
This well located in San Juan County, New Mexico	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers

Sincerely,

  
William J LeMay  
Director

WJL/BES/amg

cc. Oil Conservation Division - Aztec  
File: SWD-457  
PSI-X, 4th Quarter



ANALYSIS NO. 51-76-

FIELD RECEIPT NO. \_\_\_\_\_

API FORM 43-1

API WATER ANALYSIS REPORT FORM

Company <u>Coleman Oil &amp; Gas</u>		Sample No. <u>2</u>	Date Sampled <u>02-25-92</u>
Field	Legal Description <u>SEC 2 T9N R9W</u>	County or Parish <u>San Juan</u>	State <u>NM</u>
Lease or Unit <u>SUNCO DISPOSAL</u>	Well # <u>#1</u>	Depth <u>4</u>	Formation <u>M.V. (Pt. Lookout)</u>
Type of Water (Produced, Supply, etc.) <u>Produced</u>		Sampling Point <u>Pit</u>	Water. B/D
		Sampled By	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>7451</u>	<u>323.94</u>
Calcium, Ca	<u>168</u>	<u>8.40</u>
Magnesium, Mg	<u>39</u>	<u>3.20</u>
Barium, Ba	<u>—</u>	<u>—</u>
Potassium, K	<u>720</u>	<u>18.41</u>

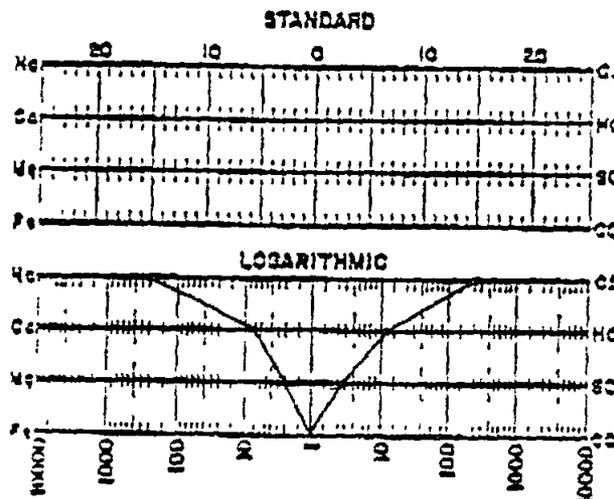
OTHER PROPERTIES

pH	<u>7.01</u>
Specific Gravity, 60/60 F.	<u>1.013</u>
Resistivity (ohm-meters)	<u>78 F.</u>
Total Hardness	<u>580</u>

ANIONS

Chloride, Cl	<u>11879</u>	<u>335.10</u>
Sulfate, SO <sub>4</sub>	<u>185</u>	<u>3.85</u>
Carbonate, CO <sub>3</sub>	<u>0</u>	<u>0</u>
Bicarbonate, HCO <sub>3</sub>	<u>915</u>	<u>15.00</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)	<u>21357</u>
Iron, Fe (total)	<u>25 ppm</u>
Sulfide, as H <sub>2</sub> S	<u>neg</u>

REMARKS & RECOMMENDATIONS:

ANALYST: Lhee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA  
 ARMINGTON, N.M.  
 BRIAN AULT-District Engineer  
 (505) 327-6222

LABORATORY WATER

To Southland Royalty

Date 9/12/84

Attn: Doug Harris

Box 570

Farmington, N.M. 87499

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management. It may however be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

4255-4377

Submitted by Doug Harris Date Rec \_\_\_\_\_

Well No McGrath #4 Depth 4255' - 4377' Formation Point Lookout

County \_\_\_\_\_ Field \_\_\_\_\_ Source DST #2 4255'-4377'

	<u>Top Recovery</u>	<u>Bottom Recovery</u>	<u>Sample Chamber</u>
Resistivity	<u>3.16 @ 65°F</u>	<u>.97 @ 71°F</u>	<u>.68 @ 68°F</u>
Specific Gravity	_____	_____	_____
pH	<u>8.47</u>	<u>7.53</u>	<u>7.86</u>
Calcium (Ca)	<u>55</u>	<u>210</u>	<u>210</u> *MP
Magnesium (Mg)	<u>NT</u>	<u>NT</u>	<u>35</u>
Chlorides (Cl)	<u>2900</u>	<u>6950</u>	<u>9900</u>
Sulfates (SO <sub>4</sub> )	_____	_____	_____
Bicarbonates (HCO <sub>3</sub> )	<u>320</u>	<u>705</u>	<u>670</u>
Soluble Iron (Fe)	<u>NT</u>	<u>NT</u>	<u>NT</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Remarks:

\*Milligrams per liter

Respectfully submitted,

Analyst \_\_\_\_\_  
cc: \_\_\_\_\_

HALLIBURTON COMPANY

By B. E. P...

NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

"Exhibit J"

SOUTH

NORTH

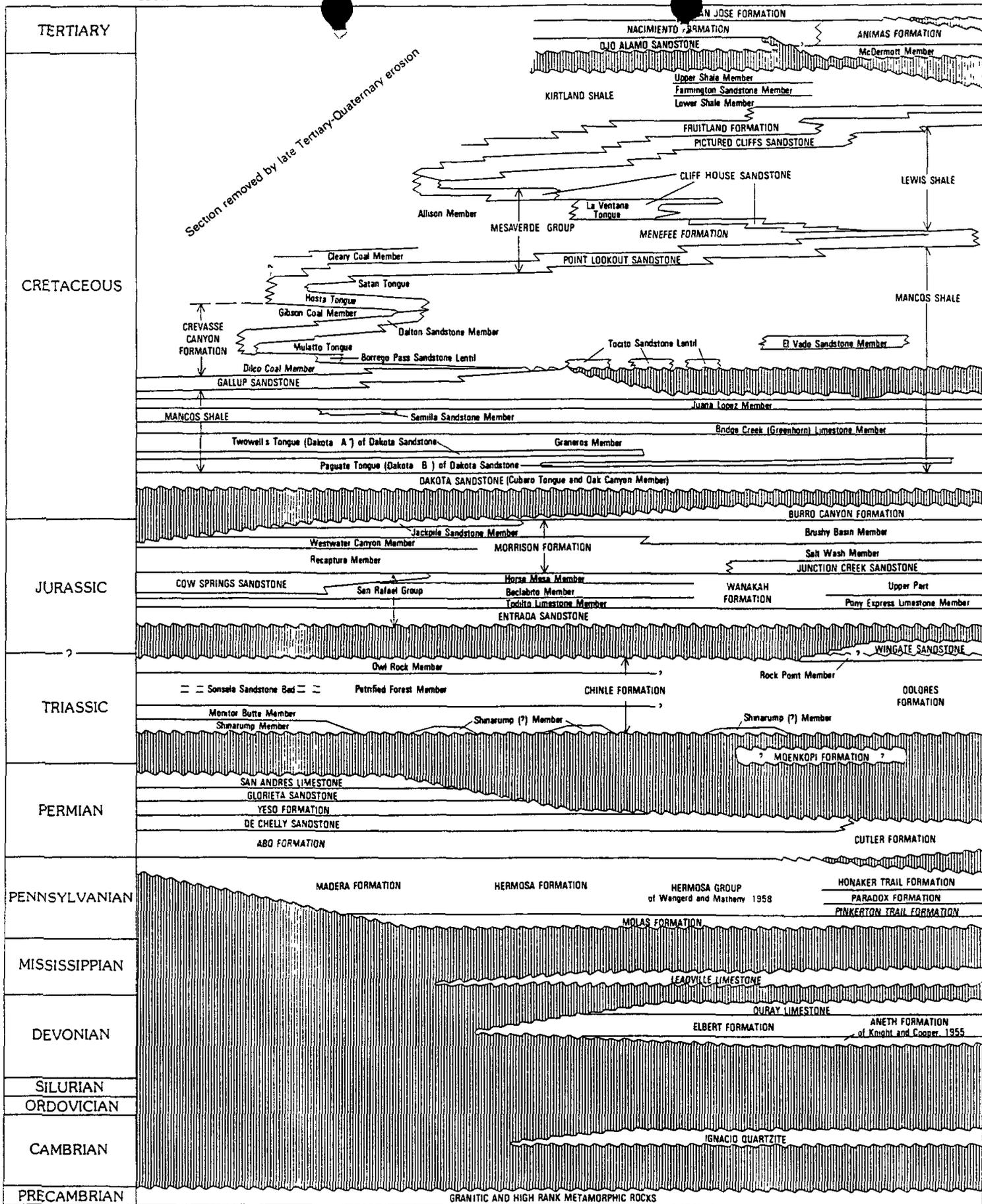


Figure 3 Time- and rock-stratigraphic framework and nomenclature.

[Modified from Molenaar 1977a b and 1989]





NOTICE OF PUBLICATION

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

"Exhibit K"

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131.

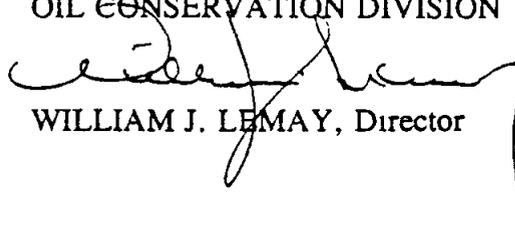
(GW-235) - Coleman Oil and Gas, Inc., Mr. Chuck Badsgard, P.O. Box 443, Farmington, New Mexico, 87499 has submitted a discharge plan application to reclassify their permitted Class II disposal well located in Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico to a Class I non-hazardous disposal well. Currently 2,000 barrels per day of oil field liquid waste classified as exempt from Resource Conservation and Recovery Act Subtitle III regulations are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,480 feet. The discharge plan application proposes to reclassify the category of the well to allow for the injection of an additional 800 barrels per day of oil field liquid waste that has been demonstrated to be "non-hazardous" by testing. A combined total of approximately 2,800 barrels per day will be disposed of by injection into the Point Lookout Formation. The total dissolved solids concentration of the injection water is approximately 24,000 mg/l. The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l. The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface. Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dissolved solids concentration of approximately 450 mg/l.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4 00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 5th day of February 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY, Director

S E A L

WELL LOCATION AND ACREAGE DEDICATION PLAT

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

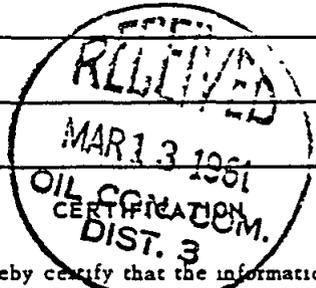
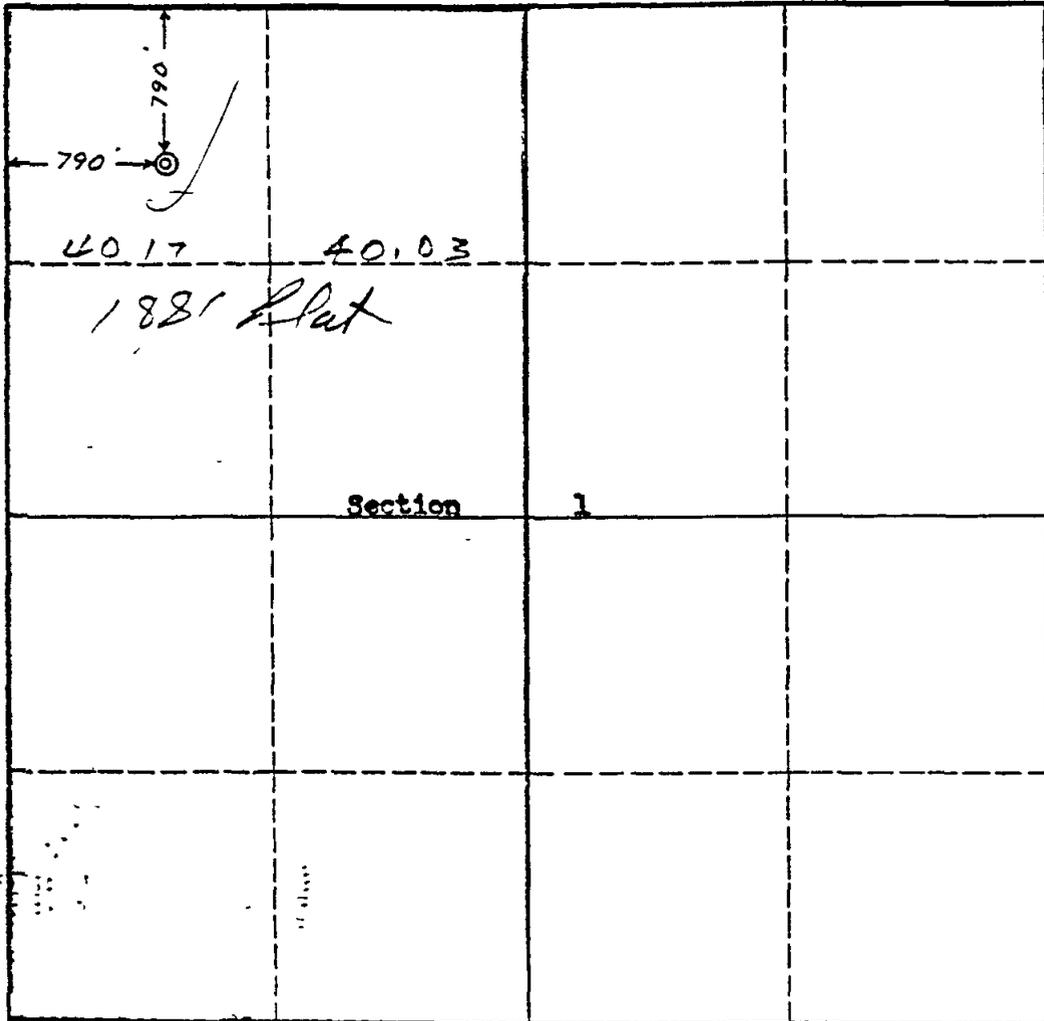
SECTION A

Operator <b>Tennessee Gas Transmission Company</b>	Lease <b>Allen Dakota Gas Unit "A"</b>	Well No. <b>1</b>
Unit Letter	Section <b>1</b>	Township <b>29 North</b>
		Range <b>12 West</b>
		County <b>San Juan County</b>
Actual Footage Location of Well <b>790</b> feet from the <b>North</b> line and <b>790</b> feet from the <b>West</b> line		
Ground Level Elev <b>5905.5</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin</b>
		Dedicated Acreage <b>360 320.20</b> Acres

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES  NO \_\_\_\_ . ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES \_\_\_\_ NO \_\_\_\_ . If answer is "yes," Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no," list all the owners and their respective interests below

Owner	Land Description

SECTION B



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

Name <i>J. J. Lacey</i>
Position <b>District Petroleum Engineer</b>
Company <b>Tennessee Gas Transmission</b>
Date <b>March 10, 1961</b>

I hereby certify that the well location shown on the plat in SECTION B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed <b>9 March 1961</b>
Registered Professional Engineer and/or Land Surveyor <i>Robert H. Ernst</i> <b>Robert H. Ernst</b>
Certificate No. <b>PE &amp; LS 2153</b>

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



All distances must be from the outer boundaries of the Section.

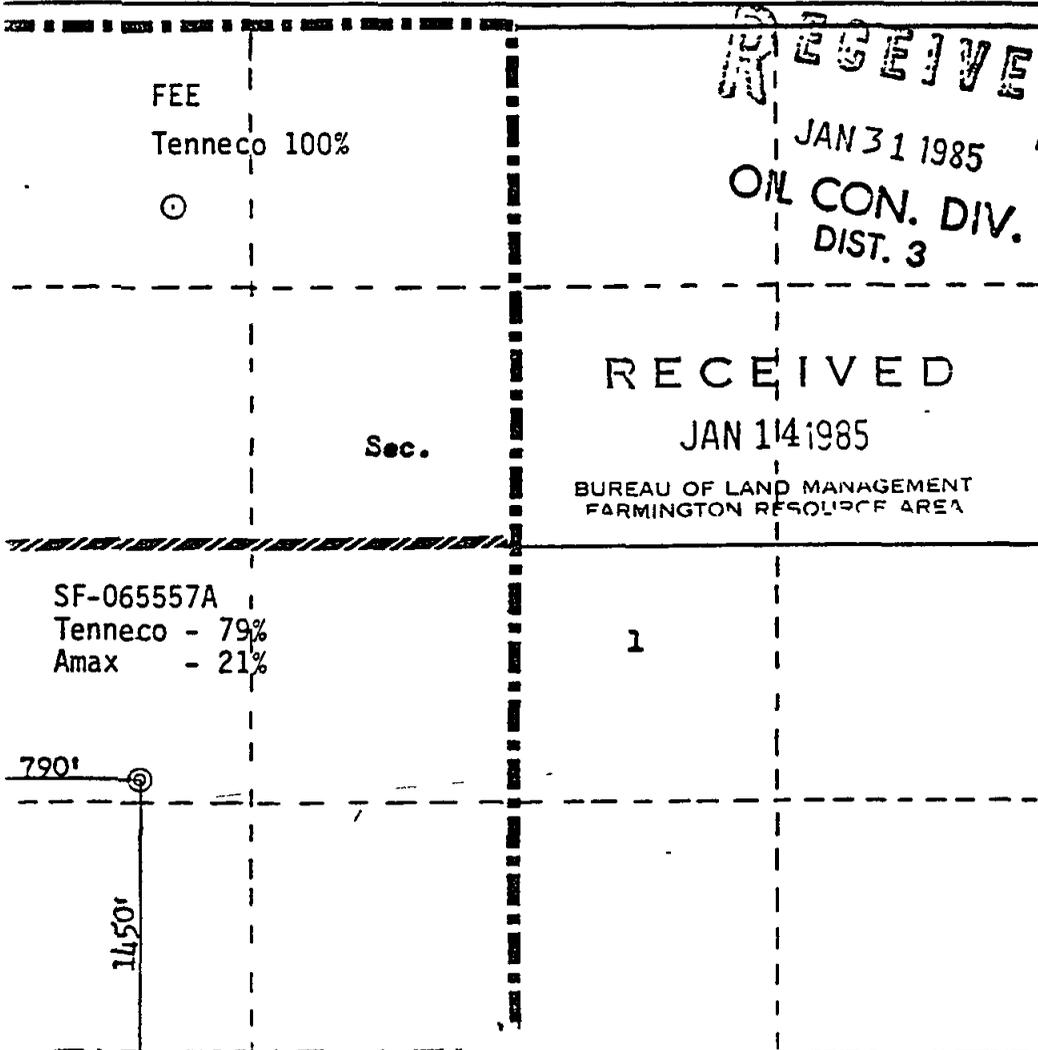
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>ALLEN #A#</b>		Well No. <b>1E</b>
Unit Letter <b>L</b>	Section <b>1</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>1450</b> feet from the <b>South</b> line and <b>790</b> feet from the <b>West</b> line				
Ground Level Elev. <b>5831</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes," type of consolidation Communitized

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



Scale 1"=100\''

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	<i>Scott McKinney</i>
Position	Sr. Regulatory Analyst
Company	Tenneco Oil Co
Date	January 10, 1985
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	October 27, 1984
Registered Professional Engineer and Land Surveyor	<i>Fred B. Kerr Jr.</i>
Certificate No.	3950

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)

Public Approval  
Budget Bureau No 1004-0135  
Expires APRIL 30, 1985

LEASE DESIGNATION AND SERIAL NO

SF-065557A

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir  
Use APPLICATION FOR PERMIT— for such proposals)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Tenneco Oil Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P.O. Box 3249, Englewood, CO 80155		8. FARM OR LEASE NAME Allen A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below) At surface 1450' FSL, 790' FWL		9. WELL NO 1E
14. PERMIT NO 30-045-26214		10. FIELD AND POOL, OR WILDCAT Basin Dakota
15. ELEVATIONS (Show whether DF, ST, OR, etc.)		11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 1, T29N, R12W
		12. COUNTY OR PARISH San Juan
		13. STATE NM

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

SUBSEQUENT REPORT OF

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <u>Progress report</u> <input type="checkbox"/>	

(NOTE Report results of multiple completion on Well Completion or Recompletion Report and Log form)

17. 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.)

3/22/85 MIRU w/Four Corners rig #7. Spud 12 1/4" surface 10:15 am 3/22/85. Drilg. TOOH RU & run 7 jts, 8 5/8 32# K-55 STC csg. Total 303 w/tools, set @318' KB. RU Western & cmt w/15 bbl H2), 274 sx (325CF), "B" w/1/4 #/sx cello-flake + 2% CaCl, plug dn 3:30 pm 3/22/85. Circ 15 bbl excess cmt. WOC NUBOP test blind rams & manifold to 1000 psi ok. TIH tag cmt @287, drill plug & cmt to 5' end of shoe, test csg & pipe rams to 1000 psi ok. Drill ahead.

3/31/85 RU run 163 jts, 5 1/2" 17# N-80 LT&C, total w/tools 6642.50. RU & circ cmt 1st stage w/20 bbls mud flush, 120 sx 221 CF 65-35 POZ 6% gel, + 1/4 #/sx cello-flake, tailed w/100 sx 118 CF "B" w/ 1/4 #/sx cello-flake. Plug on 4:15 am 4/1/85. Drop bomb Open tool & circ.

4/01/85 Cmt 2nd stage w/20 bbl mud flush 500 sx 65/35 6% gel 1/4# cello seal tailed w/100 sx "B" 1/4# cello seal. Drop bomb open tool & circ. Cmt 3rd stage w/20 bbl mud flush 200 sx 65/35 6% gel 1/4# cello seal. Plug dn 1:30 pm 4/1/85. Circ 2 bbl excess cement. Rig release @3:30 pm 4/1/85

RECEIVED  
APR 15 1985

18. I hereby certify that the foregoing is true and correct  
SIGNED Scott McKenny TITLE Sr. Regulatory Analyst DATE April 4, 1985

(This space for Federal or State office use)  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED FOR RECORD

APR 13 1985

\*See Instructions on Reverse Side

NMOCC

FARMINGTON RESOURCE AR  
BY EGB  
RV \_\_\_\_\_

TRANSPORTER	OIL		
	GAS		
OPERATOR			
PRORATION OFFICE			

Operator  
Tenneco Oil Company, Inc.

Address  
P. O. Box 3249, Englewood, CO 80155

Reason(s) for filing (Check proper box) Other (Please explain)

New Well  Change in Transporter of:

Recompletion  Oil  Dry Gas

Change in Ownership  Casinghead Gas  Condensate

If change of ownership give name and address of previous owner \_\_\_\_\_

**DESCRIPTION OF WELL AND LEASE**

Lease Name Allen A	Well No. 1E	Pool Name, including Formation Basin Dakota	Kind of Lease USA State, Federal or Fee SF	Lease No 065557A
Location Unit Letter <u>L</u> ; <u>1450</u> Feet From The <u>South</u> Line and <u>790</u> Feet From The <u>West</u>				
Line of Section <u>1</u> Township <u>29N</u> Range <u>12W</u> , NMPM, <u>San Juan</u> County				

**DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/> Gary Energy Corp.	Address (Give address to which approved copy of this form is to be sent) 4 Inverness Ct. East, Englewood, CO 80112
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/> El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) P. O. Box 4990, Farmington, NM 87499
If well produces oil or liquids, give location of tanks.	Unit : <u>L</u> ; Sec. : <u>1</u> ; Twp. : <u>29N</u> ; Rge. : <u>12W</u> ; Is gas actually connected? : <u>NO</u> ; When : <u>ASAP</u>

If this production is commingled with that from any other lease or pool, give commingling order number: \_\_\_\_\_

**COMPLETION DATA**

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res <sup>n</sup>	Diff. Res <sup>n</sup>
		X	X					
Date Spudded 3-22-85	Date Compl. Ready to Prod. 4-21-85	Total Depth 6625' KB	P.B.T.D. 6619' KB					
Elevations (DF, RAB, RT, GR, etc.) 5831' GL	Name of Producing Formation Dakota	Top Oil/Gas Pay 6425' KB	Tubing Depth 6559' KB					
Perforations <u>2 JSPF 43', 86 holes</u> <u>6425-36', 6502-28', 6596-6602' KB</u>			Depth Casing Shoe 6622' KB					

**TUBING, CASING, AND CEMENTING RECORD**

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12 1/4"	8 5/8" csg	318' KB	275 sx 325 CF
7 7/8"	5 1/2" csg	6622' KB	720 sx 1745 CF 1627
	2 3/8"	6559'	

**TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)
Length of Test	Tubing Pressure	Casing Pressure
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.

RECEIVED

MAY 02 1985

OIL CON. DIV.  
DIST. 3

**GAS WELL**

Actual Prod. Test-MCF/D 1936	Length of Test 3 hrs	Bbls. Condensate/MCF	Gravity of Condensate
Testing Method (pilot, back pr.) back pressure	Tubing Pressure (shut-in) 1325	Casing Pressure (shut-in) 1325	Choke Size 3/4"

**CERTIFICATE OF COMPLIANCE**

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

OIL CONSERVATION COMMISSION

6-12-85  
APPROVED \_\_\_\_\_ JUN 12 1985

BY \_\_\_\_\_ Original Signed by FRANK T. CHAVEZ

# NEW MEXICO OIL CONSERVATION COMMISSION

## Well Location and Acreage Dedication Plat

SECTION A.

Lease Young Date July 27, 1961

Operator Astec Oil and Gas Company Lease ~~Young~~

Well No 1-D Unit Letter D Section 2 Township 29N Range 12W NMPM

Located 990 Feet From North Line, 990 Feet From West Line

County San Juan G. L. Elevation 5847 Dedicated Acreage 399 319.94 Acres

Name of Producing Formation Dakota Pool Basin

1. Is the Operator the only owner\* in the dedicated acreage outlined on the plat below? Yes X No

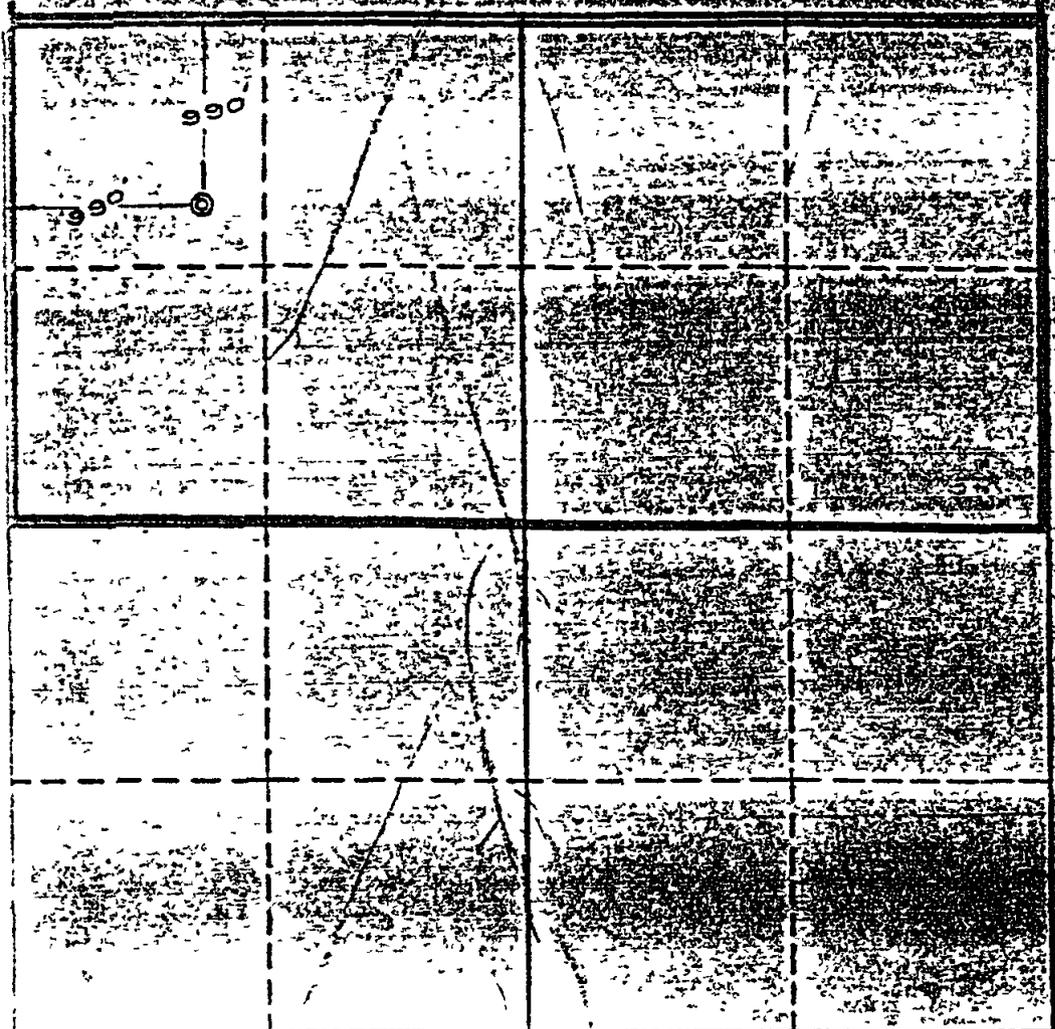
2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No If answer is "Yes" Type of Consolidation

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER LAND DESCRIPTION



SECTION B.



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief

Astec Oil and Gas Company  
OPERATOR

ORIGINAL SIGNED BY JOE C. SALMON

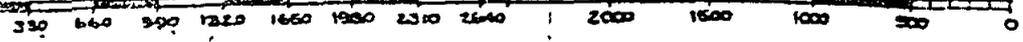
Representative  
Joe C. Salmon, Dist. Supt.  
Drawer 570, Farmington, N.M.

This is to certify that the well location shown on the plat in Section B was plotted from the actual survey made by my superior and that the same is true and correct to the best of my knowledge and belief

Date Surveyed July 27, 1961  
Four States Engineering Co.  
Albuquerque, New Mexico

C. L. Poteet  
REGISTERED ENGINEER OR  
LAND SURVEYOR

Certificate No. 3084



COPIES RECEIVED		5
DISTRIBUTION		
OFFICE	1	
OFFICE	2	
TRANSPORTER		
OIL		
PRODUCTION OFFICE		
OPERATOR	1	

Revised 7/1/61  
(Form C-100)

0									

**NEW MEXICO OIL CONSERVATION COMMISSION**  
Santa Fe, New Mexico

**WELL RECORD**

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE If State Land submit 6 Copies.

AREA 640 ACRES  
LOCATE WELL CORRECTLY

**Astec Oil & Gas Company** (Company or Operator) **Young** (Lease)

Well No. 1-D in N<sup>W</sup>  $\frac{1}{4}$  of 2 of Sec. 2, T. 29N, R. 12W, NMPM.  
Basin Dakota Pool, San Juan County.

Well is 990 feet from North line and 990 feet from West line of Section 2. If State Land the Oil and Gas Lease No. is \_\_\_\_\_

Drilling Commenced 8/1/61, 19\_\_\_\_\_. Drilling was Completed 8/13/61, 19\_\_\_\_\_.

Name of Drilling Contractor Summit Drilling Company

Address Box # 190, Farmington, New Mexico

Elevation above sea level at Top of Tubing Head G.L. - 5847. The information given is to be kept confidential until non-confidential, 19\_\_\_\_\_.

**OIL SANDS OR ZONES**

No 1, from 6446 to 6456 No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No 2, from 6521 to 6546 No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No 3, from 6609 to 6644 No. 6, from \_\_\_\_\_ to \_\_\_\_\_

**IMPORTANT WATER SANDS**

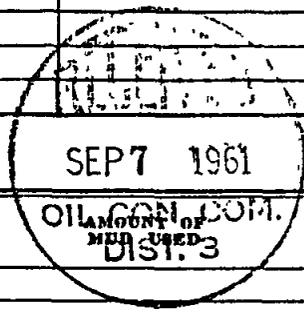
Include data on rate of water inflow and elevation to which water rose in hole.  
No 1, from \_\_\_\_\_ to \_\_\_\_\_ feet.  
No 2, from \_\_\_\_\_ to \_\_\_\_\_ feet.  
No 3, from \_\_\_\_\_ to \_\_\_\_\_ feet.  
No 4, from \_\_\_\_\_ to \_\_\_\_\_ feet.

**CASING RECORD**

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8	24	NEW	294				
4 1/2	11.6	NEW	1162				
4 1/2	9.5	NEW	5566				
2 3/8	4.7	NEW	6426				

**MUDDING AND CEMENTING RECORD**

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY
12 1/2	8 5/8	307	275	displacement	
7 7/8	4 1/2	6739	700	two plug	
	2 3/8	6436			



**RECORD OF PRODUCTION AND STIMULATION**

(Record the Process used, No. of Qts. or Gals used, interval treated or shot.)

Sand-water fraced with 60,000# 20/40 sand, 30,000# 10/20 sand, 2038 Ebls. water flushed with 160 Ebls. water.

Result of Production Stimulation... Maximum - 3400, Avg. 2800, I.R. - 33.3 bpm, dropped 108 rubber ball sealers, 5 min. shut-in pr. - 1200

Depth Cleaned Out... 6705

NEW MEXICO OIL CONSERVATION COMMISSION  
Well Location and Acreage Dedication Plat

FORM C 128  
REVISED 5/1/67

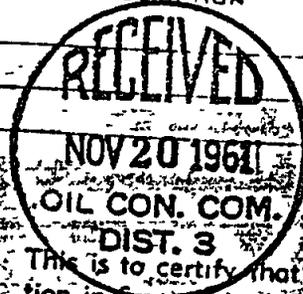
Operator Aztec Oil and Gas Company Lease McGrath Date November 16, 1961  
 Unit Letter B-1 Section 2 Township 29N Range 12W NMPM  
 d 1650 Feet From South Line, 1650 Feet From East Line  
 y San Juan G. L. Elevation 5892 Dedicated Acreage 320 8/2 Acres  
 ne of Producing Formation Dakota Pool Basin

Is the Operator the only owner\* in the dedicated acreage outlined on the plat below? Yes \_\_\_\_\_ No X

2. If the answer to question One is "No," have the interests of all the owners been consolidated by communication agreement or otherwise? Yes X No \_\_\_\_\_ If answer is "Yes," Type of Consolidation Communitization

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER LAND DESCRIPTION



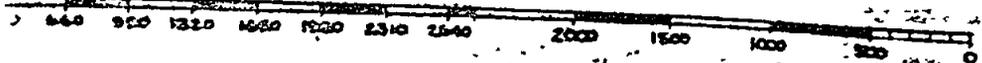
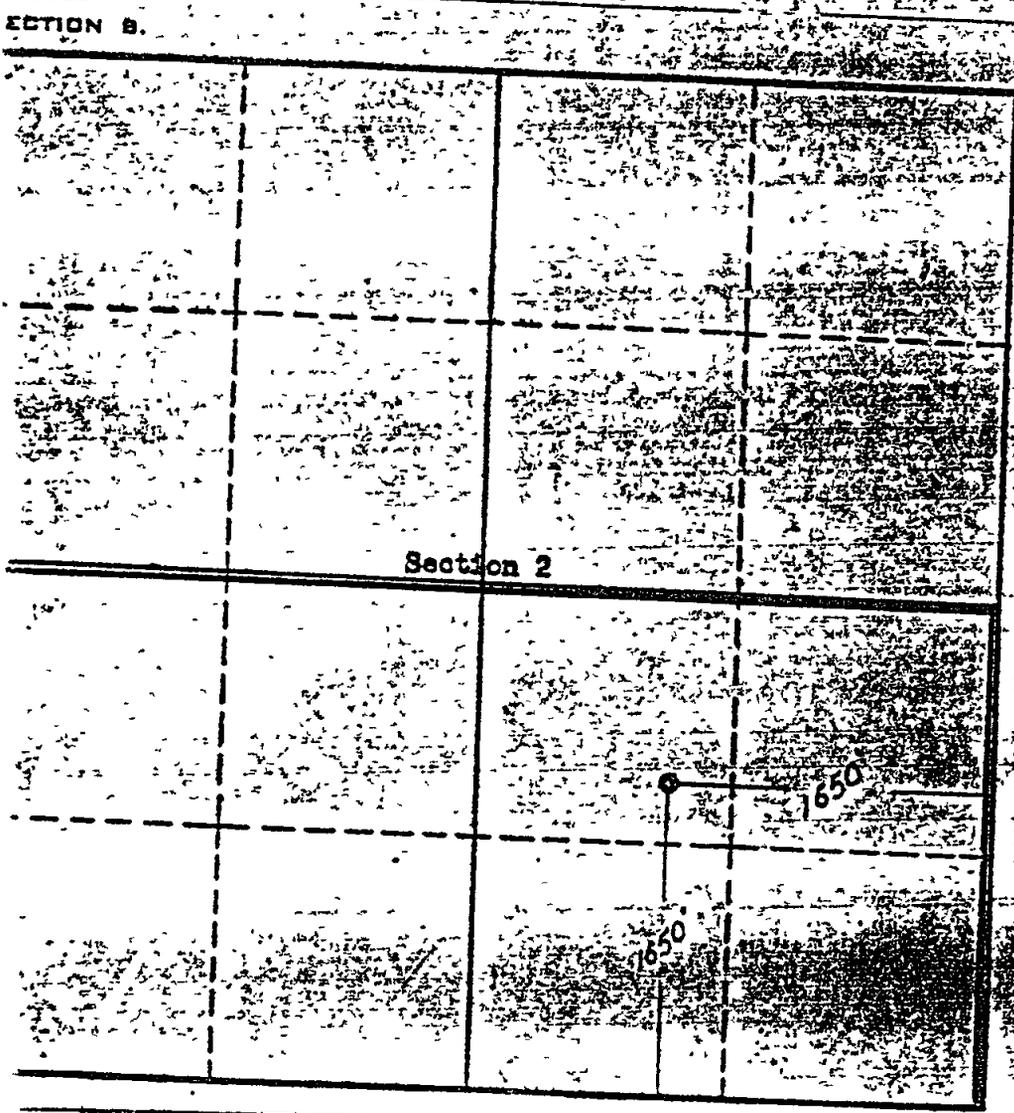
This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Aztec Oil and Gas Company  
 OPERATOR  
 ORIGINAL SIGNED BY JOE C. SALMON  
 REPRESENTATIVE  
Joe C. Salmon, Dist. Supt.  
P. O. Drawer 570, Farmington  
 ADDRESS

This is to certify that the well location shown on the plat in Section B was plotted from a 1650 actual survey under my supervision and is true and correct to the best of my knowledge and belief.

Date Surveyed Nov. 15, 1961  
Four Acres Engineering Co.  
 FARMINGTON, NEW MEXICO  
E. L. Poter  
 REGISTERED ENGINEER OR LAND SURVEYOR

Certificate No 3084





NUMBER OF COPIES RECEIVED	
DISTRIBUTION	
AREA #	
FILE	
LOG #	
LAND OFFICE	
TRANSPORTER	OIL
	GAS
PRODUCTION OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe New Mexico

Form C-104  
Revised 7/1/57

REQUEST FOR (OIL) - (GAS) ALLOWABLE

WITHIN 1/2 mile

New Well  
Recompletion

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15,025 psia at 60° Fahrenheit.

Farrington, New Mexico  
(Place)

4-29-64  
(Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS.

Astec Oil & Gas Company McGRATH "A" Well No. 1, in NE 1/4 SE 1/4, I, Sec 3, T. 29N, R. 12W, NMPM., Basin Dakota Pool  
Unit Letter San Juan

County Date Spudded 3-14-64 Date Drilling Completed 3-29-64  
Elevation 5865 Ground Total Depth 6689' PSTD 6552'

Please indicate location

Top Oil/Gas Pay 6432 Name of Prod. Form. Dakota

PRODUCING INTERVAL -

Perforations 6432-6440; 6452-6456; 6504-6524

Open Hole Depth Casing Shoe Depth Tubing

OIL WELL TEST -

Natural Prod. Test: bbls. oil, bbls water in hrs, min. Size Choke  
Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of load oil used). bbls. oil, bbls water in hrs, min. Size Choke

GAS WELL TEST -

Natural Prod. Test. 1793 MCF/Day; Hours flowed Choke Size 3/4"  
Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: MCF/Day; Hours flowed  
Choke Size Method of Testing.

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand) Fract 9/62, 070 gal. treated wtr; 60,000# 20-40 #3; 10,000# 10-20 #4

Casing Tubing Date first new Press. Press. oil run to tanks

Oil Transporter  
Gas Transporter

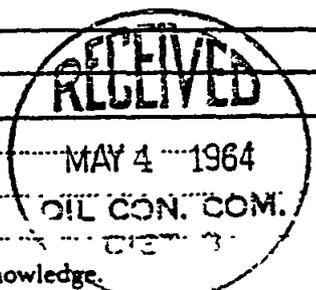
D	G	B	A
E	F	G	H
L	K	J	I X
M	N	O	P

(FOOTAGE)

Tubing, Casing and Cementing Record

Size	Feet	Sax
8-5/8"	307'	250
4-1/2"	6688'	500
2-3/8"	6429	

Remarks



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

Approved: ~~April 29~~ MAY 4 1964, 1964

Astec Oil & Gas Company  
(Company or Operator)

OIL CONSERVATION COMMISSION

Original Signed By

A. R. KENDRICK

PETROLEUM ENGINEER DIST NO 3

ORIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon  
(Signature)

Title: District Superintendent  
Send Communications regarding well to.

Name: Astec Oil & Gas Company

Address: Drawer #570, Farrington, New Mexico







NEW MEXICO OIL CONSERVATION COMMISSION  
Well Location and Acreage Dedication Plat

Date \_\_\_\_\_

AZTEC OIL & GAS COMPANY Lease Mc GRATH  
 to C-1 Unit Letter P Section 34 Township 30N Range 12W N14MPM  
 meridian 870 Feet From South Line, 1190 Feet From East Line  
 County San Juan G. L. Elevation 5774 Dedicated Acreage 320 Acres  
 Name of Producing Formation Dakota Pool Basin Dakota

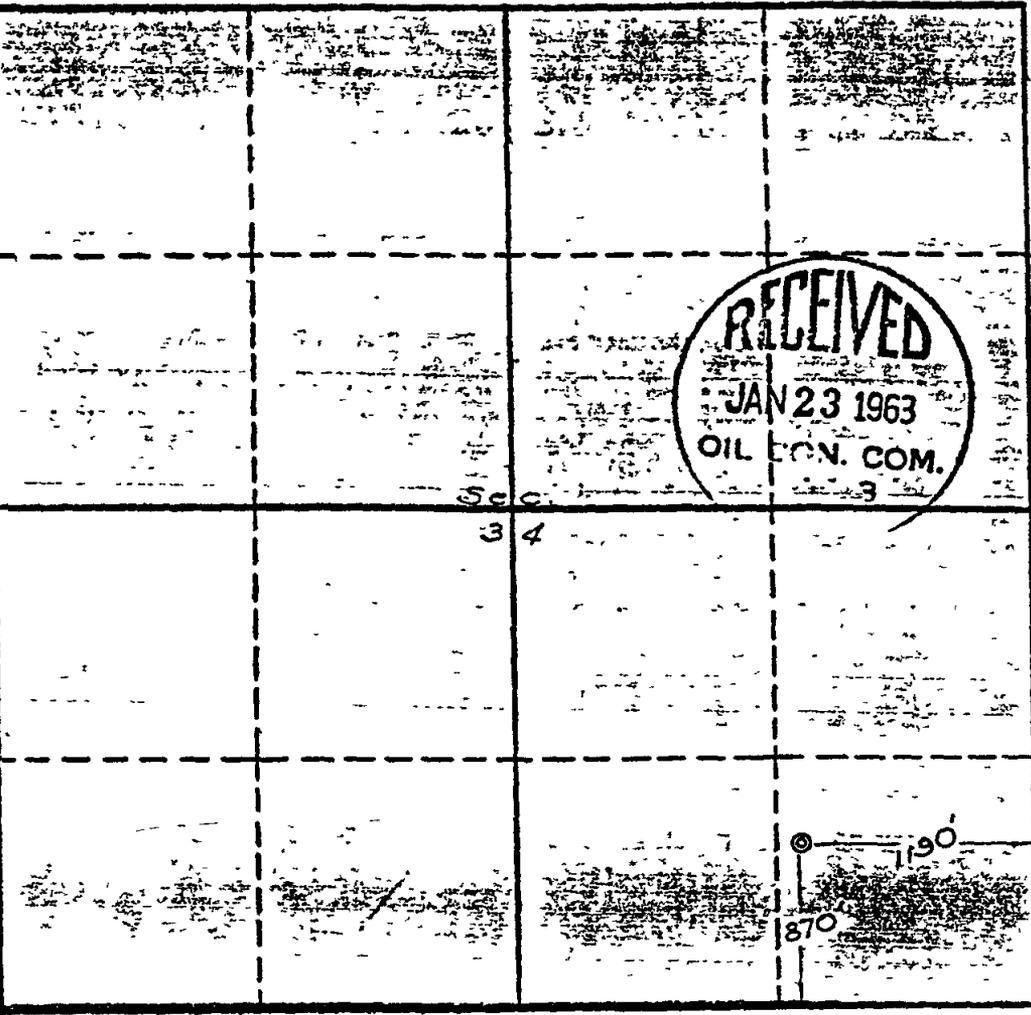
Is the Operator the only owner\* in the dedicated acreage outlined on the plat below? Yes  No

If the answer to question One is "No," have the interests of all the owners been consolidated by communization agreement or otherwise? Yes  No  If answer is "Yes," Type of Consolidation communization

If the answer to question Two is "No," list all the owners and their respective interests below.

OWNER	LAND DESCRIPTION

SECTION B.



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief

**AZTEC OIL & GAS COMPANY**

(OPERATOR)  
*Joe C. Salmon*  
 REPRESENTATIVE  
 Joe C. Salmon,  
 Dist. Supt.  
 Drawer # 570, Farmington, N.M.  
 (ADDRESS)

STATE OF NEW MEXICO  
 This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief

Date Surveyed Jan 18, 1962

FARMINGTON, NEW MEXICO  
*Conrad J. Eckhardt*  
 REGISTERED ENGINEER OR  
 LAND SURVEYOR

Certificate No 3602



U. S. LAND OFFICE SAN JUAN  
SERIAL NUMBER 277922  
LEASE OR PERMIT TO PROSPECT \_\_\_\_\_

									0

LOCATE WELL CORRECTLY

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company AZTEC OIL AND GAS COMPANY Address P. O. DRAWER 570 FARMINGTON, N. MEX.  
Lessor or Tract McGRATH Field BASIN DAKOTA State NEW MEXICO  
Well No. C-1 Sec. 34 T. 30N R. 12W Meridian N.M.P.M. County SAN JUAN  
Location 870 ft. N of S Line and 1190 ft. W of S Line of SECTION 34 Elevation 5771 s.l.  
(Denote base relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed JOE C. SALMON Title DISTRICT SUPERINTENDENT

Date MARCH 7, 1963

The summary on this page is for the condition of the well at above date

Commenced drilling FEBRUARY 7, 1963 Finished drilling FEBRUARY 18 1963

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6387 to 6400 G No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from 6462 to 6484 G No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from 6542 to 6576 G No. 6, from \_\_\_\_\_ to \_\_\_\_\_

IMPORTANT WATER SANDS

No. 1, from \_\_\_\_\_ to \_\_\_\_\_ No. 3, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from \_\_\_\_\_ to \_\_\_\_\_ No. 4, from \_\_\_\_\_ to \_\_\_\_\_

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
8 5/8	24	8 rd.	J-35	311					
4 1/2	8.2	8 rd.	J-35	1153					
2 3/8	4.7	8 rd.	J-35	6399					
4 1/2	11.6	8 rd.	J-35	1153					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
4 1/2	6637	925	Two Plug		
2 3/8	6-08				

PLUGS AND ADAPTERS

Heaving plug—Material \_\_\_\_\_ Length \_\_\_\_\_ Depth set \_\_\_\_\_  
Adapters—Material \_\_\_\_\_ Size \_\_\_\_\_

MARK  
FOLD

4  
1983)  
9-330)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other in  
instructions on  
reverse side)

Form approved  
Budget Bureau No 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1. TYPE OF WELL:  WELL  DRY  OTHER

2. TYPE OF COMPLETION:  NEW WELL  WORK OVER  REFINISH  REPAIR  OTHER

3. NAME OF OPERATOR: Amoco Production Company

FEB 20 1985

CIL CON. DIV.

RECEIVED

FEB 11 1985

4. LOCATION OF WELL (Report location clearly and in accordance with any special instructions):  
At surface: 1770' FNL x 1480' FEL  
At top prod interval reported below: Same  
At total depth: Same

5. LAND IDENTIFICATION AND SERIAL NO: SF-07792 2

6. IF INDIAN ALLIOTYPE OR TRIBE NAME: \_\_\_\_\_

7. UNIT AGREEMENT NAME: \_\_\_\_\_

8. LEASE OR DEED NAME: \_\_\_\_\_

9. WELL NO: Duff Gas Com 1E

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

11. SEC. T., R., M. OR BLOCK AND SURVEY OR ARPA: SW/NE Sec. 34, T30N, R12'

BUREAU OF LAND MANAGEMENT  
FARMINGTON DATE TIME & OFFICE AREA

14. PERMIT NO. \_\_\_\_\_ DATE TIME & OFFICE AREA \_\_\_\_\_

12. COUNTY OR PARISH: San Juan

13. STATE: NM

15. DATE SPLDDED: 11/20/84

16. DATE TD REACHED: 12/2/84

17. DATE COMPL. (Ready to prod): 1/7/85

18. ELEVATION (OF RKB, RT, OR, ETC.): 5785' KB

19. ELEV. CASINGHEAD: 5772' GR

20. TOTAL DEPTH, MD & TVD: 6608'

21. PLUG BACK T.D., MD & TVD: 6604'

22. IF MULTIPLE COMPL., HOW MANY? single

23. INTEREST DRILLED BY: O-TD

24. PRODUCING INTERVAL(S) OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD): 6396'-6576' Dakota

25. WAS DIRECTIONAL SURVEY MADE: Yes

26. TYPE ELECTRIC AND OTHER LOGS R/W: DIL-SP-GR-FDC-CNL-GR

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#, K-55	316'	12-1/4"	295 c.f. Class B	
4-1/2"	10.5#, K-55	6608'	7-7/8"	Stage 1: 1,032 c.f. Class B 50-50 poz & tailed in with 118 c.f. Class B Neat (cont. on back)	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	6575'	

31. PERFORATION RECORD (Interval, size and number)

6576'-6558', 4 jspf, .50"; 6410'-6396', 6424'-6420', 6508'-6476', 6520'-6516', 2 jspf, .50", total of 180 holes.

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(6558'-6576')	20,000 gal. 30# gel & 25,000# 20-40 sand
(6396'-6520')	70,000 gal. 70 quality foam & 90,000# 20-40 sand.

33. PRODUCTION

DATE FIRST PRODUCTION: 1/30/85

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump): Flowing

WELL STATUS (Producing or shut in): Shut-in

DATE OF TEST: 1/31/85

HOURS TESTED: 3

CHOKED SIZE: .75"

FRID N FOR TEST PERIOD: \_\_\_\_\_

OIL—BBL: 168

GAS—MCF: 1344

WATER—BBL: \_\_\_\_\_

OIL GRAVITY-API (CORR.): \_\_\_\_\_

FLOW TUBING PRESS: 104 psig

CASING PRESSURE: 397 psig

CALCULATED 24 HOUR RATE: \_\_\_\_\_

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc): To be sold

TEST WITNESSED BY: J.J. Barnett

35. LIST OF ATTACHMENTS: None

ACCEPTED FOR RECORD

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

SIGNED: R. D. Shaw

TITLE: Administrative Supervisor

DATE: FEB 14 1985

COMPLETION DATA

Designate Type of Completion - (X)		Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Reevy.	DILL Rev
			X	X					
Date Spudded	Date Compl. Ready to Prod.		Total Depth		P.B.T.D.				
11/20/84	1/7/85		6608'		6604'				
Perforations (DF, RKB, RT, GR, etc.)	Name of Producing Formation		Top Oil/Gas Pay		Tubing Depth				
577' GR	Dakota		6396'		6575'				
Perforations					Depth Casing Shoe				
6576'-6558', 6410'-6396', 6424'-6420', 6508'-6476', 6520'-6516'					6609'				

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12-1/4"	8-5/8", 24#	316'	295 c.f.
7-7/8"	4-1/2", 10.5#	6609'	3031 c.f.
	2-3/8"	6575'	

TEST DATA AND REQUEST FOR ALLOWABLE (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF

AS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MCF	Gravity of Condensate
1344 1/31/85	3 hrs.	168	
Testing Method (pilot, back pr.)	Tubing Pressure (Kbbl-lb)	Casing Pressure (Kbbl-lb)	Choke Size
Back pressure	1870 psig	2010 psig	.75"

All distances must be from the outer boundaries of the Section

RION OIL & GAS CORPORATION		Lease		Well No.	
		CARNAHAN COM		2	
Section	Township	Range	County		
35	30N	12W	San Juan		
Natural Footage Location of Well:					
1090	feet from the	South	line and	1070	feet from the
					East
					line
5905	Producing Formation	Pool		Dedicated Acreage	
	Dakota	Basin Dakota		320	
				Acres	

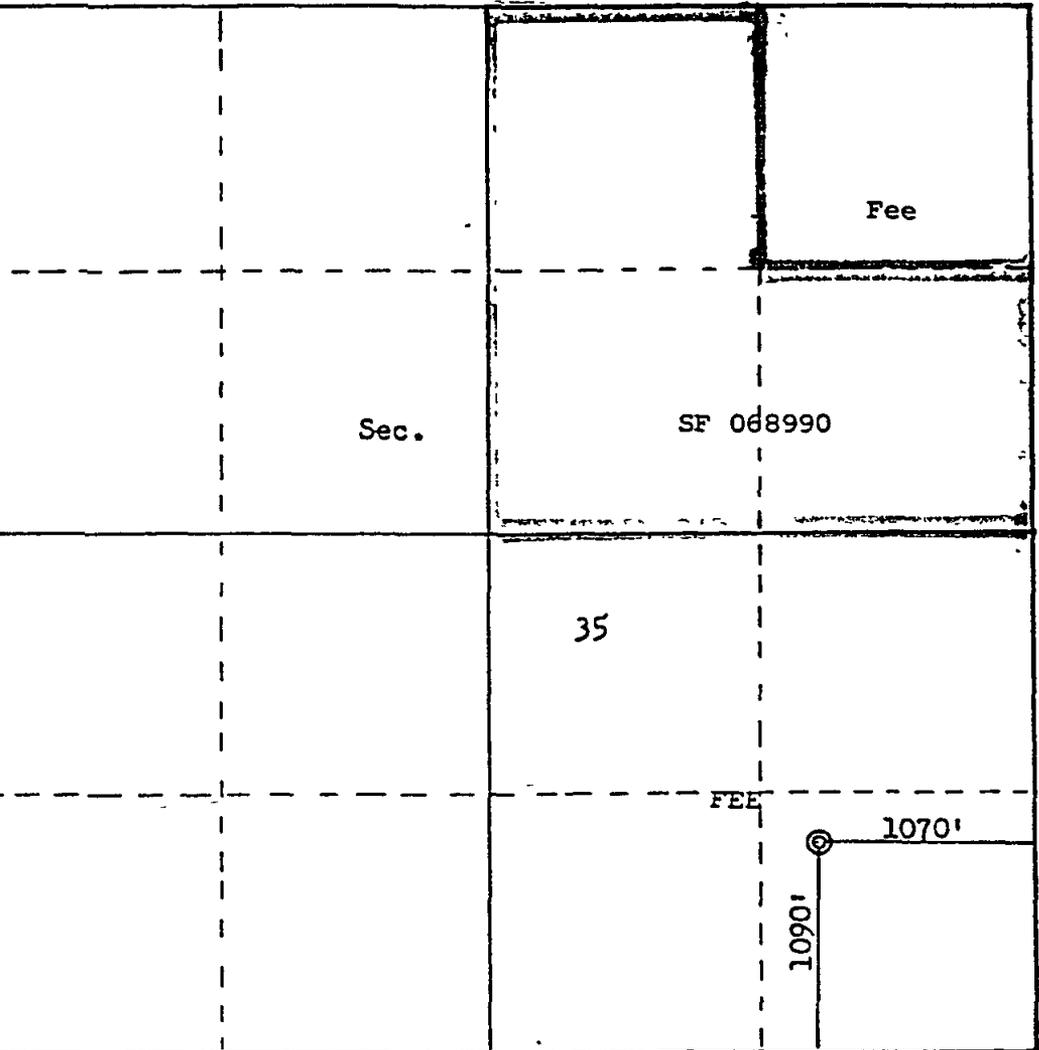
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?
 

NOV 21 1983  
OIL CON. DIV.  
DIST. 3

Yes     No    If answer is "yes," type of consolidation Communitized

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



Scale: 1"=1000'

<b>CERTIFICATION</b>	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>Steve S. Dunn</i>	
Name	Steve S. Dunn
Position	Operations Manager
Company	Merrion Oil & Gas Corporation
Date	11/17/83
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	September 1, 1983
Registered Professional Engineer and Land Surveyor	<i>Fred B. Kerr Jr.</i>
Certificate No.	3950

NEW MEXICO  
MINERALS DEPARTMENT

OIL CONSERVATION DIVISION  
P O BOX 2088  
SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

COPIES RECEIVED	
DISTRIBUTION	
NTA FE	
LE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease  
State  Fee

5. State Oil & Gas Lease No.

TYPE OF WELL  
OIL WELL  GAS WELL  DRY  OTHER

7. Unit Agreement Name

TYPE OF COMPLETION  
NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF. RESER.  OTHER

8. Farm or Lease Name  
Garnahan Com

Name of Operator  
Merrion Oil & Gas Corporation

Well No.  
2

Address of Operator  
P. O. Box 1017, Farmington, New Mexico 87499

10. Field and Pool, or Wildcat Basin  
Basin Dakota

Location of Well

LETTER P LOCATED 1090 FEET FROM THE South LINE AND 1070 FEET FROM

12. County  
San Juan

East 35 LINE OF SEC. TWP 30N RGE. 12W

Date Spudded 6/15/84 16. Date T.D. Reached 6/24/84 17. Date Compl. (Ready to Prod.) 7/23/84 18. Elevations (DF, RKB, RT, GR, etc.) 5918' KB 19. Elev. Casinghead 5905' GL

Total Depth 6780' KB 21. Plug Back T.D. 6735' KB 22. If Multiple Compl., How Many

23. Intervals Drilled By: Rotary Tools 0 - TD Cable Tools

Producing Interval(s), of this completion - Top, Bottom, Name  
6714 - 6529' KB, Dakota

25. Was Directional Sur Made  
No

Type Electric and Other Logs Run  
IES Induction, compensated Density Logs

27. Was Well Cared  
No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULL
8-5/8"	24 #/ft, J-55	230' KB	12-1/4	170 sx (350 cu. ft.) Class B	
4-1/2"	10.5 #/ft, J-55	6777' KB	7-7/8"	400 sx (488 cu. ft.) Class H	305x 396.
				600 sx (1236 cu. ft.) Class B	
				100 sx (122 cu. ft.) Class B	Total 22'

LINER RECORD

30. TUBING RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	6530' KB	

Perforation Record (Interval, size and number)  
6529, 6538, 6541, 6617, 6620, 6625, 6629, 6632, 6700, 6705, 6710, 6714, 12 holes, 0.32" diameter.

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

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
6529 - 6714' KB	75 Quality Foam
	434 Bbls H2O
	1,700,198 SCF N <sub>2</sub>
	55,000 # 20/40 sand

PRODUCTION

First Production - 7/23/84 Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing Well Status (Prod. or Shut-in) Shut in

Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas-Oil Ratio
8/3/84	3	20/64		2 Bbls	603 MCF/D	trace	37,688

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr)
850 PSI	950 PSI		16	603 MCF/D	trace	48°

Disposition of Gas (Sold, used for fuel, vented, etc.) Vented Test Witnessed By Tim Merilatt

List of Attachments

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

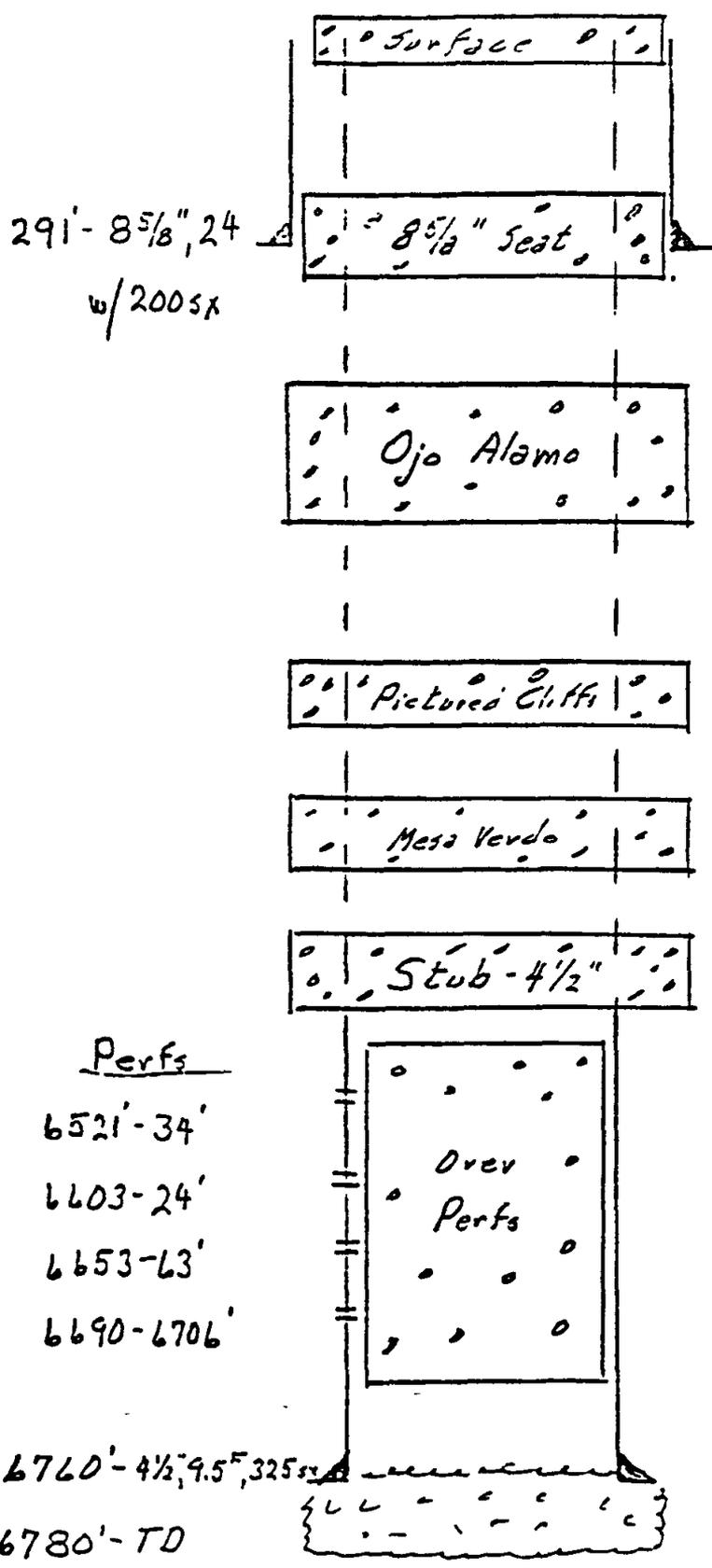
11821

Carnahan Unit #1  
Basin - Dakota Pool  
Unit P, Sect 35, 30N, 12W  
San Juan Co, New Mexico

G.L. 5911'

P & A

1. Plug over perfs  
    \$ 100' to 6400'
2. Cut and pull free  
    4 1/2" pipe
3. Plugs across —
  - a. 4 1/2" stub
  - b. Mesa Verde
  - c. Picture Cliffs
  - d. Ojo Alamo
  - e. 8 5/8" casing seat
  - f. surface
4. Monument



JCG/4-2-71

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator <b>Artec Oil &amp; Gas Company</b>		Lease <b>J. Hudson</b>		Well No <b>3</b>
Unit Letter <b>E</b>	Section <b>35</b>	Township <b>30 North</b>	Range <b>12 West</b>	County <b>San Juan</b>
Actual Footage Location of Well				
<b>1750</b>	feet from the <b>North</b>	line and	<b>990</b>	feet from the <b>West</b> line
Ground Level Ele. <b>5857</b>	Producing Formation <b>Dakota - Mesaverde</b>	Pool <b>Basin Dakota Flora Vista Mesaverde (Ext.)</b>	Dedicated Average <b>320</b> Acres	

- 1 Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below
- 2 If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty),
- 3 If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling etc?

Yes     No    If answer is "yes" type of consolidation    **Communitization**

If answer is "no," list the owners and tract descriptions which have actually consolidated (Use reverse side of this form if necessary)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission

**CERTIFICATION**

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

**ORIGINAL SIGNED BY JOE C. SALMON**

Name \_\_\_\_\_

Position **Joe C. Salmon**

Company **District Superintendent**

Date **Artec Oil and Gas**

**May 27, 1966**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

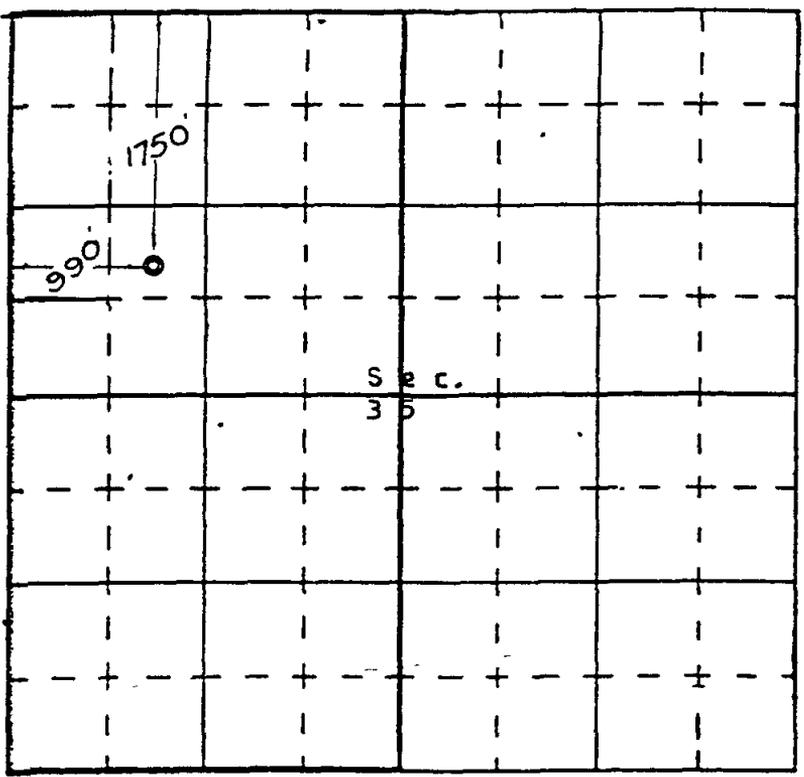
Date Surveyed \_\_\_\_\_

**March 31, 1966**

Registered Professional Engineer  
and/or Land Surveyor

*E. J. Edwards*

Certificate No 3602



OUT 7002 - 7148 - 4207 BLM Wayne

Form 2-330 (Rev 5-68)

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved Budget Bureau No 42-R355 6

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

RECEIVED

1a TYPE OF WELL: OIL WELL [ ], GAS WELL [X], DRY [ ], Other [ ]
b. TYPE OF COMPLETION: NEW WELL [X], WORK OVER [ ], DEEP-EN [ ], PLUG BACK [ ], DIFF RESVR [ ], Other [ ]

2. NAME OF OPERATOR: Aztec Oil and Gas
3 ADDRESS OF OPERATOR: Drawer 570 Farmington, New Mexico

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*
At surface 1750 FNL & 990 FWL Sec 35, T30N, R12W

At top prod interval reported below
At total depth

5 LEASE DESIGNATION AND SERIAL NO: SF 077922

6 IF INDIAN, ALLOTTEE OR TRIBE NAME

7 UNIT AGREEMENT NAME

8 FARM OR LEASE NAME: Hudson

9 WELL NO: 3

10: FIELD AND POOL, OR WILDCAT: Basin Dakota

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

Sec 35, T30N, R12W

12 COUNTY OR PARISH: San Juan
13 STATE: New Mexico

14 PERMIT NO DATE ISSUED

15 DATE SPUDDED: 7/22/66
16 DATE TD REACHED: 8/4/66
17 DATE COMPL (Ready to prod): 8/15/66
18 ELEVATIONS (DF, REB, BT, GR, ETC)\*: 5857 GL
19 ELEV. CASINGHEAD: 5858

20 TOTAL DEPTH, MD & TVD: 6750
21 PLUG BACK TD, MD & TVD: 6732
22 IF MULTIPLE COMPL, HOW MANY\*
23 INTERVALS DRILLED BY: [ ]
ROTARY TOOLS: [X]
CABLE TOOLS: [ ]

24 PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*: 6460 • 6680
25 WAS DIRECTIONAL SURVEY MADE: NO

26 TYPE ELECTRIC AND OTHER LOGS RUN: Es • Ind and Density log
27 WAS WELL CORED: NO

28 CASING RECORD (Report all strings set in well)
Table with columns: CASING SIZE, WEIGHT, LB/FT, DEPTH SET (MD), HOLE SIZE, CEMENTING RECORD, AMOUNT PULLED

29 LINER RECORD
30 TUBING RECORD
Table with columns: SIZE, TOP (MD), BOTTOM (MD), SACKS CEMENT\*, SCREEN (MD), SIZE, DEPTH SET (MD), PACKER SET (MD)

31 PERFORATION RECORD (Interval, size and number)
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
Table with columns: DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED

3\* PRODUCTION
3\* FIRST PRODUCTION
PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)
WELL STATUS (Producing or shut-in)
Table with columns: DATE OF TEST, HOURS TESTED, CHOKED SIZE, PROD'G FOR TEST PERIOD, OIL—BBL, GAS—MCF, WATER—BBL, GAS-OIL RATIO

LIST OF ATTACHMENTS
I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED: [Signature] District Engineer
DATE: August 23, 1966

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

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Oil & Gas Company Hudson Lease No. 3

Section 35 Range 30 North Township 12 West County San Juan

Well Footage Location of Well 1750 feet from North corner of Section 990 feet from West line of Basin Dakota Producing Form of Flora Vista Mesaverde (Ext) Dedication Average 320 Acres

1 Outline the acreage dedicated to the subject well by colored pencil or machine marks on the plat below

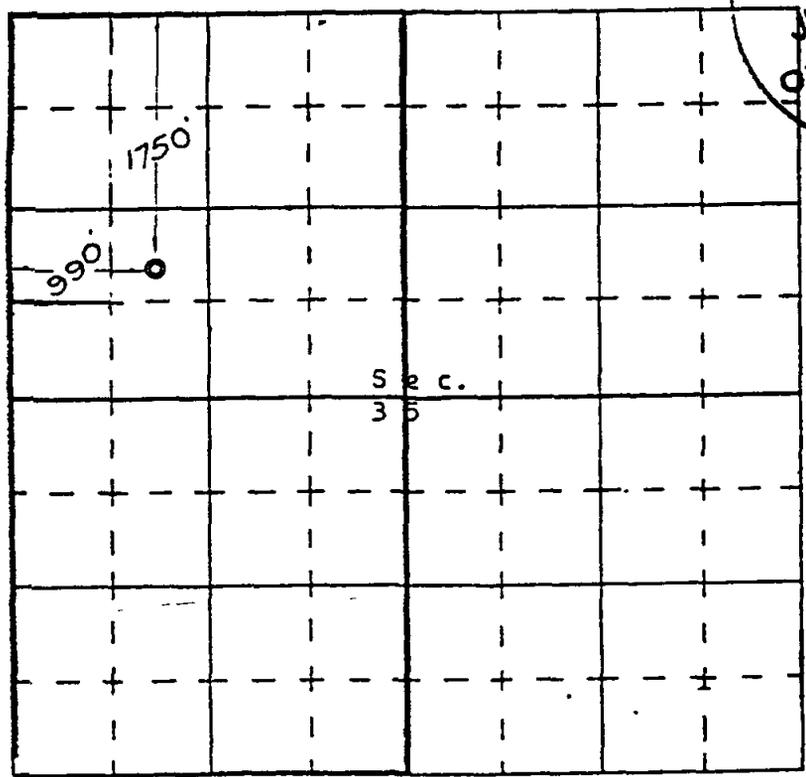
2 If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty),

3 If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes  No If answer is "yes" type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually consolidated (Use reverse side of this form if necessary)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission



CERTIFICATION

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

ORIGINAL SIGNED BY JOE C. SALMON

Name Joe C. Salmon

Position District Superintendent

Company Aztec Oil and Gas

Date May 27, 1966

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief

Date Surveyed March 31, 1966

Registered Professional Engineer and/or Land Surveyor

E. J. Edwards  
Certificate No 3602

**NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS**

Form 1-1  
Supersedes Old 1-1 and 1-2  
Effective 1-1-66

REGISTRATION OFFICE  
OPERATION OFFICE  
TRANSPORTER OF OIL AND GAS

**These** Aztec Oil and Gas  
Drawer 570 Farmington, New Mexico  
 (Check proper box)  
 Change in Transporter of  
 Oil  Dry Gas   
 Casinghead Gas  Condensate

If change of ownership give name and address of previous owner

**DESCRIPTION OF WELL AND LEASE**  
 Well No. 3 Basin Dakota State NM 077922  
 Section E 1750 feet from the North end 990 feet from the West end  
 Township 35 Range 30N Meridian 12W San Juan

**DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS**  
 Name of Transporter of Oil Plateau Incorporated Address Box 108 Farmington, New Mexico  
 Name of Transporter of Casinghead Gas or Dry Gas Southern Union Gas Company Address Box 815 Farmington, New Mexico  
 Other NO

**COMPLETION DATA**  
 Designate Type of Completion - (X)  
 Oil Well  Gas Well  New Well  Workover  Lease  Plug Back  Re-drill  
 Date Compl. Ready to Prod. 7/22/66 8/9/66 6750 6732  
 Name of Producing Formation Dakota 6460-6680 6597  
6460-80, 6540-62, 6567-72, 6580-85, 6668-80, 4 FFT 6750

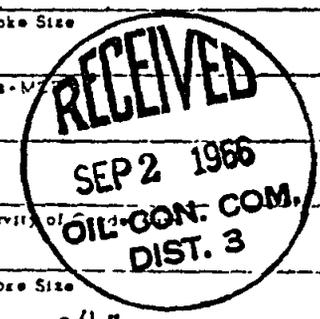
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
<u>12 1/8"</u>	<u>8 5/8"</u>	<u>306</u>	<u>250 BX</u>
<u>7 7/8"</u>	<u>4 1/2"</u>	<u>6750</u>	<u>750 BX</u>
	<u>1 1/2"</u>	<u>6597</u>	

**TEST DATA AND REQUEST FOR ALLOWABLE** (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)  
 Date of Test \_\_\_\_\_ Producing Method (Flow, pump, gas lift, etc.) \_\_\_\_\_  
 Tubing Pressure \_\_\_\_\_ Casing Pressure \_\_\_\_\_ Choke Size \_\_\_\_\_  
 Water - Bbls \_\_\_\_\_ Gas - MCF \_\_\_\_\_

**SHUT-IN WELL**  
 Length of Test 3 hr Bbls. Condensate/MMCF \_\_\_\_\_ Gravity of Oil \_\_\_\_\_  
 Tubing Pressure (Shut-in) 170 Casing Pressure (Shut-in) 747 Choke Size 3/4"

**CERTIFICATE OF COMPLIANCE**  
 I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given is true and complete to the best of my knowledge and belief.  
 ORIGINAL SIGNED BY JOE C. SALMON  
 District Superintendent  
 August 31, 1966

**OIL CONSERVATION COMMISSION**  
**SEP - 2 1966**  
 APPROVED \_\_\_\_\_  
 BY Original Signed by Emery C. Arnold  
 TITLE SUPERVISOR DIST. #3  
 This form is to be filed in compliance with RULE 1104  
 If this is a request for allowable for a newly drilled or deepened well this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111  
 All sections of this form must be filled out completely for allowable on new and recompleted wells  
 Fill out only Sections I, II, III and VI for changes of owner, well name or number or transporter, or other such change of information  
 Separate Forms C-104 must be filed for each well



Submit to Appropriate District Office  
 State Lease - 6 copies  
 Fee Lease - 5 copies  
**DISTRICT I**  
 P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
 P.O. Drawer DD, Artesa, NM 88210

**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C 105  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**  
 P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

WELL API NO \_\_\_\_\_

5. Indicate Type of Lease  
 STATE  FEE

6. State Oil & Gas Lease No \_\_\_\_\_

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. Type of Well  
 OIL WELL  GAS WELL  DRY  OTHER DISPOSAL

b. Type of Completion.  
 NEW WELL  WORK OVER  DEEPEN  PLUG BACK  DIFF RESVR  OTHER \_\_\_\_\_

7. Lease Name or Unit Agreement Name  
**SUNCO DISPOSAL**

2. Name of Operator  
**COLEMAN OIL & GAS COMPANY**

8. Well No.  
**#1**

3. Address of Operator  
**708 SOUTH TUCKER, FARMINGTON, NM 87401**

9. Pool name or Wildcat  
**FLORA VISTA MESA VERDE**

4. Well Location  
 Unit Letter E 1595 Feet From The NORTH Line and 1005 Feet From The WEST Line  
 Section 2 Township 29N Range 12W NMPM SAN JUAN County

10. Date Spudded 01-28-92 11. Date TD Reached \_\_\_\_\_ 12. Date Compl. (Ready to Prod.) 2-24-92 13. Elevations (DF & RKB, RT, GR, etc) 5859 GR. 14. Elev. Casinghead 5864

15. Total Depth 4760 16. Plug Back T.D. \_\_\_\_\_ 17. If Multiple Compl How Many Zones? 1 18. Intervals Drilled By Rotary Tools  Cable Tools \_\_\_\_\_

19. Producing Interval(s), of this completion - Top, Bottom, Name \_\_\_\_\_ 20. Was Directional Survey Made **YES**

21. Type Electric and Other Logs Run **DUAL INDUCTION & FORMATION DENSITY** 22. Was Well Cored **NO**

23. **CASING RECORD (Report all strings set in well)**

CASING SIZE	WEIGHT LB/FT	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	24.0	209	12-1/4	250 sc Class B	0
5-1/2	15.50	4760	7-7/8	1st stage 230sx 65/35 & 265 Class B Tail.	0
				2nd stage 465sx 65/35 & 50sx "8" Tail.	

24. **LINER RECORD** 25. **TUBING RECORD**

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8	4300	4300

26. Perforation record (interval, size, and number)  
4350-4460 2spf .46 220

27. **ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC**  
 DEPTH INTERVAL \_\_\_\_\_ AMOUNT AND KIND MATERIAL USED \_\_\_\_\_

28. **PRODUCTION**

Date First Production 02-24-92 Production Method (Flowing, gas lift, pumping - Size and type pump) **SWABBING** Well Status (Prod or Shut-in) **SHUT-IN**

Date of Test	Hours Tested	Choke Size	Prod n For Test Period	Oil - Bbl. TR.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
02-24-92	24	2"			3.2	164.99	19. CU/FT/BB

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF	Water - Bbl	Oil Gravity - API - (Corr)
0	315				164.99	NOT MEASURED

29. Disposition of Gas (Sold, used for fuel, vented, etc) **VENTED** Test Witnessed By **HAROLD ELLEDGE**

30. List Attachments  
**PRODUCTION TEST**

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Ron Mahan Printed Name **RON MAHAN** Title **CONTRACTS MGR** Date **02-28-92**

**RECEIVED**  
**FEB 28 1992**  
**OIL CON. DIV.**  
**DIST. 3**

Submit to Appropriate District Office  
 State Lease - 6 copies  
 Fee Lease - 5 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C 101  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**  
 P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

DISTRICT I  
 P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
 1000 Rio Brazos Rd., Aztec, NM 87410

API NO (assigned by OCD on New Wells)	<u>30-045-28653</u>
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name  SUNCO DISPOSAL <u>13795</u>		
b. Type of Well- OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> <u>SWD DISPOSAL</u> X SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>					
2. Name of Operator COLEMAN OIL & GAS COMPANY <u>4838</u>			8. Well No. #1		
3. Address of Operator 700 SOUTH TUCKER, FARMINGTON, NM 87401			9. Pool name or Wildcat <u>76680</u> FLORA VISTA MESA VERDE		
4. Well Location Unit Letter <u>E</u> <u>1595</u> Feet From The <u>NORTH</u> Line and <u>1005</u> Feet From The <u>WEST</u> Line Section <u>2</u> Township <u>29N</u> Range <u>12W</u> NMPM <u>SAN JUAN</u> County					
10. Proposed Depth 4760		11. Formation MESA VERDE		12. Rotary or C.T ROTARY	
13. Elevations (Show whether DF, RT, GR, etc) 5859 GR.		14. Kind & Status Plug. Bond		15. Drilling Contractor BIG "A" WELL SERVICE	
16. Approx. Date Work will start 1-28-92					
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST TOP
12-1/4	8-5/8	24.0	200	200	SURFACE
7-7/8	5-1/2	15.50	4760	900	SURFACE

We propose to drill, log, and set casing through the point lookout member of the Mesa Verde and upon examination of the logs, a portion of the point lookout will be selectively perforated and stimulated as needed.

**RECEIVED**

FEB 28 1992

OIL CON. DIV  
 DIST

APPROVAL EXPIRES 9-5-92  
 UNLESS DRILLING IS COMMENCED.  
 SPUD NOTICE MUST BE SUBMITTED  
 WITHIN 10 DAYS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY

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

SIGNATURE Ron Mahan TITLE CONTRACTS MANAGER DATE 02/28/92

TYPE OR PRINT NAME RON MAHAN TELEPHONE NO 327-4961

(This space for State Use)

APPROVED BY Ernie Bouch TITLE DEPUTY OIL & GAS INSPECTOR, DIST #3 DATE MAR 05 1992  
 CONDITIONS OF APPROVAL, IF ANY

P 553 308 258

**US Postal Service  
Receipt for Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail (See reverse)

Sent to <b>Merrion Oil &amp; Gas</b>	
Street & Number <b>P.O. Box 840</b>	
Post Office, City, State, ZIP Code <b>Farmington, NM 87499</b>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Fold at line over top of envelope to the right of the return address

**CERTIFIED**

P 553 308 258

**MAIL**

is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

I also wish to receive the following services (for an extra fee)

1  Addressee's Address

2  Restricted Delivery

Consult postmaster for fee

3 Article Addressed to <b>Merrion Oil &amp; Gas P.O. Box 840 Farmington NM 87499</b>	4a Article Number <b>P 553 308 258</b>
	4b Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
	7 Date of Delivery
5 Received By (Print Name)	8 Addressee's Address (Only if requested and fee is paid)
6 Signature (Addressee or Agent) <b>X</b>	

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

P 553 308 259

**US Postal Service  
Receipt for Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail (See reverse)

Sent to  
**Meridian Oil**

Street & Number  
**P.O. Box 4289**

Post Office, State, ZIP Code  
**NM 87499**

Postage \$

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Return Receipt Showing to Whom & Date Delivered

Return Receipt Showing to Whom, Date, & Addressee's Address

TOTAL Postage & Fees \$

Postmark or Date

PS Form 3800, April 1995

Fold at line over top of envelope to the right of the return address.

**CERTIFIED**

P 553 308 259

**MAIL**

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
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- The Return Receipt will show to whom the article was delivered and the date delivered

I also wish to receive the following services (for an extra fee)

- 1  Addressee's Address
- 2  Restricted Delivery

Consult postmaster for fee

3 Article Addressed to  
**Meridian Oil Company**  
**P.O. Box 4289**  
**Farmington NM 87499**

4a Article Number  
**P 553 308 259**

- 4b Service Type
- Registered
  - Express Mail
  - Return Receipt for Merchandise
  - Certified
  - Insured
  - COD

7 Date of Delivery

5 Received By (Print Name)

8 Addressee's Address (Only if requested and fee is paid)

6 Signature (Addressee or Agent)

**X**

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

Merrion Oil & Gas  
P.O. Box 840  
Farmington NM 87499  
Phone: 505-327-9801

May 3, 1996

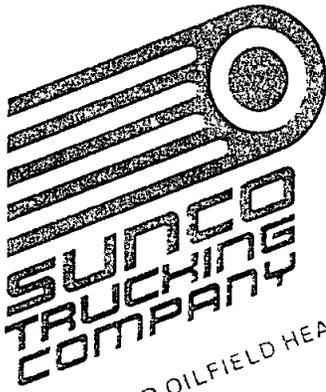
Gentleman:

Reference: Reclassification of Sunco SWD.

Sunco Trucking is in the process of applying for a new classification from Class II to Class I disposal to accept only RCRA exempt non-hazardous oil and gas wastes. The attached is a copy of that application.

Thank You,

Chuck Badsgard  
Vice-President of Sunco Trucking



WATER AND OILFIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327 0416

Meridian Oil  
P.O. Box 4289  
Farmington NM 87499  
Phone: 505-326-9700

May 3, 1996

Gentleman:

Reference: Reclassification of Sunco SWD.

Sunco Trucking is in the process of applying for  
a new classification from Class II to Class I  
disposal to accept only RCRA exempt non-hazardous  
oil and gas wastes. The attached is a copy of that  
application.

Thank You,

Chuck Badsguard  
Vice-President of Sunco Trucking



**Key Energy Services, Inc.**

Four Corners Division  
P O Box 900  
5651 US Highway 64  
Farmington, NM 87499

Phone 505-327-4935  
Fax 505-327-4962

334-6186

RECEIVED  
APR 23 2001  
PRIVATE

April 19, 2001

Wayne Price  
NMOCD  
1220 S St Francis Drive  
Santa Fe, New Mexico 87504

**RE: Application for renewal of Key Energy Services Injection Well Discharge Plan  
UIC-CLI-005**

Dear Mr Price

Please find attached Application, Documentation and Filing Fee for renewal of our  
Discharge Plan

If you require additional information, please contact me at the Office 505-334-6416 or  
the Facility at 505-334-6186

Sincerely,

Michael Talovich  
Facility Manager  
Key Energy Services

cc Mr Hal Stone Key Energy

District I  
1625 N French Dr Hobbs NM 88240  
District II  
811 South First Artesia NM 88210  
District III  
1000 Rio Brazos Blvd Aztec NM 87410  
District IV  
1220 S St Francis Dr Santa Fe NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St Francis Dr  
Santa Fe, NM 87505

Revised January 24, 2001  
Submit Original  
Plus 1 Copy  
to Santa Fe  
1 Copy to Appropriate  
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,  
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES  
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New       Renewal       Modification

1 Type Refer to next page

2 Operator \_\_\_\_\_

Address \_\_\_\_\_

Contact Person \_\_\_\_\_ Phone \_\_\_\_\_

3 Location \_\_\_\_\_ /4 \_\_\_\_\_ /4 Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_  
Submit large scale topographic map showing exact location

- 4 Attach the name telephone number and address of the landowner or the facility site
- 5 Attach the description of the facility with a diagram indicating location of fences pits dikes and tanks on the facility
- 6 Attach a description of all materials stored or used at the facility
- 7 Attach a description of present sources of effluent and waste solids Average quality and daily volume of waste water must be included
- 8 Attach a description of current liquid and solid waste collection/treatment/disposal procedures
- 9 Attach a description of proposed modifications to existing collection/treatment/disposal systems
- 10 Attach a routine inspection and maintenance plan to ensure permit compliance
- 11 Attach a contingency plan for reporting and clean-up of spills or releases
- 12 Attach geological/hydrological information for the facility Depth to and quality of ground water must be included
- 13 Attach a facility closure plan and other information as is necessary to demonstrate compliance with any other OCD rules regulations and/or orders
- 14 CERTIFICATION: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief

Name MICHAEL TALOVICH Title 4-18-2001

Signature [Signature] Date manager

## DISCHARGE PLAN APPLICATION

April 19, 2001

- 1 Discharge Plan for Key Energy Services Disposal Well
- 2 Key Energy Services Inc P O Box 900 Farmington, New Mexico 87499  
Michael Talovich, 505-334-6186
- 3 Unit E, Section 2, Township 29N, Range 12W
- 4 Key Energy Services Inc 505-327-0416 P O Box 900 Farmington NM  
87499
- 5 On file with NMOCD included with 711 Surface permit application NM-  
01-0009
- 6 N/A
- 7 See latest Injection Well Quarterly Report (included)
- 8 Wastewater is pumped from the Evaporation Pond through an above  
ground pipelines which fills a tank located at the Injection pump area  
The wastewater is then pulled from the tank and filtered and injected  
under pressure into the well  
Please find included copies of approved Discharge Plan UIC-CLI-005  
and Permit Condition Amendment
- 9 N/A
- 10 The Wastewater Disposal System is visually inspected at least 6 times  
per day , this includes Unloading Area piping, Pond perimeter piping,  
Injection System feed pipeline, Injection System Tank and all piping  
related to Injection Pump and Well  
All fluid is piped and stored above ground until fluid reaches the well  
bore All Pump and Well pressures are recorded and kept at the Facility

- 11 All spills will be reported pursuant to OCD Rule 116 including their cleanup in accordance of NMOCD guidelines  
Key Energy maintains spill clean up equipment on site This allows swift response to any spills or leaks that could occur at the Facility
- 12 Please find and refer to included copy of original Application for Disposal Well Modification from Class II to Class I
- 13 See State of New Mexico One -Well Plugging Bond U 2723755  
The remainder of the Facility will be closed under 711 Closure Guidelines as required by permit

# Advertising Receipt

AUG 8 2003

The Daily Times  
PO Box 450  
Farmington, NM 87499  
Phone (505) 325-4545  
Fax (505) 564-4580

ED MARTIN  
NM ENERGY, MINERALS & NATURAL  
RESOURCES DEPT, OIL CONSERVATION  
1220 S FRANCIS DRIVE  
ATTN FLORENE DAVIDSON  
SANTA FE, NM 87505-4000

Cust#: d0102625-000  
Ad#: 05522615  
Phone. (505)476-3492  
Date 08/01/03

Ad taker DH Salesperson: UC Classification 999

Description	Start	Stop	Ins	Cost/Day	Surcharges	Total
01 Daily Times	08/01/03	08/01/03	1	80 52		80 52
COMMERCIAL INT						3 00

**Payment Reference.**

Total. 83 52

Tax. 5 22

Net. 88 74

Prepaid\* 0 00

**Total Due 88 74**

**NOTICE OF PUBLICATION**

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 1220 South St Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440

(GW-275)-Unichem (a Division of BJ Services Company), Mr Robert E Barr, 1215 Basin Road, Farmington, New Mexico 87401, has submitted a Discharge Plan Renewal Application for their Farmington Service Facility located in the NE/4 NE/4, Section 23, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico Any potential discharge at the facility will be stored in a closed top receptacle prior to transport off-site to an OCD

OK Wayne Fin  
8/27/03

**AFFIDAVIT OF PUBLICATION**

**Ad No. 48310**

**STATE OF NEW MEXICO  
County of San Juan:**

CONNIE PRUITT, being duly sworn says  
That she is the Classified Manager of THE  
DAILY TIMES, a daily newspaper of general  
circulation published in English at Farmington,  
said county and state, and that the hereto  
attached Legal Notice was published in a  
regular and entire issue of the said DAILY  
TIMES, a daily newspaper duly qualified for  
the purpose within the meeting of Chapter 167  
of the 1937 Session Laws of the State of New  
Mexico for publication on the following day(s)  
Friday, August 1, 2003

And the cost of the publication is \$88 74

Connie Pruitt

ON 8-1-03 CONNIE PRUITT appeared  
before me, whom I know personally to be the  
person who signed the above document

Danny Beck  
My Commission Expires April 2, 2004

**COPY OF PUBLICATION**

918 Legals

**NOTICE OF PUBLICATION**

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

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(GW-275)-Unichem (a Division of BJ Services Company), Mr Robert E Barr, 1215 Basin Road, Farmington, New Mexico 87401, has submitted a Discharge Plan Renewal Application for their Farmington Service Facility located in the NE/4 NE/4, Section 23, Township 29 North, Ranges 13 West, NMPM, San Juan County, New Mexico Any potential discharge at the facility will be stored in a closed top receptacle prior to transport off-site to an OCD approved disposal facility Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 15 feet with a total dissolved solids concentration of approximately 675 mg/L The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed

UIC-CLI-005 (GW-130) - Key Energy Services, Inc , Mr Mike Talovich, P O Box 900, Farmington, New Mexico, 87499 has submitted a discharge plan renewal application for their permitted Class I disposal well located in Unit Letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico Approximately 2,000 barrels per day of non-hazardous oil field liquid waste are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,490 feet The total dissolved solids concentration of the injection water is approximately 24,000 mg/l The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dissolved solids concentration of approximately 450 mg/l

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above The discharge permit application and draft discharge permit may be viewed at the above address between 8 00 a m and 4 00 p m, Monday through Friday The draft discharge permit may also be viewed at OCD's web site <http://www.emnrd.state.nm.us/ocd/> Prior to ruling on any proposed discharge permit or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and any interested person may request a public hearing Requests for a public hearing shall set forth the reasons why a hearing should be held A hearing will be held if the Director determines there is significant public interest

If no public hearing is held, the Director will approve or disapprove the proposed permit based on information available If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit and information submitted at the hearing

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 24th day of June 2003

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director

THE SANTA FE  
**NEW MEXICAN** RECEIVED  
Founded 1849

AUG 05 2003

OIL CONSERVATION  
DIVISION

*Ed Martin*  
NM OIL CONSERVATION D  
1220 ST FRANCIS DR  
ATT MARY ANAYA  
SANTA FE NM 87505

ALTERNATE ACCOUNT: 56689  
AD NUMBER 00019826 ACCOUNT: 00002212  
LEGAL NO. 73788 P O # 04.199.050340  
333 LINES 1 TIME(S) 227 92  
AFFIDAVIT 5.25  
TAX. 15 59  
TOTAL. 248.76

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, K Voorhees, being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937, that the publication # 73788 a copy of which is hereto attached was published in said newspaper 1 day(s) between 08/01/2003 and 08/01/2003 and that the notice was published in the newspaper proper and not in any supplement, the first date of publication being on the 1st day of August, 2003 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/s/ *K. Voorhees*  
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 1st day of August, 2003

Notary *Lauree E. Harding*

Commission Expires: *11/23/03*

*OK Wayne*  
*8/27/03*

**AFFIDAVIT OF PUBLICATION**

**Ad No. 48310**

**STATE OF NEW MEXICO  
County of San Juan:**

CONNIE PRUITT, being duly sworn says  
That she is the Classified Manager of THE  
DAILY TIMES, a daily newspaper of general  
circulation published in English at Farmington,  
said county and state, and that the hereto  
attached Legal Notice was published in a  
regular and entire issue of the said DAILY  
TIMES, a daily newspaper duly qualified for  
the purpose within the meeting of Chapter 167  
of the 1937 Session Laws of the State of New  
Mexico for publication on the following day(s)  
Friday, August 1, 2003

And the cost of the publication is \$88 74

Connie Pruitt

ON 8-1-03 CONNIE PRUITT appeared  
before me, whom I know personally to be the  
person who signed the above document

Danny Beck  
My Commission Expires April 2, 2004

**COPY OF PUBLICATION**

918 Legal's

**NOTICE OF PUBLICATION**

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application(s) have been submitted to the Director of the Oil Conservation Division, 1220 South St Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440

(GW-275)-Unichem (a Division of BJ Services Company), Mr Robert E Barr, 1215 Basin Road, Farmington, New Mexico 87401, has submitted a Discharge Plan Renewal Application for their Farmington Service Facility located in the NE/4 NE/4, Section 23, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico Any potential discharge at the facility will be stored in a closed top receptacle prior to transport off-site to an OCD approved disposal facility Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 15 feet with a total dissolved solids concentration of approximately 675 mg/L The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed

UIC-CLI-005 (GW-130) - Key Energy Services, Inc , Mr Mike Talowich, P O Box 900, Farmington, New Mexico, 87499 has submitted a discharge plan renewal application for their permitted Class I disposal well located in Unit Letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico Approximately 2,000 barrels per day of non-hazardous oil field liquid waste are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,480 feet The total dissolved solids concentration of the injection water is approximately 24,000 mg/l The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dissolved solids concentration of approximately 450 mg/l

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If no public hearing is held, the Director will approve or disapprove the proposed permit based on information available If a public hearing is held, the director will approve or disapprove the proposed permit based on information in the permit and information submitted at the hearing

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 24th day of June 2003

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director

Legal No 48310 published in The Daily Times, Farmington, New Mexico on Friday, August 1, 2003

RECEIVED

OCT 10 2001

OIL CONSERVATION DIVISION

THE SANTA FE NEW MEXICAN

Founded 1849

NM OIL CONSERVATION DIVISION
ATTN. WAYNE PRICE
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505

AD NUMBER. 226352 ACCOUNT. 56689
LEGAL NO. 70014 P O.# 02199000249
206 LINES 1 time(s) at \$ 90.81
AFFIDAVITS 5.25
TAX 6 00
TOTAL 102 06

NOTICE OF PUBLICATION

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications has been submitted to the Director of the Oil Conservation Division, 1220 S Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440

UIC-CLI 005- Key Energy Services, Inc., Mr Mike Talovich, P O Box 900, Farmington, New Mexico, 87499 has submitted a discharge plan renewal application for their per-

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in the event of accidental spills, leaks and other accidental discharges to the ground surface. Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dis-

solved solids concentration of approximately 450 mg/l

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 6th day of September 2001.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

SEAL
LORI WROTENBERY, Director
Legal #70014
Pub September 13, 2001

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE

I, \_\_\_\_\_ being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937, that the publication #70014 a copy of which is hereto attached was published in said newspaper 1 day(s) between 09/13/2001 and 09/13/2001 and that the notice was published in the newspaper proper and not in any supplement, the first publication being on the 13 day of September, 2001 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit

/S/ \_\_\_\_\_
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 13 day of September A.D , 2001

Notary \_\_\_\_\_

Commission Expires \_\_\_\_\_

www.sfnwmexican.com

# KEY ENERGY SERVICES

## FOUR CORNERS DIVISION

### PIPEYARD/DISPOSAL

P O BOX 900

5651 US HWY 64

FARMINGTON, NEW MEXICO 87499

OFFICE (505) 334-6416 FAX (505) 334-5413

DATE 3-4-02

TIME 10:00 Am

TO COMPANY NMOC

PERSON MR. WAYNE

PHONE \_\_\_\_\_ FAX 1-505-476-3462

FROM MIKE TALOUCH

MESSAGE QUOTE + PROCEDURE FOR WELL PLUGGING  
MR. RANDY BLACKMON Ph # 327-0416 Ext 117  
(505)

**TOTAL NUMBER OF PAGES** 3

(INCLUDING COVER SHEET)

**QUOTE TO PLUG & ABANDON  
 SUNCO DWD #1  
 PREPARED BY RANDY BLACKMON  
 PLUG & ABANDONMENT SUPERVISOR  
 KEY ENERGY SERVICES INC.**

ESTIMATED PROCEDURES ARE AS FOLLOWS:

1. RELEASE 5 ½" PACKER AND TOOH.
2. RIH W/5 ½" CEMENT RETAINER SET @ 4250'
3. MIX AND PUMP 50 SX CLASS B CEMENT (38 SX BELOW RETAINER & 12 SX ABOVE)
4. ESTIMATE THREE 18 SX BALANCED PLUGS INSIDE 5 ½" CASING TO COVER VARIOUS ZONES AS REQUIRED.
5. ONE 30 SX PLUG FROM 259' TO SURFACE.
6. CUT OFF WELL HEAD AND RIG ANCHORS
7. INSTALL DRY HOLE MARKER

ESTIMATED COST TO PERFORM THIS PROJECT=\$10,980 00

ESTIMATED COST TO CLEAN AND RESEED LOCATION WHERE ACTUAL WELL IS=\$2,500.00

TOTAL=	\$13,480.00
INFLATION FACTOR 20 %	\$2,696.00
TOTAL ESTIMATE	\$16,176.00

COMPANY KEY ENERGY WELL Sunco #1 DATE 2-22-02

EQUIP / PERSONNEL	QTY	RATE	AMOUNT	QTY	RATE	AMOUNT
MOB TIME						
REGULAR TIME	20	220	4400 <sup>00</sup>			
CREW TRAVEL	2	110	220 <sup>00</sup>			
PICKUP CHARGE	2	110	220 <sup>00</sup>			
MISC. CHARGE			150 <sup>00</sup>			
SUPERVISOR	2	350	700 <sup>00</sup>			
CEMENT PUMP	1		1000 <sup>00</sup>			
WIRELINE CHARGE						
RIG PIT / FRAC TANK						
H2S EQUIPMENT						
RESTROOM						
R&D / REPORT	1	200	200 <sup>00</sup>			
OTHER / PERDIEM						
OTHER						
MATERIALS / SUPLIES			6890 <sup>00</sup>			
CEMENT	134	10 <sup>00</sup>	1340 <sup>00</sup>			
CaCl						
MUD / SPACER						
PERFORATIONS						
CUTS						
RETAINER	1	850	850 <sup>00</sup>			
CIBP						
DRY HOLE MARKER	1	350	350 <sup>00</sup>			
FLANGE / SPOOL	1	150	150 <sup>00</sup>			
BIT / SUB						
ELEVATORS / RAMS						
SPEAR / SCRAPER						
DIRT WK / ANCHORS	1	650	650 <sup>00</sup>			
FUEL / ENVIRO						
OTHER						
OTHER						
TRUCKING COST			3340 <sup>00</sup>			
TKG WATER	4	60	240 <sup>00</sup>			
TKG EQUIPMENT	4	85	340 <sup>00</sup>			
TKG TUBING	2	85	170 <sup>00</sup>			
TKG PIT / TANK						
OTHER						
<b>TOTAL</b>			<b>750<sup>00</sup></b>	<b>TOTAL</b>		<b>10,980<sup>00</sup></b>



*Key Energy Services, Inc.*

April 29, 2002

Martyne Kieling  
Wayne Price  
Oil Conservation Division  
1220 So. St. Francis Drive  
Santa Fe, New Mexico 87505

Re: Address change

Dear Martyne and Wayne

I am requesting that all correspondents regarding Key Energy Services be sent to the following address.

Key Energy Services, Inc.  
Attn: Gene Butler  
6 Desta Drive  
Suite 4400  
Midland, Texas 79705

Key Energy Services PBD well list is listed below:

Contintial Water Sales	Truckers 2 Brine Station
BKE#1 SWD	RA State
Sims-McCasland Water Sales	J.H.Day#1
J.H.Day#2	Christmas#3
City of Carlsbad Brine Station	Bone Springs SWD
Atha#1 SWD	

Key Energy Services FCD well list:

Sunco Disposal

Thank You

Gene Butler

**Price, Wayne**

---

**From:** Price, Wayne  
**Sent:** Thursday, March 14, 2002 10:06 AM  
**To:** 'disposal@cyberport.com', 'wprice@state.nm.us'  
**Cc:** Kieling, Martyne  
**Subject:** RE: Discharge Plan Approval Conditions

APPROVED!!

-----Original Message-----

**From:** Mike Talovich [mailto:disposal@cyberport.com]  
**Sent:** Thursday, March 14, 2002 10:20 AM  
**To:** 'wprice@state.nm.us.'  
**Subject:** Discharge Plan Approval Conditions

RE: Discharge Plan UIC-CLI-005

Mr. Price:

Key Energy Services Inc. requests a 90 day extension for the following Discharge Plan Conditions:

#16 Below Grade Tanks/Sumps

#23 Plugging Bond and / or Letter of Credit

#26 Storm Water Plan

The above items are all in process and will be complied with by June 14, 2002

Also required is a 30 day extension for the Financial Assurance portion of Facility Permit NM-01-0009 (711 permit)

Thankyou,

Michael Talovich  
Facility Manager

<b>Tracking:</b>	<b>Recipient</b>	<b>Read</b>
	'disposal@cyberport.com'	
	'wprice@state.nm.us'	
	Kieling, Martyne	Read 3/18/2002 8:31 AM



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Sahsbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
**Oil Conservation Division**

## NOTICE OF PUBLICATION

### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications has been submitted to the Director of the Oil Conservation Division, 1220 S. Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440.

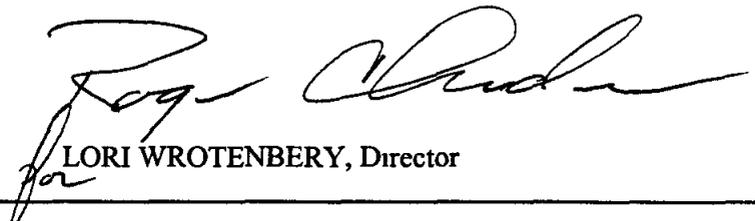
**UIC-CLI-005- Key Energy Services, Inc., Mr. Mike Talovich, P.O. Box 900, Farmington, New Mexico, 87499 has submitted a discharge plan renewal application for their permitted Class I disposal well located in Unit Letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Approximately 2,000 barrels per day of non-hazardous oil field liquid waste are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,480 feet. The total dissolved solids concentration of the injection water is approximately 24,000 mg/l. The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l. The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface. Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dissolved solids concentration of approximately 450 mg/l.**

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 6<sup>th</sup> day of September 2001

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



LORI WROTENBERY, Director

SEAL

THE SANTA FE  
**NEW MEXICAN**  
Founded 1849

NM OIL CONSERVATION DIVISION  
ATTN: WAYNE PRICE  
1220 S. ST. FRANCIS DRIVE  
SANTA FE, NM 87505

AD NUMBER 226352 ACCOUNT: 56689  
LEGAL NO. 70014 P.O.#. 02199000249  
206 LINES 1 time(s) at \$ 90.81  
AFFIDAVITS 5.25  
TAX. 6 00  
TOTAL 102.06

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLICATION

STATE OF NEW MEXICO  
ENERGY, MINERALS  
AND NATURAL RESOURCES  
DEPARTMENT  
OIL CONSERVATION  
DIVISION

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UIC-CL1005- Key Energy Services, Inc, Mr Mike Talovich, P O Box 900, Farmington, New Mexico, 87499 has submitted a discharge plan renewal application for their permitted Class I disposal well located in Unit Letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico Approximately 2,000 barrels per day of non-hazardous oil field liquid waste are disposed of by injection into the Point Lookout Formation at a depth from 4,380 to 4,480 feet The total dissolved solids concentration of the injection water is approximately 24,000 mg/l The total dissolved solids concentration of the formation fluids is approximately 14,000 mg/l The discharge plan addresses construction, operation and monitoring of the well and associated surface facilities and provides a contingency plan in the event of accidental spills, leaks and other accidental discharges to the ground surface Ground water most likely to be affected by any accidental discharge is at a depth from 78 to 90 feet and has a total dis-

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 6th day of September 2001

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL  
LORI WROTENBERY, Director  
Legal #70014  
Pub September 13, 2001

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, MM Weideman being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937, that the publication #70014 a copy of which is hereto attached was published in said newspaper 1 day(s) between 09/13/2001 and 09/13/2001 and that the notice was published in the newspaper proper and not in any supplement, the first publication being on the 13 day of September, 2001 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit

/s/ MM Weideman  
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this  
13 day of September A D., 2001

Notary Laura J. Hardin  
Commission Expires 11/23/03

*Approved  
W Price  
10/10/01*

**AFFIDAVIT OF PUBLICATION**

**Ad No. 44995**

**STATE OF NEW MEXICO  
County of San Juan:**

CONNIE PRUITT, being duly sworn says  
That she is the Classified Manager of THE  
DAILY TIMES, a daily newspaper of general  
circulation published in English at Farmington,  
said county and state, and that the hereto  
attached Legal Notice was published in a  
regular and entire issue of the said DAILY  
TIMES, a daily newspaper duly qualified for  
the purpose within the meeting of Chapter 167  
of the 1937 Session Laws of the State of New  
Mexico for publication on the following day(s)

Monday, September 10, 2001

And the cost of the publication is \$82.60

Connie Pruitt

ON 9-11-01 CONNIE PRUITT appeared  
before me, whom I know personally to be the  
person who signed the above document

Jimmy Beck  
My Commission Expires April 02, 2004

OK

**COPY OF PUBLICATION**

**NOTICE OF PUBLICATION**

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT,  
OIL CONSERVATION DIVISION**

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 6th day of September 2001

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director

Legal No 44995, published in The Daily Times, Farmington, New Mexico, Monday, September 10, 2001

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. 141398 dated 4/19/2001  
or cash received on \_\_\_\_\_ in the amount of \$ 100<sup>00</sup>  
from KEY ENERGY SERVICES, INC.  
for KEY ENERGY SERVICES INJECTION WELL MIC-CLI-005

Submitted by: WAYNE PRICE Date: 5/19/01  
Submitted to ASD by: [Signature] Date: "  
Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee  New Facility \_\_\_\_\_ Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.  
Full Payment \_\_\_\_\_ or Annual Increment \_\_\_\_\_



KEY ENERGY SERVICES, INC.  
FOUR CORNERS DIVISION  
5051 US HIGHWAY 64 P.O. BOX 902  
FARMINGTON, NEW MEXICO 87499  
505 327-4935

PNC BANK NATIONAL ASSOCIATION  
JEANNETTE, PA  
60101-1133

No **141398**

Check Date **4/19/2001**

PAY One Hundred Dollars and No Cent



[Signature: Ron Jellabaum]

TO THE ORDER OF  
NM ENRGY, MNRLS, & NAT RESC DEPT  
OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DRIVE  
SANTA FE NM 87504

MIC-CLI-005

AUTHORIZED SIGNATURE IF OVER \$10,000.00



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## Memorandum of Meeting or Conversation

Telephone   X    
Personal \_\_\_\_\_  
E-Mail   X    
FAX: \_\_\_\_\_

Date: 3/16/01

Originating Party: **Wayne Price-OCD**

Other Parties: **Mike Talovich & Gene Butler- Key Energy Service Inc.**

Subject **Discharge Plan Renewal Notice for the following Facilities:**

<b>UICCL1005</b>	<b>Key Energy Class I Disposal Well</b>	<b>expires</b>	<b>8/26/01</b>
<b>GW-___</b>	<b>Name</b>	<b>expires</b>	
<b>GW-___</b>	<b>Name</b>	<b>expires</b>	
<b>GW-___</b>	<b>Name</b>	<b>expires</b>	

**WQCC 3106.F.** If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved [12-1-95]

**Discussion:** Discussed WQCC 3106F and gave notice to submit Discharge Plan renewal application with \$100.00 filing fee for the above listed facilities

**Conclusions or Agreements:**

Please submit before April 26, 2001

Signed: \_\_\_\_\_