

**PERMIT**

**8-26-1996**

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. 40033 dated 2/14/97,  
or cash received on \_\_\_\_\_ in the amount of \$ 50.00  
from Sunco Trucking  
for Disposal Well #1 UIC-CL1-005  
Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
Submitted to ASD by: R. Chudler Date: 3/19/97  
Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_  
Filing Fee ☒ New Facility \_\_\_\_\_ Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_  
Organization Code 521.07 Applicable FY 97

To be deposited in the Water Quality Management Fund.

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



WATER & OILFIELD HEAVY HAULING

708 S. TUCKER - P.O. BOX 443  
FARMINGTON, NEW MEXICO 87499  
(505) 327-0416

CHECK NO. 040033

95-54/1022

FIRST NATIONAL BANK  
FIRST IN FARMINGTON AND THE FOUR CORNERS  
FARMINGTON, AZTEC, BLOOMFIELD, SHIPROCK, NEW MEXICO

CHECK/DATE

02/14/97

PAY

DOLLARS

AND

CENTS

\$50.00

AMOUNT

\$ 50.00

PAY  
TO  
THE  
ORDER  
OF

NMED - WATER QUALITY MANAGEMENT  
2040 SOUTH PACHECO ST  
SANTA FE, NM 87505

*[Signature]*

⑈040033⑈ ⑆102200546⑆ 010107617⑈



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

March 20, 1997

**CERTIFIED MAIL**

**RETURN RECEIPT NO. P-288-258-920**

Mr. George Coleman  
Coleman Oil and Gas, Inc.  
P.O. Box 443  
Farmington, New Mexico 87499

**RE: Discharge Plan UIC-CLI-005  
Permit Condition Amendment  
Class I Non-Hazardous Oil Field Waste Disposal Well  
Sunco Disposal Well No. 1  
Eddy County, New Mexico**

*SAUTMAN*

Dear Mr. Coleman:

Pursuant to the request received from Coleman Oil and Gas, Inc. (Coleman) on November 18, 1996, permit condition number 4 of the August 26, 1996 approval has been amended. Enclosed are two copies of the conditions of approval with the amended condition. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 10 working days of receipt of this letter.

Please be advised that the amendment of this plan does not relieve Coleman of liability should operations result in pollution of surface water, ground water, or the environment.

The OCD hopes that this has clarified your concern, and we appreciate your input into this process.

Sincerely,

Roger C. Anderson  
Environmental Bureau Chief

RCA/mwa

xc: OCD Aztec Office



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

March 20, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-881**

Mr. George Coleman  
Coleman Oil and Gas, Inc.  
P.O. Box 443  
Farmington, New Mexico 87499

RE:

**Permit Condition Clarification  
Coleman Oil and Gas, Inc.  
Class I Disposal Well and  
Sunco Trucking Water Disposal Company  
San Juan County, New Mexico**

Dear Mr. Coleman:

The New Mexico Oil Conservation Division (OCD) has completed reviewed of the letter dated December 23, 1996 from Curtis & Dean on behalf of Coleman Oil and Gas, Inc. (Coleman). The letter requested to modify the terms and conditions of the permits for the disposal pond and the injection well. Determinations by the OCD are provided below. Paragraph numbering corresponds to the December 23, 1996 letter.

The injection well:

1. Section 3109.G.4 of the Water Quality Control Commission (WQCC) states that a discharge plan shall not be approved for a period longer than five years. Therefore, the approval period will not be extended beyond five years.
2. The monitoring requirements of Section 5207.B.2 state that continuous monitoring devices shall be used to record injection pressure, flow rate, flow volume, and annulus pressure. Therefore, the requirements of the August 26, 1996 approval will continue to be used.



ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
COLEMAN OIL AND GAS, INC., CLASS I WELL  
DISCHARGE PLAN REQUIREMENTS (AMENDED)  
(March 20, 1997)

1. **Coleman Commitments:** Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.
2. **Maximum Injection Pressure:** The maximum operating injection pressure at the wellhead will be 2,850 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 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

Coleman 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.
3. **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. A 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 Coleman for the life of the well.
4. **Annulus:** Until the facility operates 24 hours per day, the casing-tubing annulus will be completely filled with an inert fluid and connected to a casing differential tank with the same inert fluid to maintain a constant casing-tubing fluid level in the annulus at all times. A sight glass will be installed on the casing differential tank to monitor and record, on a daily basis, for tubing or casing leaks. Once 24 hour operation begins, the casing-tubing annulus will be completely filled with an inert fluid and a minimum pressure of 100 psi maintained. Any loss or gain of inert fluid will be documented and reported to the OCD Aztec District Office immediately.
5. **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 Coleman for the life of the well.
6. **Maintenance Records:** All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.

7. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.
8. 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 either EPA method 8010/8020 or EPA method 8240.
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
  - c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).
- Records of all analyses will be maintained at Coleman for the life of the well.
9. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. 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 Class I non-exempt non-hazardous oil field waste (OCD Form C-138).
10. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.
11. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

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 facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.
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, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
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 demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.
17. **Underground Process/Wastewater Lines:** All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. 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.
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, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
20. **Spill Reporting:** All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman 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. 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 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: Coleman shall have in effect, for the life of the well, 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.
24. Training: All personnel associated with operations at the Coleman 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 Coleman for the life of the well.
25. Certification: Coleman, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman 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.

Accepted:

COLEMAN OIL AND GAS, INC.

by \_\_\_\_\_  
Title

Mr George Coleman

March 20, 1997

Page 2

3. The monitoring requirements of Section 5207.B.1 state that the discharger shall provide analysis of the injection fluids at least quarterly. Therefore, the request to change to annual testing will not be allowed.
4. The OCD guidelines for berming require containment of one-third more than the total volume of the largest tank or all interconnected tanks. Even though Coleman's interconnected pits/tanks are compartmentalized, containment of one-third more than the total volume of all interconnected tanks is still required. Required berming may include berming of the entire facility.
5. The policy of the OCD is to always solicit input from operators regarding additional facility requirements.
6. Coleman submitted a request, dated November 18, 1996, to the OCD to install a casing differential tank on the back side of the well to monitor for leaks instead of the one hundred psi minimum required in the August 26, 1996 approval. Coleman's request will be allowed and is addressed in a separate letter.

The disposal pond:

7. Section IX.B.2 of Order Number 9485-A states that no oil shall be allowed in the pond(s). Incidental oil associated with produced water will be removed as soon as possible from the pond(s).
8. Testing under number eight of Landfarm Operation of Order Number R-10756 will meet testing requirements required under number nine of the August 26, 1996 approval.
9. If systems become inoperative and cannot be returned to operation within 24 hours, the OCD Aztec District Office will be notified immediately.
10. Berming requirements at the disposal facility are the same as the injection well (see number four above).
11. The OCD policy is the same for disposal facilities (see number five above).
12. Section XII.B.1.&2 of OCD Order Number R-9485-A states that the listed requirements for hydrogen sulfide concentrations are needed to prevent harm by hydrogen sulfide gas. Therefore, the required concentrations levels will be adhered to.

Mr George Coleman

March 20, 1997

Page 3

13. During the location of a leak in the primary liner, no new fluids will be introduced to the pond. Sump fluids may be pumped back into the pond as part of the leak location process. The introduction of new fluids may proceed only after the leak has been located and repaired.

If have any questions, please call me at (505) 827-7152.

Sincerely,



Roger C. Anderson  
Environmental Bureau Chief

RCA/mwa

xc: OCD Aztec Office



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

August 26, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-950**

Mr. George Coleman  
Coleman Oil and Gas, Inc.  
P.O. Box 443  
Farmington, New Mexico 87499

**RE: Approval of Discharge Plan UIC-CLI-005 (Formerly GW-235)  
Class I Non-Hazardous Oil Field Waste Disposal Well  
Coleman Oil and Gas, Inc.  
Sunco Disposal Well No. 1  
Unit Letter E, Sec 2, Twn 29 N, Rng 12 W  
San Juan County, New Mexico**

Dear Mr. Coleman:

The discharge plan UIC-CLI-005 for the Coleman Oil and Gas (Coleman) Class I non-exempt non-hazardous oil field waste disposal well located in unit letter E, 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. The application consists of the original New Mexico Oil Conservation Division (OCD) Order SWD-457 issued January 13, 1992, the discharge plan application for a Class I disposal well dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.

The discharge plan was submitted pursuant to Section 5101.B.3 of the New Mexico Water Quality Control Commission (WQCC) Regulations. It is approved pursuant to Sections 5101.A and 3109.C. Please note Sections 3109.E and 3109.F which provide for possible future amendments or modifications of the plan. Please be advised that approval of this plan does not relieve Coleman of liability should operations result in pollution of surface or ground waters, or the environment.

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 nonhazardous to wildlife including migratory birds.

Mr. George Coleman  
August 26, 1996  
Page 2

The monitoring and reporting shall be as specified in the above referenced materials. 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 Coleman 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.

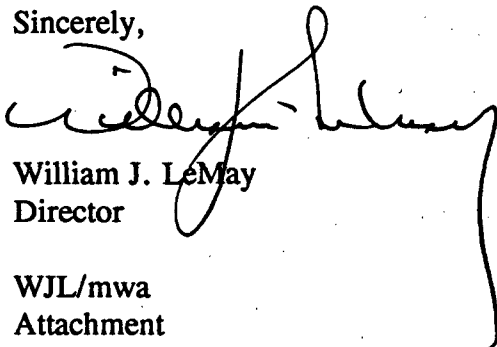
Pursuant to Section 3109.G.4, this plan is for a period of five (5) years. This approval will expire August 26, 2001, and Coleman should submit an application for renewal in ample time before this date. Note that under Section 5101.G of the regulations, if a discharger submits a discharge plan renewal application at least 180 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 application for the Coleman Class I non-hazardous oil field waste disposal well is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$50 plus a flat fee of \$1,380 for Class I injection wells. The OCD has not received the \$50 filing fee or the \$1,380 flat fee. The \$50 dollar filing fee is due upon receipt of this approval. The flat fee of \$1,380 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: NMED-Water Quality Management and addressed to the OCD Santa Fe Office.

On behalf of the staff of the Oil Conservation Division, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,



William J. LeMay  
Director

WJL/mwa  
Attachment

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



Mr. George Coleman  
August 26, 1996  
Page 3

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
COLEMAN OIL AND GAS, INC., CLASS I WELL  
DISCHARGE PLAN REQUIREMENTS

1. Payment of Discharge Plan Fees: The \$50 dollar filing fee is due upon receipt of this approval. The \$1,380 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. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.
3. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 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 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

Coleman 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. A 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 Coleman for the life of the well.
5. Annulus: The casing-tubing annulus will be filled with an inert fluid and a minimum pressure of 100 psi maintained.
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 Coleman for the life of the well.

Mr. George Coleman  
August 26, 1996  
Page 4

7. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.
8. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.
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 either EPA method 8010/8020 or EPA method 8240.
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
  - c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).

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

10. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. 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 Class I non-exempt non-hazardous oil field waste (OCD Form C-138).
11. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.

Mr. George Coleman

August 26, 1996

Page 5

12. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
13. 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.
14. 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 facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.
15. 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.
16. Labeling: All tanks, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
17. 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 demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.
18. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years 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.
19. 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.

Mr. George Coleman

August 26, 1996

Page 6

20. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
21. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman 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.

22. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of the well. 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.
23. 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 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.
24. Plugging Bond and /or Letter of Credit: Coleman shall have in effect, for the life of the well, 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.
25. Training: All personnel associated with operations at the Coleman 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 Coleman for the life of the well.
26. OCD Inspections: Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.

Mr. George Coleman

August 26, 1996

Page 7

27. Certification: Coleman Oil and Gas, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman Oil and Gas, 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.

Accepted:

COLEMAN OIL AND GAS, INC.

by \_\_\_\_\_  
Title

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
COLEMAN OIL AND GAS, INC., CLASS I WELL  
DISCHARGE PLAN REQUIREMENTS

1. Payment of Discharge Plan Fees: The \$50 dollar filing fee is due upon receipt of this approval. The \$1,380 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. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.
3. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 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 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.  
  
Coleman 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. A 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 Coleman for the life of the well
5. Annulus: The casing-tubing annulus will be filled with an inert fluid and a minimum pressure of 100 psi maintained.
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 Coleman for the life of the well.

7. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.
8. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.
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 either EPA method 8010/8020 or EPA method 8240.
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
  - c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).

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

10. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. 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 Class I non-exempt non-hazardous oil field waste (OCD Form C-138).
11. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.

12. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
13. 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.
14. 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 facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.
15. 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.
16. Labeling: All tanks, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
17. 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 demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.
18. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. 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.
19. 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.



Mr. George Coleman  
August 26, 1996  
Page 6

20. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
21. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman 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.

22. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of the well. 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.
23. 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 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.
24. Plugging Bond and /or Letter of Credit: Coleman shall have in effect, for the life of the well, 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.
25. Training: All personnel associated with operations at the Coleman 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 Coleman for the life of the well.
26. OCD Inspections: Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.

Mr. George Coleman

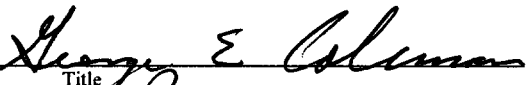
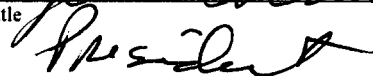
August 26, 1996

Page 7

27. Certification: Coleman Oil and Gas, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman Oil and Gas, 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.

Accepted:

COLEMAN OIL AND GAS, INC.

by   
Title 



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

March 20, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-920**

Mr. George Coleman  
Coleman Oil and Gas, Inc.  
P.O. Box 443  
Farmington, New Mexico 87499

**RE: Discharge Plan UIC-CLI-005**  
**Permit Condition Amendment**  
**Class I Non-Hazardous Oil Field Waste Disposal Well**  
**Sunco Disposal Well No. 1**  
**Eddy County, New Mexico**

Dear Mr. Coleman:

Pursuant to the request received from Coleman Oil and Gas, Inc. (Coleman) on November 18, 1996, permit condition number 4 of the August 26, 1996 approval has been amended. Enclosed are two copies of the conditions of approval with the amended condition. Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 10 working days of receipt of this letter.

Please be advised that the amendment of this plan does not relieve Coleman of liability should operations result in pollution of surface water, ground water, or the environment.

The OCD hopes that this has clarified your concern, and we appreciate your input into this process.

Sincerely,

Roger C. Anderson  
Environmental Bureau Chief

RCA/mwa

xc: OCD Aztec Office

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
COLEMAN OIL AND GAS, INC., CLASS I WELL  
DISCHARGE PLAN REQUIREMENTS (AMENDED)  
(March 20, 1997)

1. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996; and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.
2. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 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 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

Coleman 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.
3. 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 reseated. A 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 Coleman for the life of the well.
4. Annulus: Until the facility operates 24 hours per day, the casing-tubing annulus will be completely filled with an inert fluid and connected to a casing differential tank with the same inert fluid to maintain a constant casing-tubing fluid level in the annulus at all times. A sight glass will be installed on the casing differential tank to monitor and record, on a daily basis, for tubing or casing leaks. Once 24 hour operation begins, the casing-tubing annulus will be completely filled with an inert fluid and a minimum pressure of 100 psi maintained. Any loss or gain of inert fluid will be documented and reported to the OCD Aztec District Office immediately.
5. 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 Coleman for the life of the well.
6. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.

7. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.
8. 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 either EPA method 8010/8020 or EPA method 8240.
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
  - c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).
- Records of all analyses will be maintained at Coleman for the life of the well.
9. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. 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 Class I non-exempt non-hazardous oil field waste (OCD Form C-138).
10. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.
11. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

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 facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.
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, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
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 demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.
17. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years 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.
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, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
20. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman 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. 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 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: Coleman shall have in effect, for the life of the well, 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.
24. Training: All personnel associated with operations at the Coleman 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 Coleman for the life of the well.
25. Certification: Coleman, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman 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.

Accepted:

COLEMAN OIL AND GAS, INC.

by \_\_\_\_\_  
Title

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL  
COLEMAN OIL AND GAS, INC., CLASS I WELL  
DISCHARGE PLAN REQUIREMENTS (AMENDED)  
(March 20, 1997)

1. Coleman Commitments: Coleman will abide by all commitments submitted in the discharge plan application dated May 6, 1996, and supplemental information dated May 13, 1996 and June 21, 1996, and OCD Order SWD-457.
2. Maximum Injection Pressure: The maximum operating injection pressure at the wellhead will be 2,850 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 2,850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

Coleman 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.
3. 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. A 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 Coleman for the life of the well.
4. Annulus: Until the facility operates 24 hours per day, the casing-tubing annulus will be completely filled with an inert fluid and connected to a casing differential tank with the same inert fluid to maintain a constant casing-tubing fluid level in the annulus at all times. A sight glass will be installed on the casing differential tank to monitor and record, on a daily basis, for tubing or casing leaks. Once 24 hour operation begins, the casing-tubing annulus will be completely filled with an inert fluid and a minimum pressure of 100 psi maintained. Any loss or gain of inert fluid will be documented and reported to the OCD Aztec District Office immediately.
5. 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 Coleman for the life of the well.
6. Maintenance Records: All routine maintenance work on the well will be recorded and maintained at Coleman for the life of the well.



7. Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and non-exempt non-hazardous oil field wastes as permitted under the OCD 711 facility for Sunco Trucking Water Disposal Company. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in number 9. Under the OCD 711 permit, all non-exempt non-hazardous oil field waste require approval from the OCD prior to acceptance and disposal. OCD Form C-138 shall be used to request prior approval for acceptance and disposal.
8. 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 either EPA method 8010/8020 or EPA method 8240.
  - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
  - c. Heavy metals using the ICAP scan (EPA method 6010) and Arsenic and Mercury using atomic absorption (EPA methods 7060 and 7470).

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

9. Quarterly Reporting: The following reports will be signed and certified in accordance with WQCC section 5101.H. 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 Class I non-exempt non-hazardous oil field waste (OCD Form C-138).
10. Monthly Reporting: Monthly reporting of the disposal of produced water will be in accordance with OCD Rule 1115 which requires monthly submittal of OCD Form C-115 to the OCD Santa Fe Office.
11. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

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 facilities associated with the well or modifications to existing facilities associated with the well must place the tank on an impermeable type pad within the berm.-
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, drum, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
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 demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps.
17. Underground Process/Wastewater Lines: All underground process/wastewater, and brine transfer pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. 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.
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, and leak detection will be inspected daily to ensure proper operation and to prevent overtopping or system failure.
20. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office.

Coleman 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. 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 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: Coleman shall have in effect, for the life of the well, 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.
24. Training: All personnel associated with operations at the Coleman 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 Coleman for the life of the well.
25. Certification: Coleman, by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Coleman 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.

Accepted:

COLEMAN OIL AND GAS, INC.

by \_\_\_\_\_  
Title



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

September 8, 1997

MIKE T.

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-969**

Mr. Kenneth V. Huseman  
Key Energy Group, Inc.  
6010 Hwy. 191, Suite 212  
Odessa, TX 79762

**RE: Transfer of Sunco Trucking Water Disposal Co., Class I Non-Hazardous Disposal Well to Key Four Corners, Inc.  
SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM  
San Juan County, New Mexico  
Discharge Plan UIC-CLI-005**

Dear Mr. Huseman:

The New Mexico Oil Conservation Division (OCD) has received the request from Key Four Corners, Inc. (Key) dated August 25, 1997 for the transfer of ownership of the Sunco Water Disposal Company Class I Non-Hazardous Disposal Well, Discharge Plan UIC-CLI-005, located in SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, to Key Four Corners, Inc. The request is **hereby approved** in accordance with Water Quality Control Commission Regulation 5101.I.

In addition, Key must file form C-104 with the OCD for a change of operator. A replacement bond reflecting the new operator must also be filed with the OCD. Until such financial assurance is in place, the transferor's (Sunco Water Disposal Company) financial assurance will not be released.

All modifications and alternatives to the approved disposal methods must receive prior OCD approval. Key is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

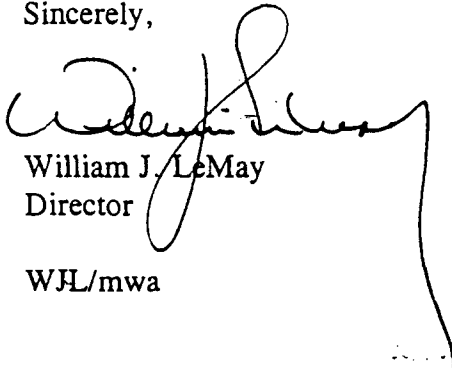
Please be advised, approval of this transfer does not relieve Key of liability should their operation result in pollution of surface waters, ground water or the environment.

Mr. Kenneth V. Huseman  
September 8, 1997  
Page 2

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. Upon written application by the permittee, an exception to screening, netting, or covering may be granted by the district supervisor upon a showing that an alternative method will protect migratory birds or that the facility is not hazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoir, or in open receptacles.

If there are any questions, please contact Mark Ashley at (505) 827-7155.

Sincerely,



William J. LeMay  
Director

WJL/mwa

xc: OCD Aztec Office

Mr. George E. Colman, Sunco Trucking Co.

CERTIFIED MAIL RETURN RECEIPT NO. P-288-258-970

Mr. Ron Fellabaum, Sunco Trucking Co./Key Four Corners, Inc.

CERTIFIED MAIL RETURN RECEIPT NO. P-288-258-971

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? X 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: X 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/l 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: 5/4/96
- \* 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



## TABLE OF CONTENTS

- I. Purpose
- II. Operator Information
- III. Well Data
- IV. Expansion
- V. Map of One Mile Radius
- VI. Area of Review Well Data
- VII. Proposed Operation
- VIII. Injection Zone Data
- 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# flocculants 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

gray angular to subangular, very fine grained sandstone with laminations of light to dark gray carbonaceous shale. It has a maximum porosity of 13 to 14% with an average of 10%. The average thickness is 100 feet and is at the depth of 4380' to 4480'. The underground water sources are the Nacimiento which is exposed at the surface and the Ojo Alamo which occurs from 500' to 700'; See attached "Exhibit J"

#### **IX. Stimulation Program**

The proposed stimulation program is to breakdown the perforated interval 4380' to 4480' with 5,000 to 7,500 gallons of 15% HCL and ball sealers.

#### **X. Well Test Data**

This data has previously been submitted.

#### **XI. Fresh Water Data**

The State Engineers Office shows one water well within one mile of the proposed well which was drilled in the SE,SE of Section 34,T30N,R12W in 1977 and was capped with a welded steel plate. There is no current information available.

#### **XII. Affirmative Statement & Contingency Plan**

We have examined the geologic data available and there is no apparent evidence of open faults or any other hydrologic connection between the Point Lookout formation and any underground source of drinking water.

In the accidental event of the cross transfer of disposed waters and fresh water the source will be stopped immediately upon detection and take the steps necessary to provide the extraction and monitoring equipment.

#### **XIII. Proof of Notification**

The public notice was previously listed: See attached "Exhibit K"

#### 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 Darsgaard TITLE: Vice-President

SIGNATURE: Paul Backyard 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 <i>Sunco Disposal</i>		Well No. <i>1</i>
Unit Letter <b>E</b>	Section <b>2</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>1595</b> feet from the <b>NORTH</b> line and <b>1005</b> feet from the <b>WEST</b> line					
Ground level Elev. <b>5859</b>	Producing Formation <i>MV</i>		Pool <i>Florco Vista</i>	Dedicated Acreage: <i>N/A</i> 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 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: *Lon 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.

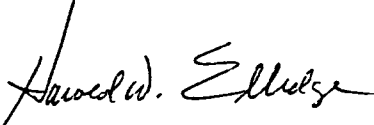
Date Surveyed: **June 4, 1991**  
 Signature of Surveyor: *CECIL B. TULLS*  
 Professional Surveyor Seal: **CECIL B. TULLS, REGISTERED PROFESSIONAL LAND SURVEYOR, NO. 9672, STATE OF NEW MEXICO**  
 Certificate No.: **9672**



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

68 jts 2513.35

dv tool 1.79

70 jts 2250.57

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

DV tool at 2244.17' KB

Anticipated PBTD 4717' KB

CIRC CEMENT

NO CEMENT

2250.57

2250.57

Casing landed at 4762' KB

WELL PROFILE

OPERATOR COLEMAN OIL & GAS CO.  
 WELL # SUNGO WDW #1  
 FIELD CROUCH MESA  
 COUNTY SAN JUAN  
 STATE NEW MEXICO  
 DATE 7/27/94  
☐ NEW COMPLETION ☒ WORKOVER

	Casing	Liner	Tubing
SIZE	5 1/2		2 7/8
WEIGHT	15.5		6.5
GRADE			
THREAD			EUE
DEPTH	4706		4265

ITEM NO.	EQUIPMENT AND SERVICES	LENGTH KB	DEPTH
1	DONUT TYPE TUBING HANGER	.76	
2	2 7/8 EU PIN X PIN NIPPLE	.46	
3	2 7/8 PLASTIC LINED PUP JOINT	10.15	
4	2 7/8 PLASTIC LINED PUP JOINT	6.22	
5	135 JTS 2 7/8 PLASTIC LINED TUBING	4248.78	
6	2 7/8 X 5 1/2" ARROW 'T-2' PLASTIC COATED ON-OFF TOOL (MEAS W/ S. NIPPLE)	1.66	
7	2 7/8 X 1.87 STAINLESS STEEL NIPPLE W/ 1.87" 'F' PROFILE		4281
8	2.688 X 5 1/2" ARROW J-LATCH	.90	
9	3EA 2.688 BONDED SEAL UNITS 357		
10	2.688 1/2 MULESHOE BOTTOM	1.42	
11	5 1/2 X 2.688 ARROW 'XL-W' RETRIEVABLE SEAL BORE PACKER	4.68	4282
12	5 1/2 X 2.688 TUBING ADAPTER BOTTOM	1.14	
13	2 3/8 PLASTIC COATED PUP JOINT	5.69	
14	2 3/8 X 1.78 STAINLESS STEEL NIPPLE W/ 1.78" 'F' PROFILE	.87	4289
15	2 3/8 PLASTIC COATED PUP JOINT	6.10	
16	2 3/8 X 5 1/2 W/L ENTRY GUIDE COLLAR	.55	4296

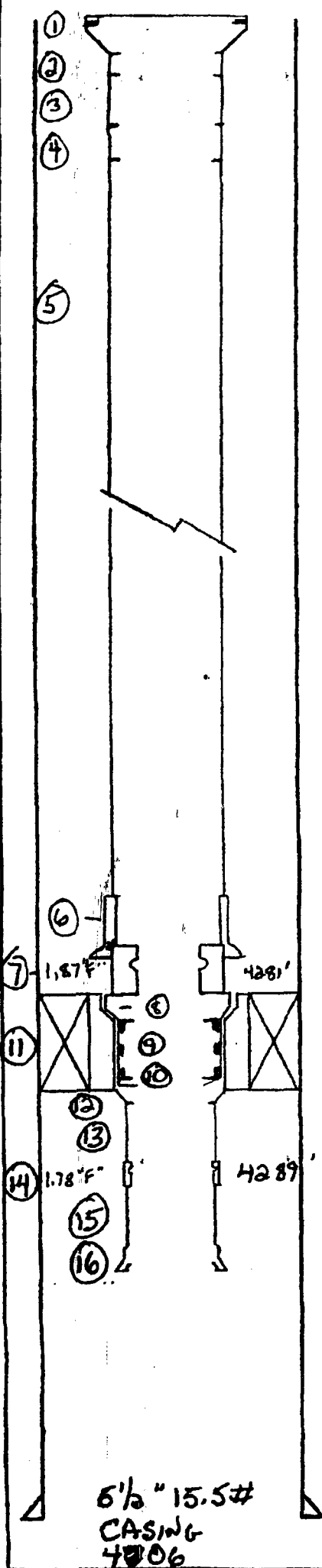
COMMENTS:

SEAL ASSY & TUBING WERE LANDED W/ 4000# TENSION  
 T-2 ON-OFF TOOL IS LEFT HAND RELEASE  
 J-LATCH SEAL ASSY IS RIGHT HAND RELEASE

PREPARED BY  
 B. J. WARBURTON

OFFICE  
 FARMINGTON, NM

PHONE  
 (505) 326-5141



**MOUNTAIN  
 STATES**  
 OIL TOOL

# "EXHIBIT B #2 CONTINUOUS" PIPE RECORD

PG 1 of 2

2000 Coleman Oil & Gas LEASE Surco Disposal WELL NO. 1 7/28 1979

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		6 10		87		5 69		1 10		4 68		90		1 66
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 3/8" x 5 1/2" ARROW T-2 ON/OFF TOOL W/ 1.5" F NIPPLE	
	55		6 10		87		5 69		1 10		4 68		90		1 66

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	6 10
3	1.78" STAINLESS "F" NIPPLE	-	2 3/8	-	-	-	MTN STATES	87
4	PLASTIC LINED PUP JOINT	1	2 3/8	-	-	-	MTN STATES	5 69
5	TUBING ADAPTOR BOTTOM	-	2 1/16	-	-	-	MTN STATES	1 10
6	ARROW XL-W RETRIEVABLE PACKER	-	5 1/2	-	-	-	ARROW	4 68
7	ARROW J-LATCH	-	2 1/16	-	-	-	ARROW	90
8	ARROW T-2 ON/OFF TOOL	-	2 7/8	-	-	-	ARROW	1 66

REMARKS

\*ASTERISK DESIGNATES CENTRALIZER ON JOINT

TOTAL

21 55

TOP PACKER @ 4280.93' KB - BOTTOM @ 4290.92' KB

JOINTS NOT RUN

PUP JOINTS USED TO SPACE WITHIN 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

Page 2 of 2

Colerigan Oil & Gas Lease Sunco Disposal

WELL NO. 1

7/28 19

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
	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 75		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	27/8	6.5	J-55	8-50	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
8								

REMARKS

\*ASTERISK DESIGNATES CENTRALIZER ON JOINT

TOTAL PAGE 1 & PAGE 2

4286 48

JOINTS NOT RUN TRADE OUT

44

BAD JOINTS w/ NEW

..

TOTAL

4286 92

TOP ROTARY DRIVE BUSHING TO TOP OF CASING HEAD FLANGE (\*)

13 00

BOTTOM PACKER ASSEM.

4299 92

CO. REP.

"EXHIBIT C"



**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting  
Lease Management  
Contract Pumping

204 N. Auburn  
Farmington, New Mexico 87401  
(505) 327-4892

CELEMAN OIL & GAS  
SUNCO DISPOSAL WELL #1

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

MOUNTAIN STATES ARROW SET 1 PAPER AT 4265'

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

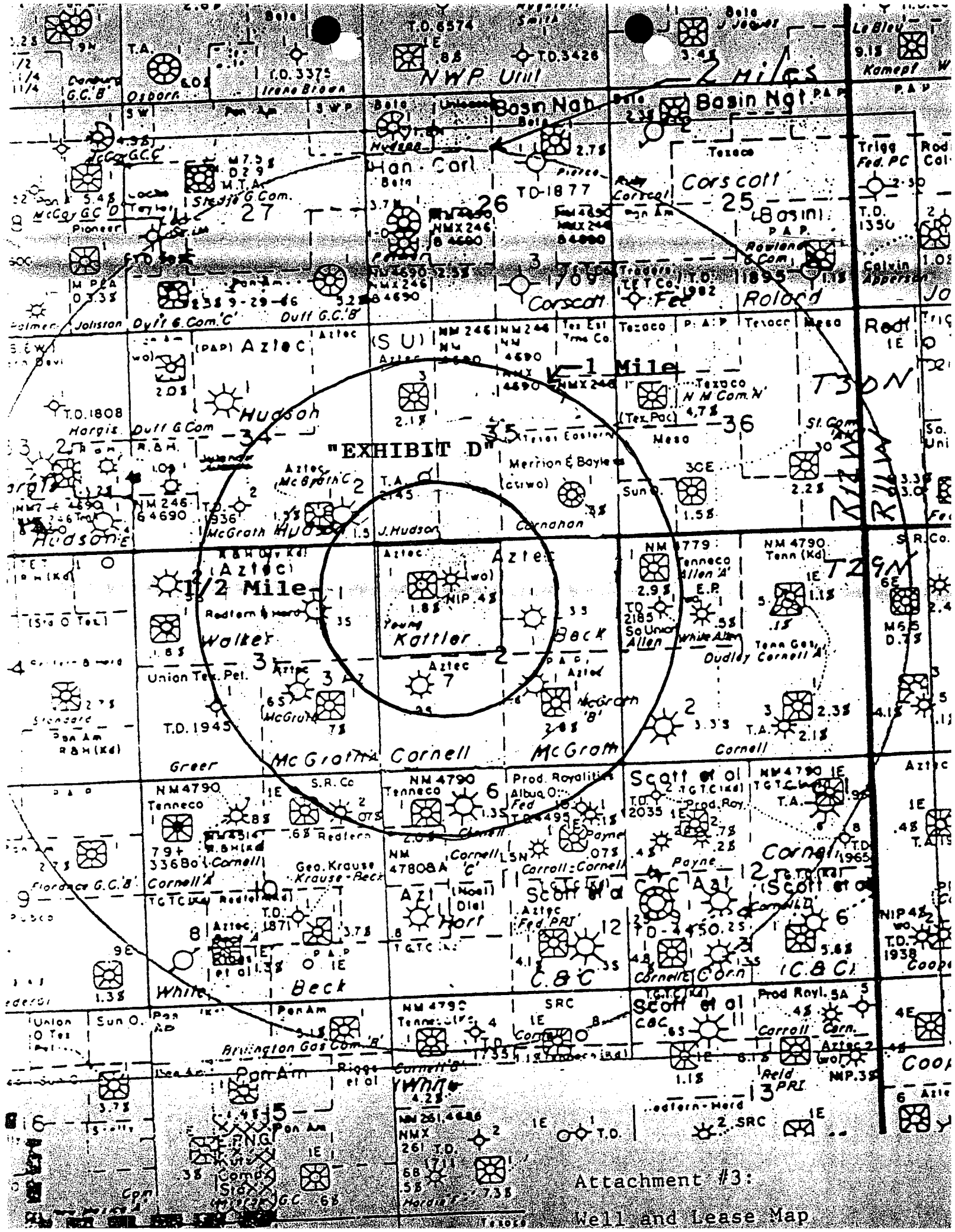
PERFS 4350 - 4460  
2 SPF 220 TOTAL HOLES.

7570 - 4706'

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

Tom Thompson 10/14/93





## 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	Merrion	Basin Dak	ZA	12-19-60	6760
21215	30-045-08946	P	35	30N	12W	Carahan Com	1	Merrion	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

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

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'





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

"Exhibit G"

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

December 22, 1993

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

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	2350 psig
This well located in San Juan County, New Mexico.	

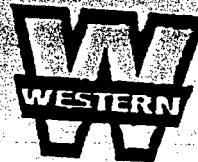
The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. LeMay  
Director

WJL/BES/amg

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



ANALYSIS NO. 51-7

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

API FORM 45-1

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 T29N R2W</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	meq/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>

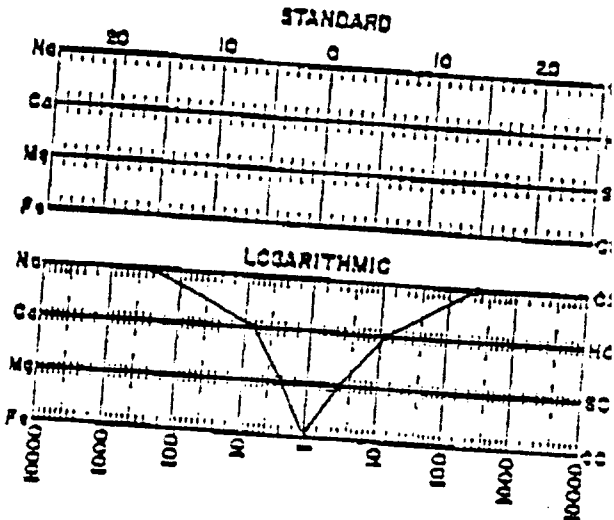
OTHER PROPERTIES

pH	<u>7.01</u>
Specific Gravity, 60/60 F.	<u>1.013</u>
Resistivity (ohm-meters)	<u>78 F.</u>
Total Hardness	<u>35</u>
	<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 — meq/l



Total Dissolved Solids (calc.) 21357

Iron, Fe (total) 25 ppm  
Sulfide, as H<sub>2</sub>S neg

REMARKS & RECOMMENDATIONS:

PLEASE REFER ANY QUESTIONS TO:

ANALYST: Llee

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

## LABORATORY WATER

To Southland Royalty  
Attn: Doug Harris  
Box 570  
Farmington, N.M. 87499

Date 9/12/84

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 44 Depth 4255' - 4377' Formation Point Lookout  
County \_\_\_\_\_ Field \_\_\_\_\_ Source DST 12 4255-4377

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

Remarks:

\*Milligrams per liter

Respectfully submitted,

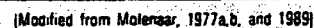
Analyst: \_\_\_\_\_  
cc: \_\_\_\_\_

HALLIBURTON COMPANY

By B. E. Purn

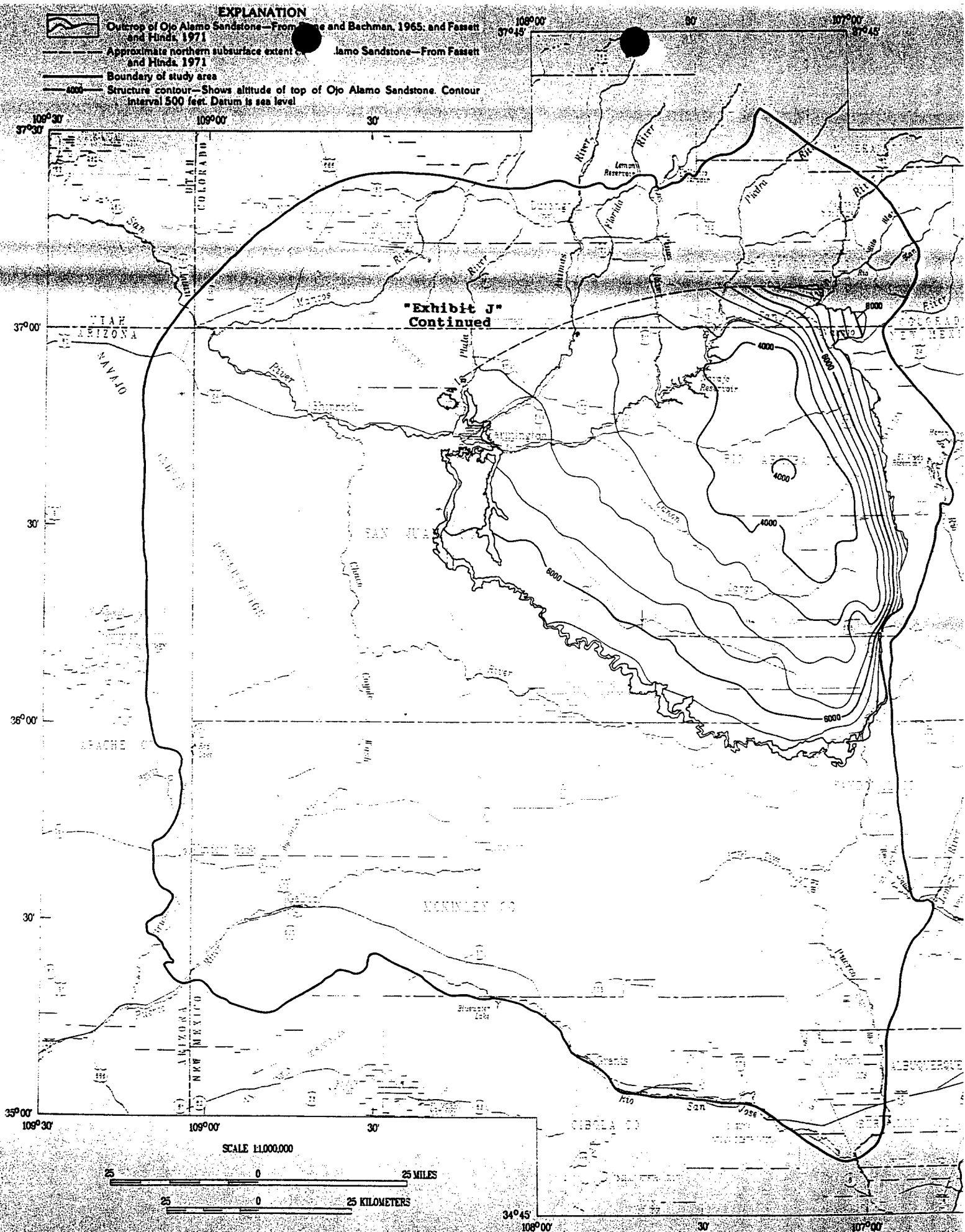
## NOTICE

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.



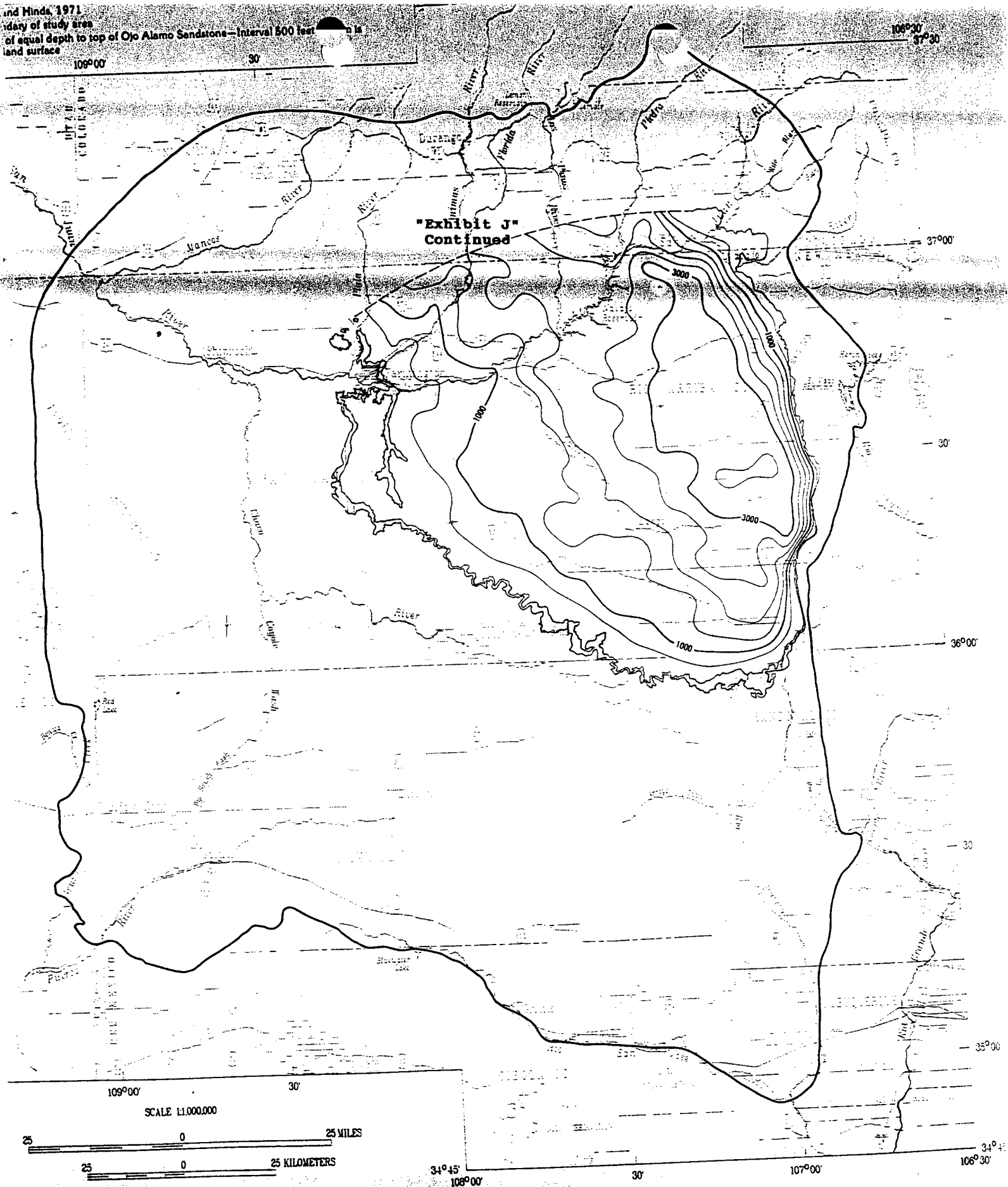
**Figure 3. Time- and rock-stratigraphic framework and nomenclature.**

## CONVERSION FACTORS





and Hinds, 1971  
 idary of study area  
 of equal depth to top of Ojo Alamo Sandstone—Interval 500 feet  
 land surface



**Figure 5. Approximate depth to the top of the Ojo Alamo Sandstone.**

## EXPLANATION

**EXPLANATION**

**Outcrop of Ojo Alamo Sandstone—From Dane and Bachman, 1965, and Fassett and Hinds, 1971**

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

FORM C-128  
 Revised 5/1/57

**SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE**

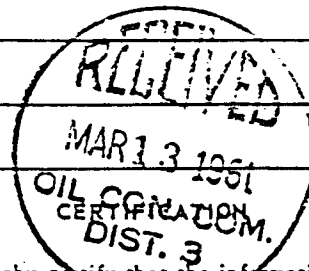
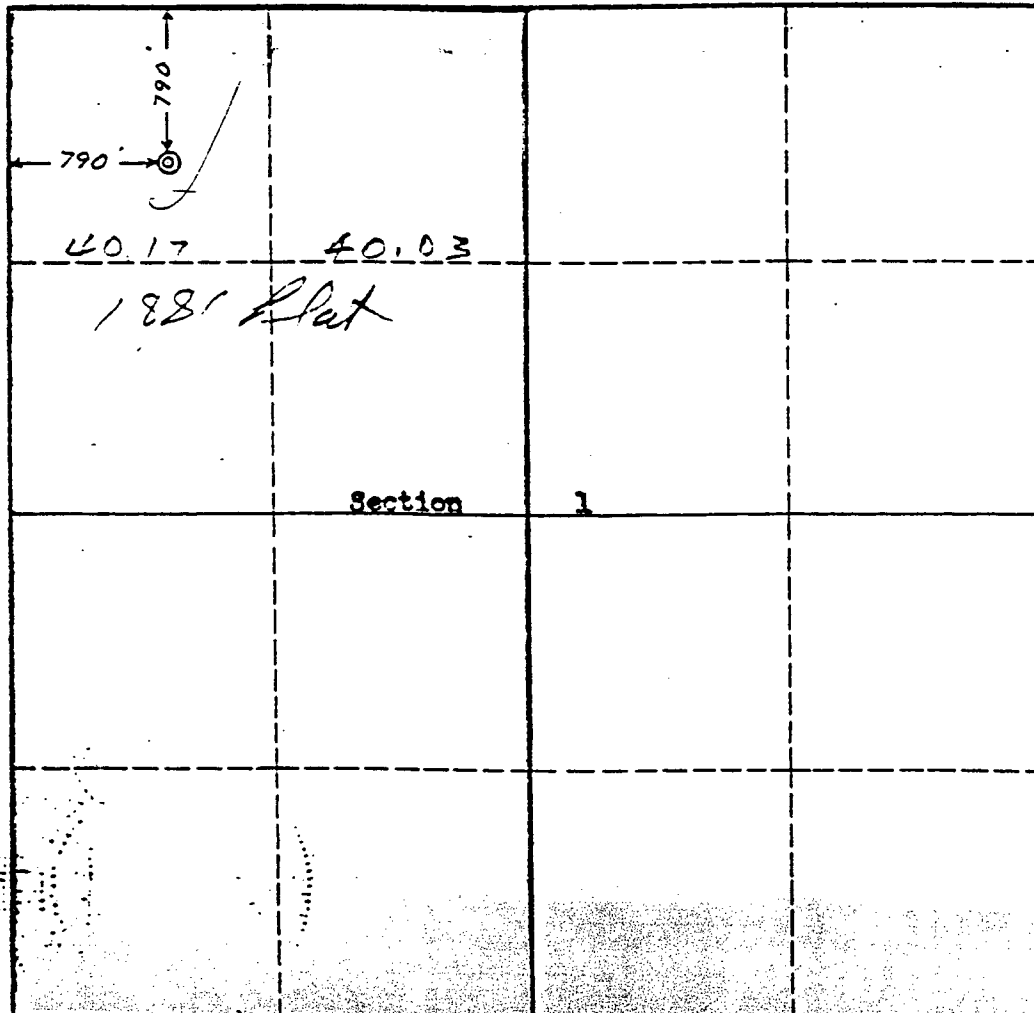
**SECTION A**

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>720</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>360 320.2 Acres</b>	

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 <b>J. J. Lacey</b>
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 <b>Robert H. Ernst</b>
Certificate No. <b>PE &amp; LS 2153</b>

San Juan Engineering Co.

**Santa Fe, New Mexico**

## WELL RECORD

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

AREA 640 ACRES  
LOCATE WELL CORRECTLY

**Tenneco Corporation**  
(Company or Operator)

Allen Dakota Gas Unit "A"  
(Lease)

Well No. 1, in NW  $\frac{1}{4}$  of NW  $\frac{1}{4}$ , of Sec. 1, T. 29N, R. 12W, NMPM.

## Basin Dakota

Pool.....San Juan

County.

Well is 790 feet from N line and 790 feet from N line

of Section 1 If State Land the Oil and Gas Lease No. is NM 520 NM 524

Drilling Commenced March 12, 1961.. Drilling was Completed May 19, 1961

Name of Drilling Contractor.....Great Western Drilling Company.....

Address.....Farmington, New Mexico.....

Elevation above sea level at Top of Tubing Head.....5905 GL..... The information given is to be kept confidential until  
....., 19.....

### OIL SANDS OR ZONES

No. 1, from 6714 to 6718 No. 4, from 6605 to 6620

No. 2, from 6700 to 6706 No. 3, from 6518 to 6524

No. 3, from 6689 to 6693 No. 6, from 6527 to 6533

## IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from None to  feet.

No. 2, from.....to.....sect. ....

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" on 24#		New	264'	Guide	--	--	Surface
4 1/2" 9.5#		New	4628'	Float	--	6518-6718	Production
4 1/2" 11.6#		New	2157'				

## MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. BAGS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12 1/4"	8 5/8"	264'	200 Sx	Two Plug		
7 7/8"	4 1/2"	6785'	300 Sx	Two Plug		

### RECORD OF PRODUCTION AND STIMULATION

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

Sand Frac Perfs 6714-18; 6700-06; 6689; 93, with 10,000# 20-40 sand and 20,000 gal. water.

Sand Frac Perfs 6605-20 with 250 gal EDA, 43,000# 20-40 sand and 68,000 gal water.

Sand Frac Perfs 6518-24 and 6527-33 with 250 gal BDA 40,000# 20-40 sand and 52,000 gal water.

Result of Production Stimulation.....

TEST-- Flw 2882 MCFFD, ACF 3162, 10 BEI cond per MMCF on 3/4" choke TP 230, CP 710,  
SITP 2096, BHP 2566.

North Cleared Plot



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

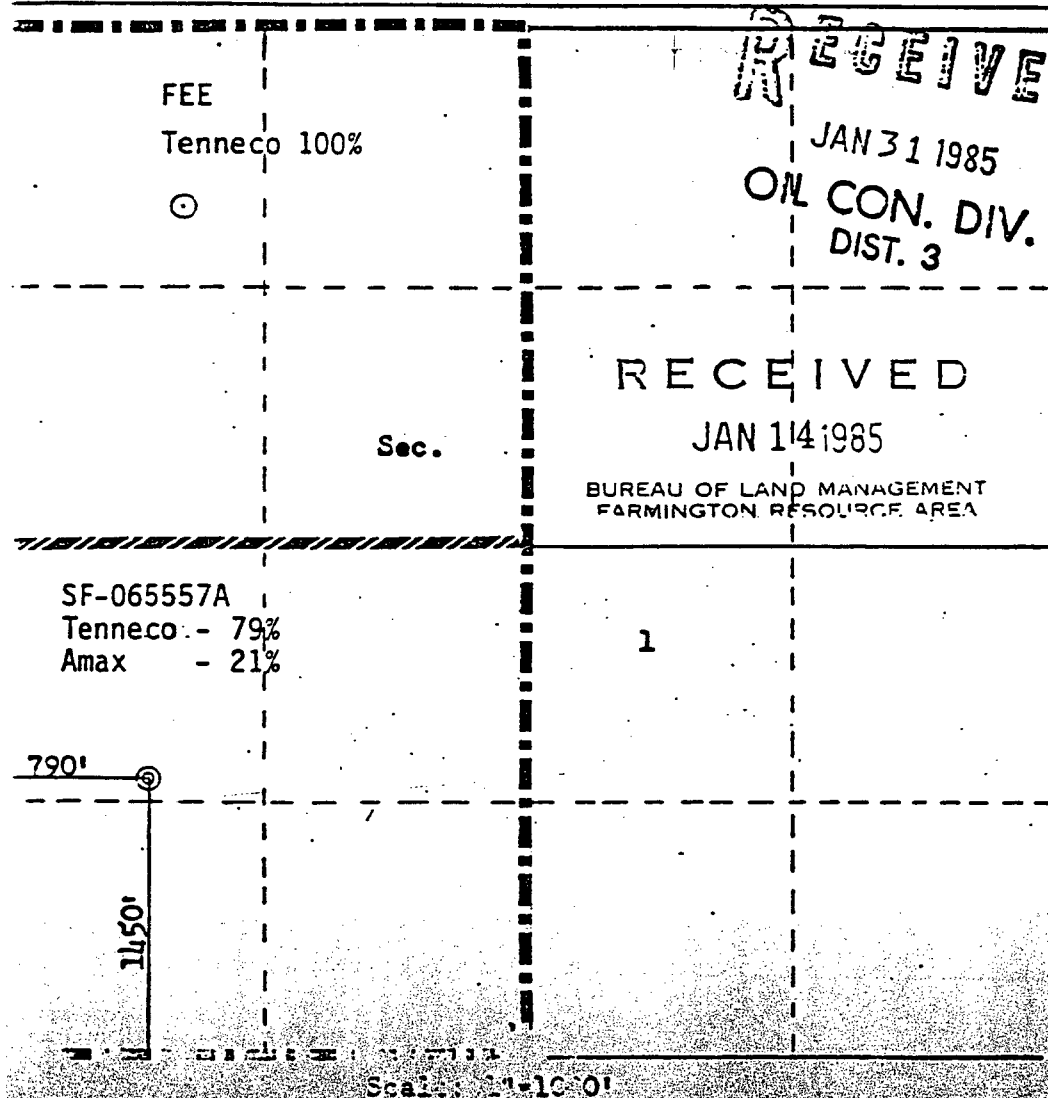
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>ALLEN #1A</b>		Well No. <b>1E</b>
Init Letter <b>L</b>	Section <b>1</b>	Township <b>29N</b>	Range <b>12W</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>1450</b> feet from the <b>South</b> line and <b>790</b> feet from the <b>West</b> line				
Ground Level Elev: <b>5831</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>3.220</b> - <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 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.



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. Kern Jr.</i>
Certificate No.	3950

983)  
9-331)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions on  
reverse side)

Budget Bureau No. 1004-0135  
Expires August 31, 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 SF, RT, CR, etc.)		11. SEC., T., R., N., OR E.L. AND SURVEY OR AREA SEC. 1, T29N, R12W	
		12. COUNTY OR PARISH San Juan	
		13. STATE NM	

16. 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"/>		<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)	<input checked="" type="checkbox"/> Progress report		

(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. Drllg. 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

OIL CONSERVATION

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

SIGNED Scott McKinney

TITLE Sr. Regulatory Analyst DATE April 4, 1985

(This space for Federal or State office use)

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

ACCEPTED FOR RECORD

APR 12 1985

\*See Instructions on Reverse Side

NMOCC

FARMINGTON RESOURCE AREA  
b1  
b2  
b3

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

Testing Method (prior, 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.

6-12-85 OIL CONSERVATION COMMISSION

APPROVED

JUN 12 1985

BY

Original Signed by FRANK T. CHAVEZ

# NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-128  
REVISED 5/1/5

## Well Location and Acreage Dedication Plat

SECTION A.

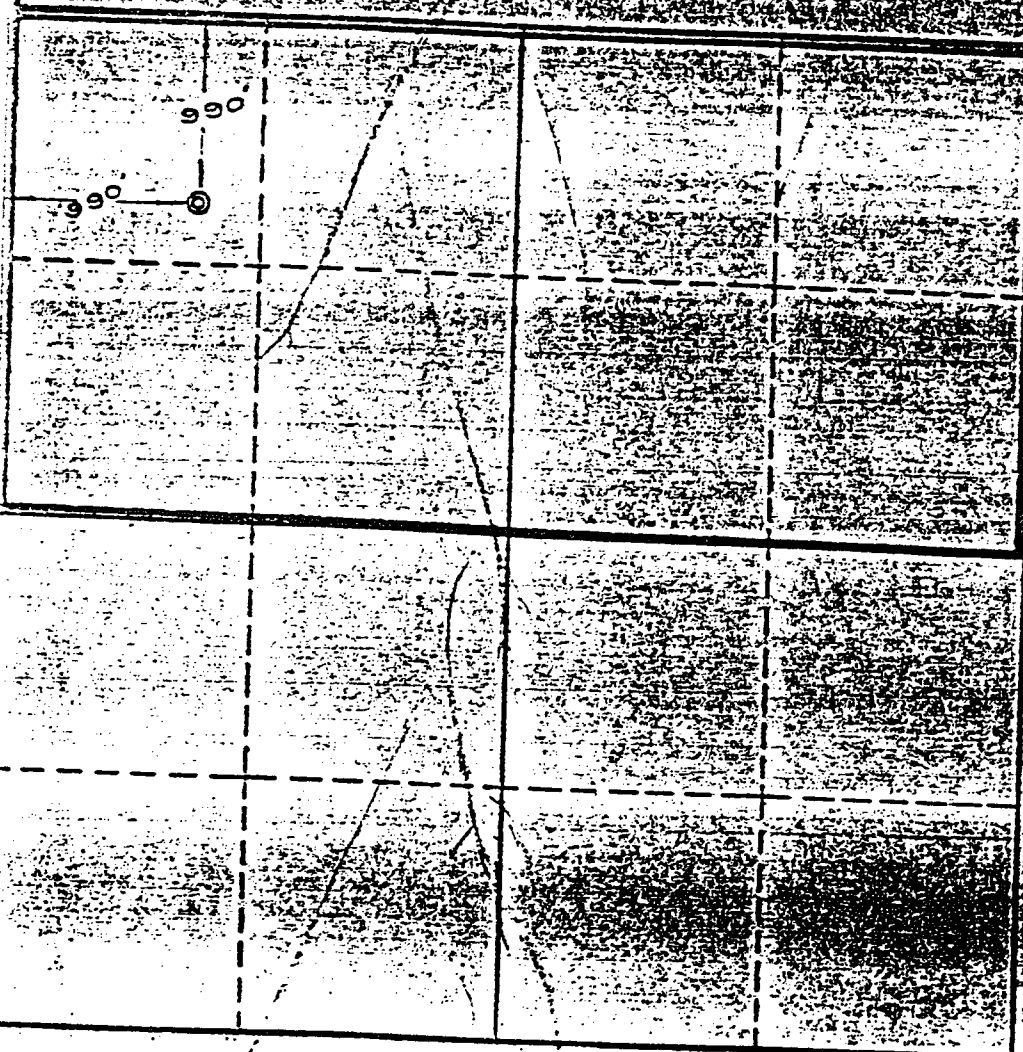
Operator Astec Oil and Gas Company Lease Young Date July 27, 1961  
Well No. 1-D Unit Letter D Section 2 Township 29N Range 12W NMPA  
Located 990 Feet From North Line, 990 Feet From West Line  
County San Juan G. L. Elevation 5847 Dedicated Acreage 319.94 Acre  
Name of Producing Formation Dakota Pool Basia

1. Is the Operator the only owner\* in the dedicated acreage outlined on the plat below? Yes ☒ No ☐
2. If the answer to question One is "No," have the interests of all the owners been consolidated by common ownership, 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 DESCRIBED

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

ORIGINAL SIGNED BY JOE C. SALMON

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 field notes of a survey made by \_\_\_\_\_ my superior \_\_\_\_\_ is true and correct to the best of my knowledge and belief.

Date Surveyed July 27, 1961

Four States Engineering Co.  
2101 North Central Ave.  
Albuquerque, New Mexico

E. J. P. P. P.  
REGISTERED ENGINEER OR  
LAND SURVEYOR

Certificate No. 3084

COPIES RECEIVED		5
DISTRIBUTION		
OFFICE	1	✓
TRANSPORTER	2	
OPERATION OFFICE		
OPERATOR	1	

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

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

0									

AREA 640 ACRES  
LOCATE WELL CORRECTLY

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.

Astec Oil & Gas Company

Young

(Company or Operator)

(Lease)

Well No. 1-D, in NW 1/4 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 O.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	DSW	294				
4 1/2	11.6	DSW	1162				
4 1/2	9.5	DSW	5566				
2 3/8	4.7	DSW	6426				

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12 1/4	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 flooded with 60,000# 20/40 sand, 30,000# 10/20 sand, 2036 Bbls. water flushed with 160 Bbls. 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 8-128  
REVISED 5/1/61

Date November 16, 1961

Aztec Oil and Gas Company Lease McGrath  
B-1 Unit Letter J Section 2 Township 29N Range 12W NMPM  
1650 Feet From South Line, 1650 Feet From East Line  
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

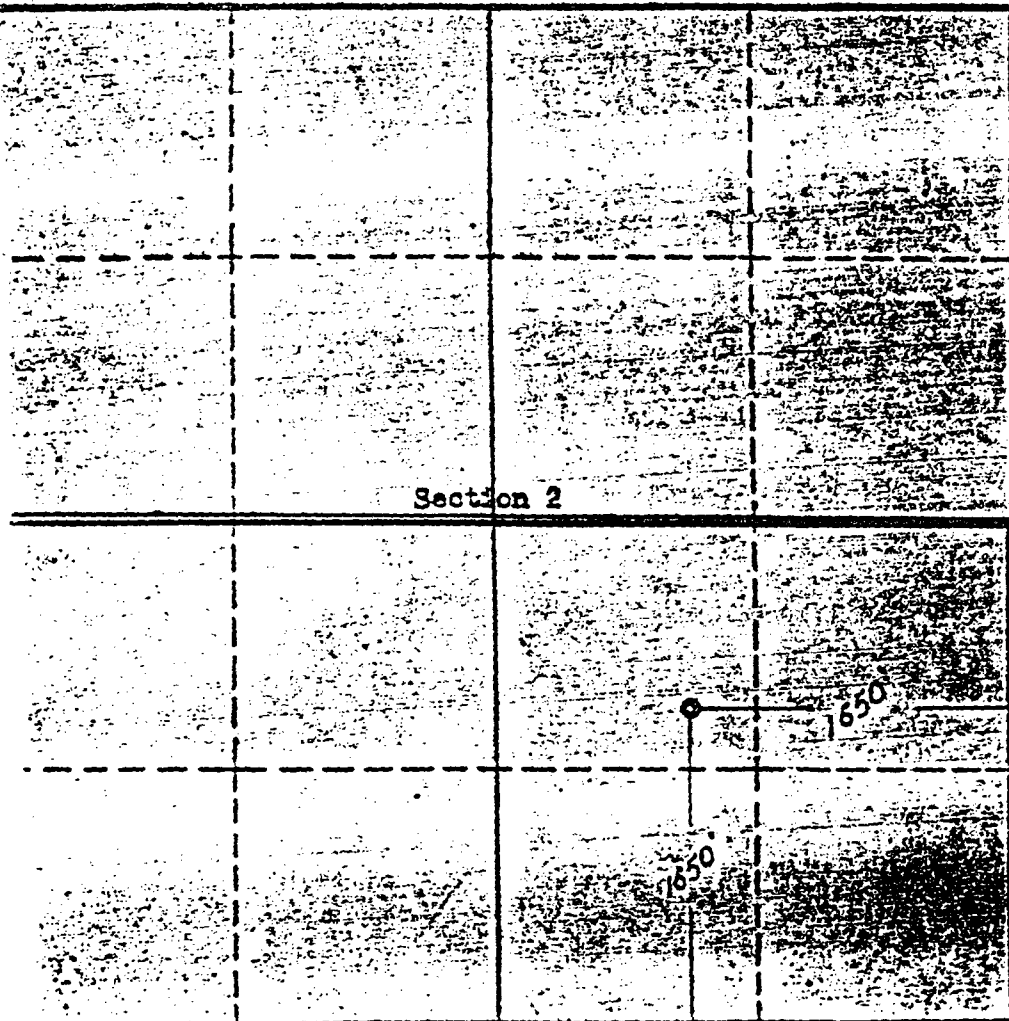
2. If the answer to question One is "No," have the interests of all the owners been consolidated by communication agreement or otherwise? Yes X No \_\_\_\_\_ If answer is "Yes," Type of Consolidation Communization

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

OWNER

LAND DESCRIPTION

SECTION B.



RECEIVED

NOV 20 1961

OIL CON. COM.

DIST. 3

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

Joe C. Salmon, Dist. Supt.

P. O. Drawer 570, Farmington

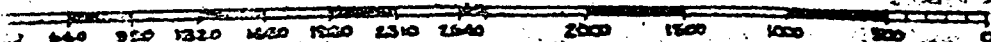
This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual survey made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed Nov. 15, 1961

Four States Engineering Co.  
 FARMINGTON, NEW MEXICO

REGISTERED ENGINEER OR  
 LAND SURVEYOR

Certificate No. 3084





**Santa Fe, New Mexico**

RECEIVED					
DIVISION					
	OIL				
A	809				
OFFICE					
A					

AREA 640 ACRES  
LOCATE WELL CORRECTLY

**Hydroath Unit**

(Company or Operator)

(Leave)

Well No. 7-1 in 25 1/4 of 2 1/4 of Sec. 2, T. 29N, R. 12W, NMPM.

**Familia Dubonia**

## Pool

**Don J. Ladd**

**..County.**

Well is 1690 feet from South line and 1650 feet from East line.

(intended)

of Section 2 If State Land the Oil and Gas Lease No. is (Patented)

Drilling Commenced 21/19/61, 19..... Drilling was Completed 19/3/61, 19.....

Name of Drilling Contractor..... **Freeman & Murray Drilling Co.** .....

Address..... P.O. Box # 672, Coleman, Texas

Elevation above sea level at Top of Tubing Head..... **O.L. 5092**..... The information given is to be kept confidential until

~~CONFIDENTIAL~~ 19

No. 1 from 6486 to 6496 No. 4 from \_\_\_\_\_ to \_\_\_\_\_

No. 1, from 6598 to 6596

No. 2, from 6598 to 6596

No. 3, from 6598 to 6596

No. 4, from 6598 to 6596

No. 5, from 6598 to 6596

No. 2, from	to	No. 3, from	to
No. 3, from	to	No. 6, from	to

No. 3, 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
6 5/8	24	NEW	10 jts.				
4 1/2	11.6	NEW	1110*				
4 1/2	9.5	NEW	5258*				
2 3/8	8.1	NEW	6434*				

## MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. BAGS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
12	8 3/8	315	225	displacement		
7 7/8	4 1/2	6720	265	two plug		
	2 3/8	5445				

DEC 29 1961  
OIL

### RECORD OF PRODUCTION AND STIMULATION

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

Hand-water treated with 57,000 gals. water, 45,000# 20/40 sand, 80,000# 10/20 sand

Result of Production Stimulation.....

Avg. I.P. - 34 bpm.

6626

## Depth Cleaned Out

RECEIVED	
C. STATION	
DATE	
FILE	
A.S.S.	
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 QUADRUPLICATE 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

4-29-64

(Place)

(Date)

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

Astac Oil & Gas Company

McGRATH "A"

Well No. 1

in NE

SE

1/4

(Company or Operator)

(Lease)

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

3-29-64

Please indicate location:

Elevation 5865 Ground

Total Depth 6689'

PSTD

6552'

Top Oil/Gas Pay 6432

Name of Prod. Form.

Dakota

PRODUCING INTERVAL -

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

Open Hole

Depth

Depth

Casing Shoe

Tubing

OIL WELL TEST -

Natural Prod. Test: \_\_\_\_\_ bbls. oil, \_\_\_\_\_ bbls water in \_\_\_\_\_ hrs, \_\_\_\_\_ min. Size \_\_\_\_\_

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

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 w/62,070 gal. treated w/10,000# 20-40 mesh; 10,000# 10-20 mesh

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

Oil Transporter \_\_\_\_\_

Gas Transporter \_\_\_\_\_

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

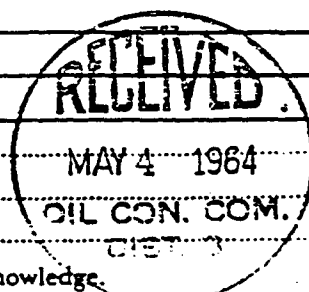
(FOOTAGE)

Tubing, Casing and Cementing Record

Size Feet Size

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

Astac Oil & Gas Company

(Company or Operator)

OIL CONSERVATION COMMISSION

Original Signed By

By: A. R. KENDRICK

T. PETROLEUM ENGINEER DIST. NO. 3

ORIGINAL SIGNED BY JOE C. SALMON Joe C. Salmon

(Signature)

Title District Superintendent

Send Communications regarding well to:

Name Astac Oil & Gas Company

Drawer #570, Farrington, New Mexico

Address

✕

## WELL RECORD

NUMBER OF COPIES RECEIVED		
DISTRIBUTION		
SALES		
FILE		
U.S.G.S.		
LAND OFFICE		
TRANSPORTATION	OIL	
	GAS	
PRODUCTION OFFICE		
OPERATOR		

					X	

**AREA 640 ACRES  
LOCATE WELL CORRECTLY.**

**MOGRATE "A"**

(Company or Operator)

(Leave)

Well No. 1, in NE  $\frac{1}{4}$  of SE  $\frac{1}{4}$ , of Sec 3, T. 29N, R. 12W, NMPM.

## Basin Dakota

Pool San Juan

Country.

Well is 1720 feet from South line and 990 feet from East line.

of Section 3 If State Land the Oil and Gas Lease No. is Patented

Drilling Commenced 3-14 19 64 Drilling was Completed 3-29 19 64

Name of Drilling Contractor..... **Armaguard**

Address.....

Elevation above sea level at Top of Tubing Head..... The information given is to be kept confidential until  
..... 19.....

### OIL SANDS OR ZONES

No. 1, from 6432 to 6440 No. 4, from \_\_\_\_\_ to \_\_\_\_\_

No. 2, from 6452 to 6456 No. 3, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from 6504 to 6524 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"	24.7	New	9 jts.				
4 1/2"	9.5 & 11.6	New	213 jts.				

### MUDDING AND CEMENTING RECORD

[illegible]

### RECORD OF PRODUCTION AND STIMULATION

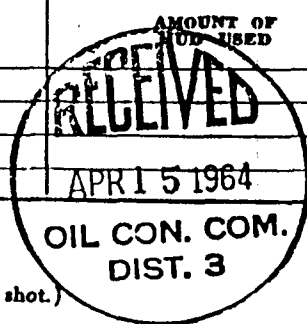
(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

~~Fract well with 62,070 gals treated w/ 60,000 # 20-40 sd; 10,000# 10-20 sand~~

Result of Production Stimulation..... No ID pressure; Max. press. 3400#; Minimum pressure 2800#;

Average treating pressure 3100#; AIR 41.5 BPM; IEIP 1200#; SI 5 min. 100%

Flushed w/ 1500 gals wtr treated w/ 1% cacl2 & 20% Depth Cleaned Out 6552+  
1000 gals WAC8





STATE	
COUNTY	
SECTION	
TOWNSHIP	
RANGE	
COUNTY	

**NEW MEXICO OIL CONSERVATION COMMISSION**  
**WELL LOCATION AND ACREAGE DEDICATION PLAT**  
 SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

FORM C-28  
 Rev. 12/5/57

**SECTION A**

Operator <b>TENNECO OIL COMPANY</b>		Lease <b>CORNELL NE DAKOTA GAS UNIT "C"</b>		Well No. <b>1</b>
Unit Letter <b>D</b>	Section <b>11</b>	Township <b>29 North</b>	Range <b>12 East</b>	County <b>San Juan</b>
Actual Footage Location of Well: <b>990</b> feet from the <b>North</b> line and <b>990</b> feet from the <b>West</b> line				
Ground Level Elev. <b>5716' ungraded</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage <b>320</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 communization 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**

	Section <b>11</b>		

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

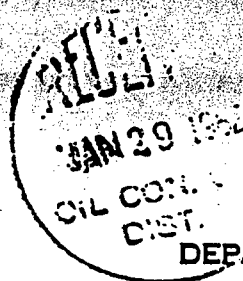
Name <b>J. J. Lacey</b>
Position <b>Dist. Petroleum Engineer</b>
Company <b>Tenneco Corp., acting as agent, Tenneco Oil Company</b>
Date <b>December 6, 1961</b>

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>5 December 1961</b>
Registered Professional Engineer and/or Land Surveyor <b>Robert H. Ernst</b>
Certificate No. <b>E &amp; LS 2463</b>

0 350 500 650 800 950 1100 1250 1400 1550 1700 1850 2000 2150 2300 2450 2600 2750 2900 3050 3200

	X								



U.S. LAND OFFICE Santa Fe  
SERIAL NUMBER SF 065557-A  
LEASE OR PERMIT TO PROSPECT \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

## LOG OF OIL OR GAS WELL

## LOCATE WELL CORRECTLY

**Tenneco Corp., acting by & thru its managing**  
Company agent, Tenneco Oil Company Address P. O. Box 1714, Durango, Colorado  
Lessor or Tract Cornell Dakota Gas Unit "C" Field Basin Dakota State New Mexico  
Well No. 1 Sec. 11 T. 29N R. 12W Meridian N.M.P.M. County San Juan  
Location 990 ft. S. of N. Line and 990 ft. E. of W. Line of Section 11 Elevation 5716 GL  
(Derivet four 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 [Signature] L. B. Plumb

Date January 23, 1962

Title Dist. Production Supt.

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

Commenced drilling December 6, 1961 Finished drilling December 27, 1961

**OIL OR GAS SANDS OR ZONES**  
No. 1, from 6298 to 6306 No. 2, from 6380 to 6404 No. 3, from 6462 to 6466 No. 4, from 6477 to 6483  
**IMPORTANT WATER SANDS**  
No. 1, from 6404 to 6405 No. 2, from 6405 to 6406 No. 3, from 6406 to 6407 No. 4, from 6407 to 6408  
**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	CRAT	245	Pattern	Surface			Surface
4-1/2	11.5	8	CRAT	123	Pattern	Production			Production
4-1/2	9.5	8	CRAT	649	Pattern	Production	6298	6483	Production

## MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	250'	150	Two Plug		
4-1/2	660'	300	Two Plug		

## PLUGS AND ADAPTERS

Heaving plug—Material	Length	Depth set
Adapter—Material	Size	

FOLD MARK

NEW MEXICO OIL CONSERVATION COMMISSION  
Well Location and Acreage Dedication Plat

Date

AZTEC OIL & GAS COMPANY

Lease Mc GRATH

o. C-1 Unit Letter P Section 34 Township 30N Range 12W NMPM

red 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 ☐

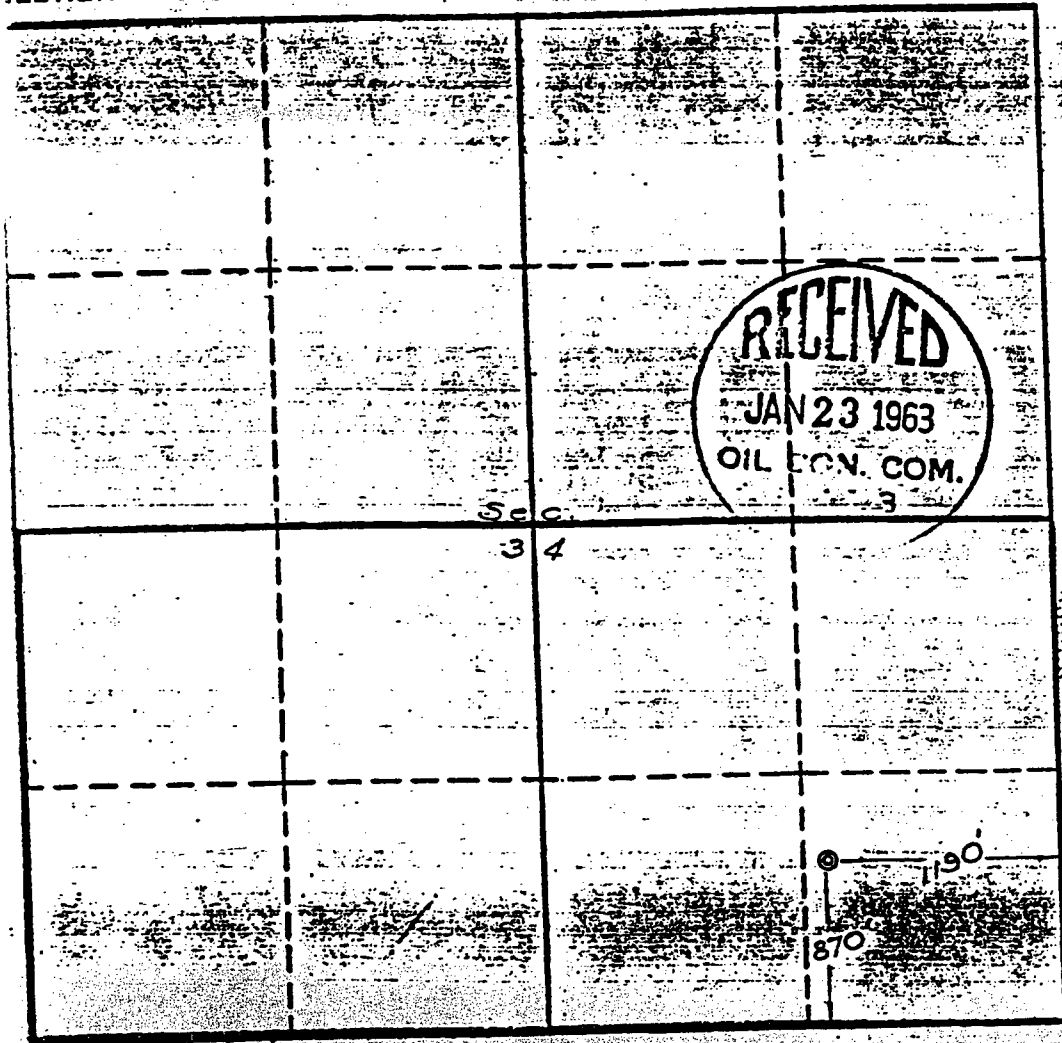
If the answer to question One is "No," have the interests of all the owners been consolidated by communization agreement or otherwise? Yes ☒ No ☐ If answer is "Yes," Type of Consolidation communization

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  
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

REGISTERED ENGINEER OR  
LAND SURVEYOR

Certificate No. 3602



Form approved.  
Budget Bureau No. 12-R333.4

U S LAND OFFICE 3ALPDA 7E

SERIAL NUMBER 27922

LEASE OR PERMIT TO PROSPECT

MAR 11 1963  
OIL COM. COM.  
DIST. 3

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

# LOG OF OIL OR GAS WELL

## LOCATE WELL CORRECTLY

Company AZTEC OIL AND GAS COMPANY Address P. O. DRAWER 570 FARMINGTON, N. MEY.

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 577 S.1

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**

Date ~~MARCH 7, 1963~~-----

**JOE C. SALMON**

Title ~~DISTRICT SUPERINTENDENT~~

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 4 No. 4, from \_\_\_\_\_ to \_\_\_\_\_

No. 2, from 6462 to 6484 a No. 5, from \_\_\_\_\_ to \_\_\_\_\_

No. 3, from 6542 to 6576 - a 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	6399					
4	1 1/2	7.3	8 rd.	J-35	6399					
2	3/8	4.7	8 rd.	J-35	6399					
4	1 1/2	11.6	8 rd.	J-35	1163					

## MUDDING AND CEMENTING RECORD

	Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
MARK	8 5/8	323	225	Displacement		
	4 1/2	6637	925	Two Plug		
	2 3/8	6-08	-----	-----		

## PLUGS AND ADAPTERS

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

[illegible]



1983)  
9-330)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other in-  
structions on  
reverse side)

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

5. LEASE DESIGNATION AND SERIAL NO.

SF-07792 2

6. IF INDIAN, ALLIOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. NAME OF LEASE NAME

Duff Gas Com

9. WELL NO.

1E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

SW/NE Sec. 34, T30N, R12

12. COUNTY OR  
PARISH

San Juan

13. STATE

NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1. TYPE OF WELL:

WELL ☐

WELL ☒

DRY ☐

2. TYPE OF COMPLETION:

WELL ☒

WELL ☐

WELL ☐

WELL ☐

WELL ☐

WELL ☐

WELL ☐

WELL ☐

3. NAME OF OPERATOR

Amoco Production Company

4. ADDRESS OF OPERATOR

501 Airport Drive, Farmington, NM 87401

5. LOCATION OF WELL (Report location clearly and in accordance with instructions on reverse side)

At surface

1770' FNL x 1480' FEL

At top prod. interval reported below Same

At total depth Same

FEB 20 1985

CIL CON. DIV.

RECEIVED

FEB 11 1985

BUREAU OF LAND MANAGEMENT

14. PERMIT NO.

DATE OF EXPIRATION

12. COUNTY OR  
PARISH

San Juan

13. STATE

NM

15. DATE SPUDDED

11/20/84

16. DATE T.D. REACHED

12/2/84

17. DATE COMPL. (Ready to prod.)

1/7/85

18. ELEVATIONS (UP, RNB, RT, OR, ETC.)\*

5785' KB

19. ELEV. CASINGHEAD

5772' GR

20. TOTAL DEPTH, MD & TVD

6608'

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

6609'

22. IF MULTIPLE COMPL.,  
HOW MANY\*

single

23. INTERVAL  
DRILLED RT

ROTARY TOOLS

O-TD

CABLE TOOLS

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 RUN

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 & tailed in with 118 c.f. Class B Neat (cont. on back)	B 50-50 poz Class B Neat

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	6575'	

31. PERFORATION RECORD (Interval, size and number)

6576'-6558', 4 jsfpf, .50"; 6410'-6396',  
6424'-6420', 6508'-6476', 6520'-6516',  
2 jsfpf, .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		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
1/30/85		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
1/31/85	3	.75"	→		168		
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
104 psia	397 psia	→		1344			

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

TEST WITNESSED BY

To be sold

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

Original Signed By

FEB 14 1985

SIGNED R. D. Shaw

TITLE Administrative Supervisor

DATE 2/14/85

# COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Some Reentry	DILL Re
		X	X					
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
11/20/84	1/7/85	6608'	6604'					
Deviations (DF, RKB, RT, CR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
5772' GR	Dakota	6396'	6575'					
Particulations			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 of 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 (Start-In)	Casing Pressure (Start-In)	Choke Size
Back pressure	1870 psig	2010 psig	.75"

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

MERRION OIL & GAS CORPORATION		LEASE		WELL NO.	
CARNAHAN COM				2	
Section	Township	Range	County		
35	30N	12W	San Juan		
Well Footage Location of Well:					
1090 feet from the South line and		1070 feet from the East line			
Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage		
5905	Dakota	Basin Dakota	320	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 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.

## CERTIFICATION

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

Name

Steve S. Dunn

Position

Operations Manager

Company

Merrion Oil &amp; 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

Fred B. Kerr Jr.

Certificate No. 3950

Scale: 1"=1000'

OF NEW MEXICO  
MINERALS DEPARTMENT

Form C-105  
Revised 10-1-78

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

COPIES RECEIVED	
DISTRIBUTION	
DATE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	
TYPE OF WELL	

5a. Indicate Type of Lease

State ☐ Fee ☐

5. State Oil & Gas Lease No.

7. Unit Agreement Name

8. Farm or Lease Name

Garnahan Com

Well No.

2

10. Field and Pool, or Wildcat Basin Dakota

12. County

San Juan

TYPE OF COMPLETION

NEW ☒ WORK OVER ☐

Name of Operator

Merrion Oil & Gas Corporation

Address of Operator

P. O. Box 1017, Farmington, New Mexico 87499

Location of Well

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

East 35 TWP. 30N RGE. 12W

LINE OF SEC. TWP. RGE. NMDM

Date Spudded

6/15/84

15. 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 Cored

No

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	MOLE 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	325 x 396
				600 sx (1236 cu. ft.) Class B	
				100 sx (122 cu. ft.) Class B	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		Production Method (Flowing, gas lift, pumping - Size and type pump)				Well Status (Prod. or Shut-in)	
7/23/84		Flowing				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
Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)		
250 PSI	950 PSI	16	603 MCF/D	trace	48°		
Disposition of Gas (Sold, used for fuel, vented, etc.)						Test Witnessed By	
Vented						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.



21 JUL 82

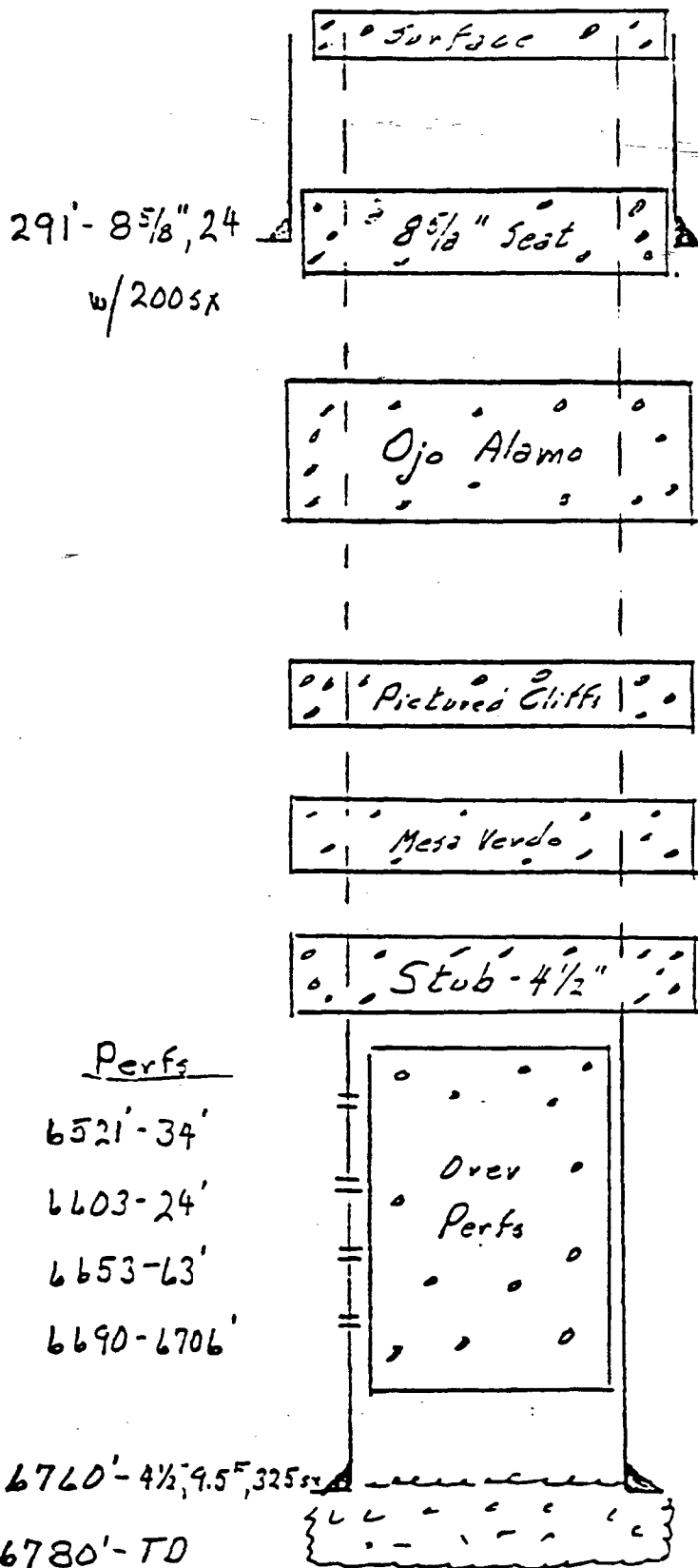
Carnation Unit #1  
Basin - Dakota Pool

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 Cliff
  - 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 Elev. <b>5857</b>	Producing Formation <b>Dakota - Mesaverde</b>	Pool <b>Basin Dakota Flora Vista Mesaverde (Ext.)</b>	Dedicated Acreage: <b>320</b>		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 interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☒ Yes    ☐ No    If answer is "yes," type of consolidation ..... **Communization** .....

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 communization, 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**

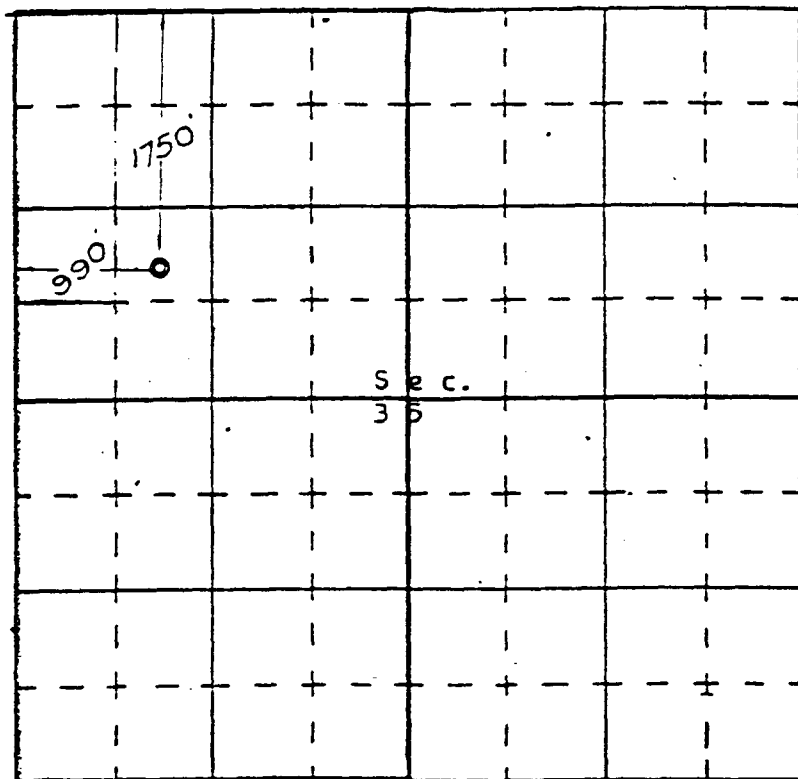
**May 27, 1966**

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 200 - 2148 - 4207 BLM Wayne -

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐ AUG 24 1966

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 FWL & 990 FWL Sec 35, T-30N, R-12W

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUDDED 7/22/66 16. DATE T.D. 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 T.D., MD & TVD 6732 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 6460 - 6680

25. TYPE ELECTRIC AND OTHER LOGS RUN Es - Ind and Density log

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT FILLED
8-5/8"	24#	306	12-1/4	250 ✓	
4-1/2"	10-5#	6750	7-7/8	700 ✓	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1 1/2	6597	

31. PERFORATION RECORD (Interval, size and number)

6460-80, 6540-62, 6567-72, 6580-85, 6668-80  
4 SPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6460-6668-80	1936 bbl R20
	40,000# 20/40
	20,000# 10/20
	125 balls

33.*		PRODUCTION			
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'G FOR TEST PERIOD	OIL—BSL.	GAS—MCF.
8/22/66	3 hr	3/4" <sup>flowing</sup>	→ <sup>2</sup> <sub>1</sub> <sup>2</sup>		
LOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—
170	747	→		2485	

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

5. LIST OF ATTACHMENTS

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

SIGNED [Signature] TITLE 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.

Aztec Oil & Gas Company

Hudson

Well No. 3

Section 35

Range 30 North

Range 12 West

County San Juan

1750

feet from top North

990

feet from the West

line

Producing Formation

Basin Dakota

Dedicated Acreage

5657

Dakota - Mesaverde

Flora Vista Mesaverde (Ext)

320

Acres

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

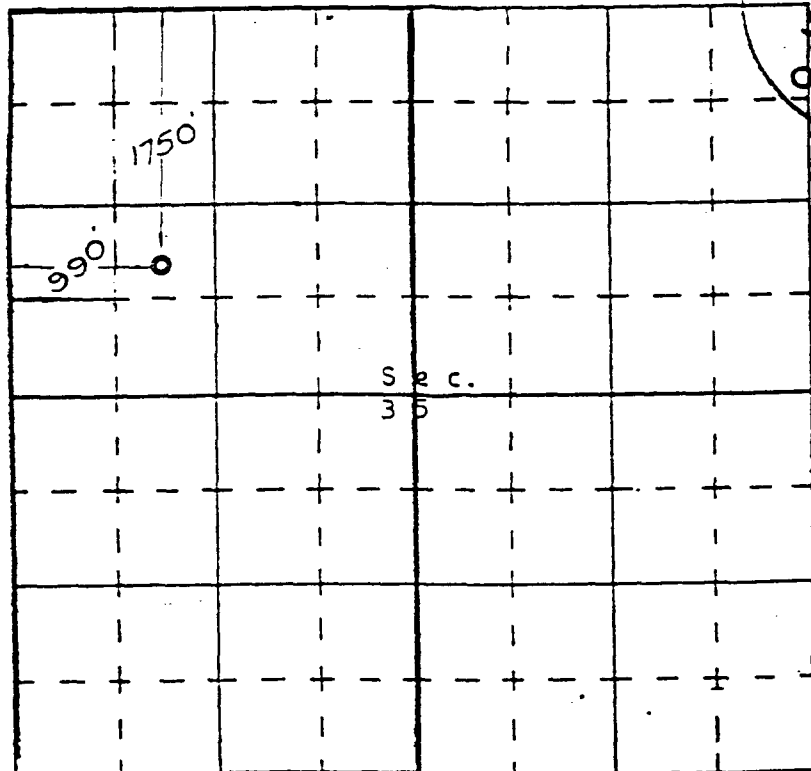
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.



**RECEIVED**  
JUN 2 1966  
OIL CON. COM.  
DIST. 3

**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. H. Ecks  
Certificate No. 3602

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

Form C-104  
Supersedes Old C-104 and C-105  
Effective 1-1-66

REGISTRATION  
OFFICE

TRANSPORTER  
OIL  
GAS

OPERATOR

REGISTRATION OFFICE

Aztac Oil and Gas

Drawer 570

Farmington, New Mexico

Change in Transporter of:  
Oil ☐ Gas ☐  
Casinghead Gas ☐ Condensate ☐

Change of ownership give name  
and address of previous owner

DESCRIPTION OF WELL AND LEASE

Well Name: Basin Dakota

Kind of Lease: Fed

State: New Mexico

County: Santa Fe

Section: 3

Range: 12N

Township: 30N

Range: 35E

Section: 35

Distance from the North line and 990 feet from the West line

SIGNATURE OF TRANSPORTER OF OIL AND NATURAL GAS

Plateau Incorporated  
Box 108  
Farmington, New Mexico

Southern Union Gas Company  
Box 815  
Farmington, New Mexico

COMPLETION DATA

Designate Type of Completion - (X)  
Oil Well ☒ Gas Well ☒ New Well ☒ Workover ☐ Deepen ☐ Plug Back ☐ Some Back ☐ Full Back ☐

Date Compl. Ready to Prod. 7/22/66  
Total Depth 6750  
B.B.D. 6732

Name of Producing Formation Dakota  
Top Oil Gas Pay 6460-6680  
Casing Depth 6597

5857 GL  
6540-80, 6540-62, 6567-72, 6580-85, 6668-80, 4 RPT  
6750

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
12 1/8"	8 5/8"	306	250 BX
7 7/8"	4 1/2"	6750	750 BX
	3 1/2"	6597	

TEST DATA AND REQUEST FOR ALLOWABLE

Test Name: Flow To Tanks

Date of Test: 8/9/66

Producing Method (Flow, pump, gas lift, etc.):

Tubing Pressure

Casing Pressure

Choke Size

Water - Bbls.

Gas - MCF

Well: 2485

Length of Test: 3 hr

Bbls. Condensate/MMCF

Gravity of Oil

Back Pressure: 170

Casing Pressure (Shut-in): 747

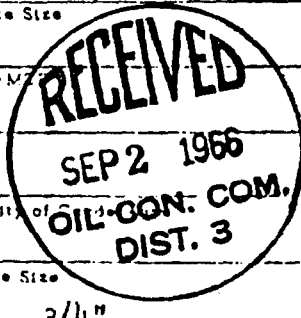
Choke Size: 3/4"

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  
(Signature)  
District Superintendent  
August 31, 1966  
(Date)

OIL CONSERVATION COMMISSION  
APPROVED SEP - 2 1966  
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 well data.  
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, Artesia, NM 88210

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-105  
Revised 1-1-89

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER <u>DISPOSAL</u>	7. Lease Name or Unit Agreement Name  SUNCO DISPOSAL
b. Type of Completion: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> OTHER <input type="checkbox"/>	

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 <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. Date Spudded 01-28-92	11. Date T.D. 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 <input checked="" type="checkbox"/> 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 "B" Tail.	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH 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 02-24-92	Hours Tested 24	Choke Size 2"	Prod'n For Test Period	Oil - Bbl. TR.	Gas - MCF 3.2	Water - Bbl. 164.99	Gas - Oil Ratio 19. CU/FT/BB
Flow Tubing Press. 0	Casing Pressure 315	Calculated 24-Hour Rate	Oil - Bbl. 0	Gas - MCF	Water - Bbl. 164.99	Oil Gravity - API - (Corr.) 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 correct to the best of my knowledge and belief

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

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)

5. Indicate Type of Lease

STATE ☐

FEE ☒

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☒

RE-ENTER ☐

DEEPEN ☐

PLUG BACK ☐

b. Type of Well:

OIL  
WELL ☐

GAS  
WELL ☐

OTHER ☐

SWD  
DISPOSAL ☒

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

7. Lease Name or Unit Agreement Name

SUNCO DISPOSAL

13295

8. Well No.

#1

2. Name of Operator

COLEMAN OIL & GAS COMPANY

4838

3. Address of Operator

700 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. 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 4-5-92  
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

TITLE CONTRACTS MANAGER

DATE 02/28/92

TYPE OR PRINT NAME

RON MAHAN

TELEPHONE NO 327-4961

(This space for State Use)

APPROVED BY

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	
<b>Farmington NM 87499</b>	
Code	
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):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

**Merrion Oil & Gas  
 P.O. Box 840  
 Farmington NM 87499**

4a. Article Number

**P 553 308 258**

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)

6. Signature: (Addressee or Agent)

**X**

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

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)

PS Form 3800, April 1995

Send to <b>Meridian Oil</b>	
Street & Number <b>P.O. Box 4289</b>	
Post Office <b>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	

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.
- 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:**

**Meridian Oil Company**  
**P.O. Box 4289**  
**Farmington NM 87499**

**4a. Article Number**

**P 553 308 259**

**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)**

**6. Signature: (Addressee or Agent)**

**X**

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

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

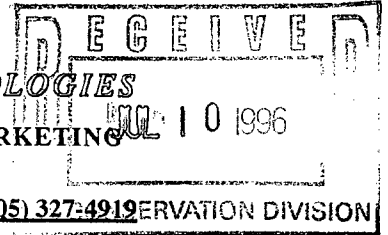
# CFT

CREATIVE FUTURE TECHNOLOGIES

INDUSTRIAL PRODUCT SALES AND MARKETING

Main Office #505-632-0662

P.O. BOX 364 FARMINGTON, NM 87499 PHONE: (505) 327-4919 FAX: (505) 327-4919 OIL CONSERVATION DIVISION



NM ENERGY MINERALS & NATURAL RESOURCES  
OIL CONSERVATION DIVISION  
2040 SOUTH PACHECO STREET  
SANTA FE, NEW MEXICO 87505

JUNE 21, 1996

ATTN: MARK ASHLEY

REFERENCE: Final information for application submittal  
for Sunco Trucking operating Coleman Oil & Gas Disposal  
Well #1 reclassification to Class I Operation.

Dear Mark:

The attached information includes the plugging bond  
estimated by third party, well cement bond log,  
hydrocarbon water analysis including EPA approved  
method 8010 and 8310 (other water analysis previously  
submitted), MIT back pressure test witnessed by Aztec  
office, and Insurance bond renewal to cover inflation.

Please contact me if you have any further information  
needed so we can get this approval as soon as possible.

Thank You,

A handwritten signature in cursive script, appearing to read "Chuck Badsgard". The signature is written in dark ink and is positioned above the printed name.

Chuck Badsgard  
Vice-President- Sunco Trucking



COMP	COLEMAN OIL AND GAS, INC.
WELL	SUNCO DISPOSAL NO. 1
FIELD	FLORA VISTA MESAVERDE
COUNTY	SAN JUAN
ST. N. M.	

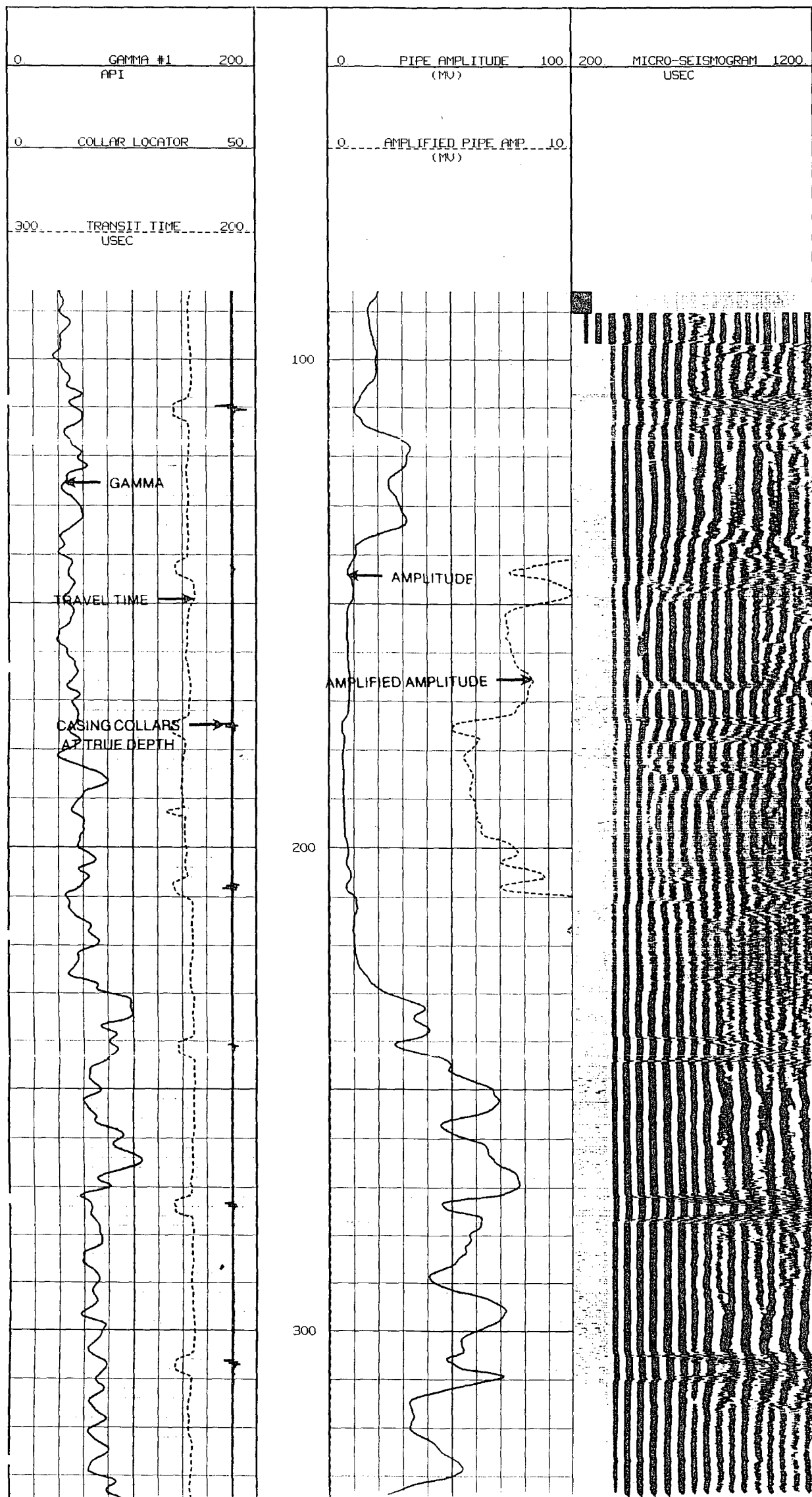
COMPANY	COLEMAN OIL AND GAS, INC.
WELL	SUNCO DISPOSAL NO. 1
FIELD	FLORA VISTA MESAVERDE
COUNTY	SAN JUAN
ST. N. M.	
API NO.	NA
LOCATION	1535 FHL RD 1005 FHL
SEC. 2	
TAP.	23N
RGE.	
12N	

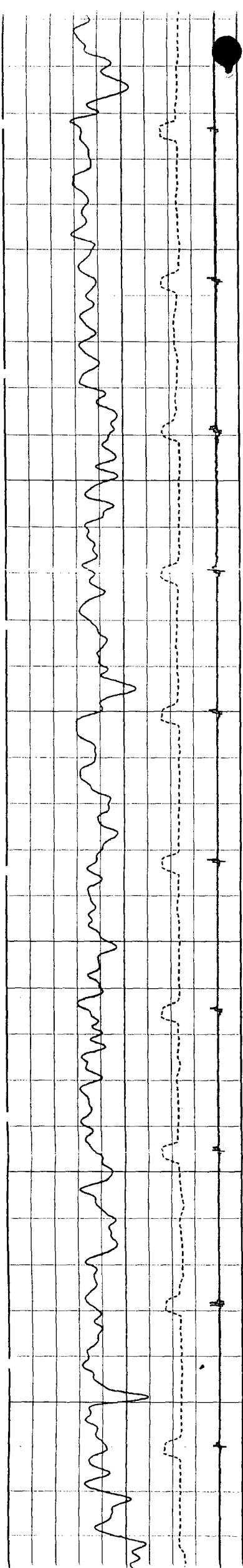
[illegible]

FOLD HERE

SERVICE TICKET NO.: 77934				API SERIAL NO.: NA				PGM VERSION: H L S DLS HD 1.0			
THE WELL NAME, LOCATION, CEMENTING DATA AND BOREHOLE DESCRIPTION FURNISHED BY CLIENT											
CEMENTING DATA											
CEMENT PUMPED		N/A		VOLUME		8BL		/ JOINT FROM		TO	
PRECEDING FLUID				VOLUME		8BL		CENTRALIZERS		/ JOINT FROM TO	
RETURNS		FULL PARTIAL NONE						/ JOINT FROM		TO	
PIPE ROTATED/RECIPICATED		DURING PUMPING		YES NO				/ JOINT FROM		TO	
		AFTER PLUG DOWN		YES NO				CENTRALIZERS		/ JOINT FROM TO	
PLUG PUMPED				YES NO				/ JOINT FROM		TO	
PLUG LANDING PRESSURE:								/ JOINT FROM		TO	
PRESSURE HELD				HRS AFTER PUMPING							
EQUIPMENT DATA											
GAMMA				NEUTRON				ACOUSTIC			
RUN NO.		ONE		RUN NO.				RUN NO.		ONE	
SERIAL NO.		010		SERIAL NO.				SERIAL NO.		011	
MODEL NO.		304		MODEL NO.				MODEL NO.		271	
DIAMETER		3.500		DIAMETER				NO. OF CENT		3	
DETECTOR MODEL NO.		10406		LOG TYPE				SPACING		3 /5	
TYPE		SCINT.		SOURCE TYPE							
LENGTH		6"		SERIAL NO.							
DISTANCE TO SOURCE		N/A		STRENGTH							
LOGGING DATA											
GENERAL					GAMMA		NEUTRON		ACOUSTIC		
DEPTHS		WELL HEAD		SPEED		SCALE		SCALE		SCALE	
NO.	FROM	TO	PRESSURE	FT./MIN.	L	R	L	R	L	R	
ONE	PBTD	100	NONE	40	0	200			200	1200	
REMARKS: CREW:NORTON,MOULTON,RAMOS											
RIG:BIG -A- NO. 34											
HALLIBURTON LOGGING SERVICES, INC. DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF LOG DATA. CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HLS PERSONNEL OR WHICH MAY APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS OR RECOMMENDATIONS AGREES THAT HLS IS NOT RESPONSIBLE, EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILFUL MISCONDUCT FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.											

0	GAMMA #1	200	0	PIPE AMPLITUDE	100	200	MICRO-SEISMOGRAM	1200
	API			(MV)			USEC	
0	COLLAR LOCATOR	50	0	AMPLIFIED PIPE AMP	10			
				(MV)				
300	TRANSIT TIME	200						
	USEC							

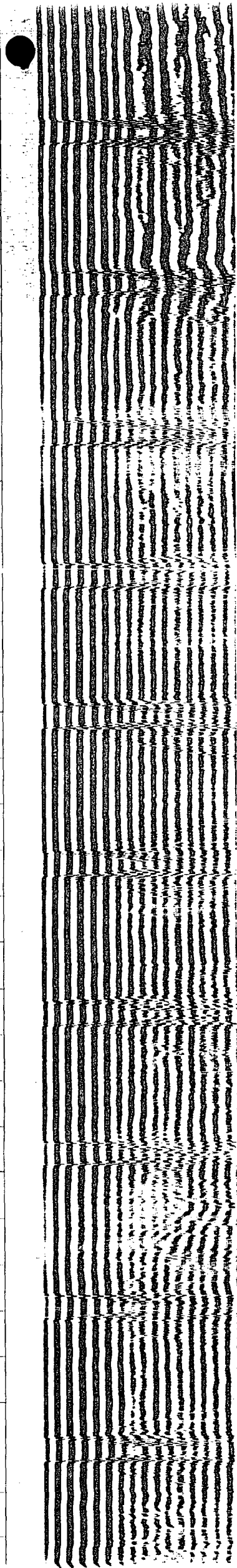
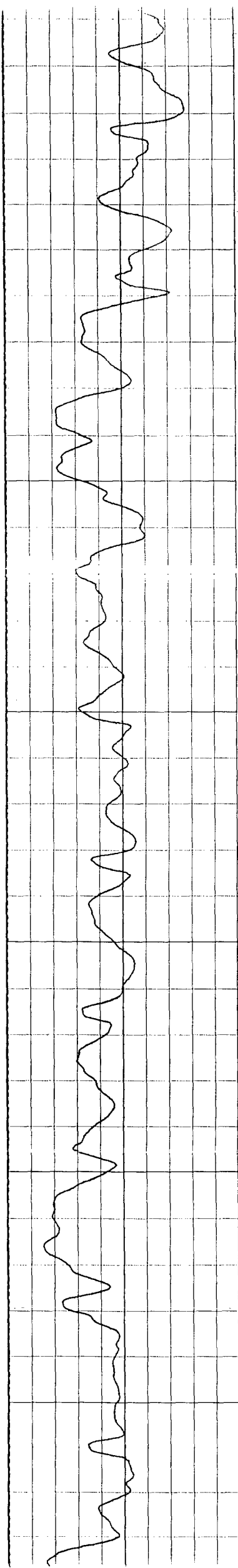


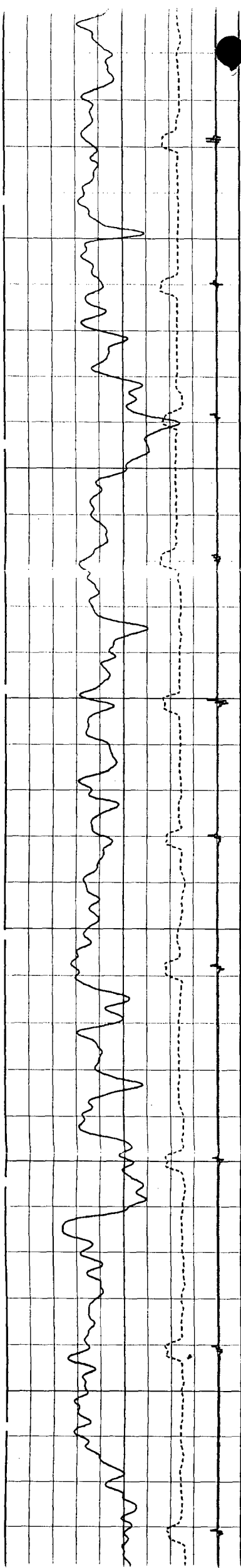


300

400

500

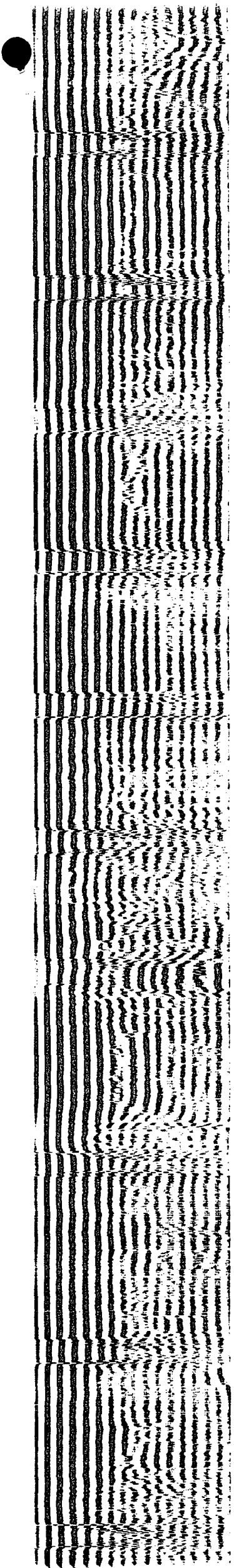
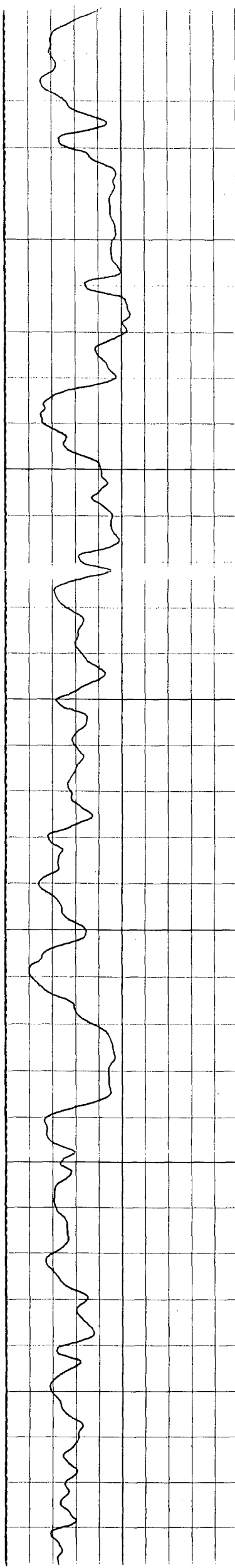


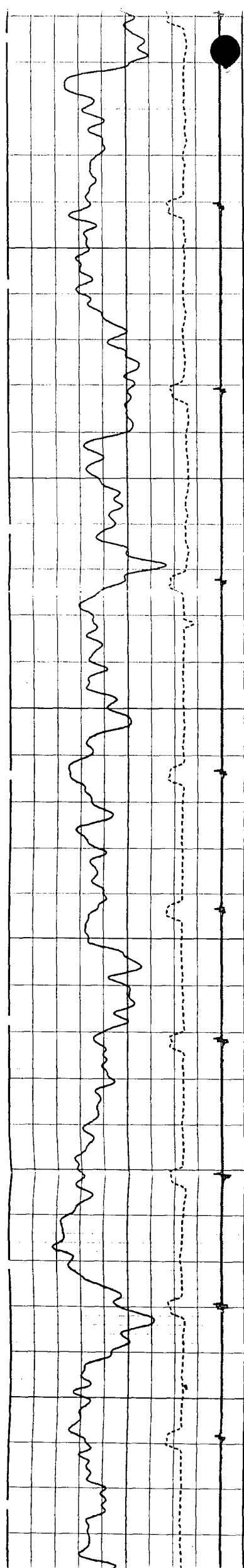


600

700

800

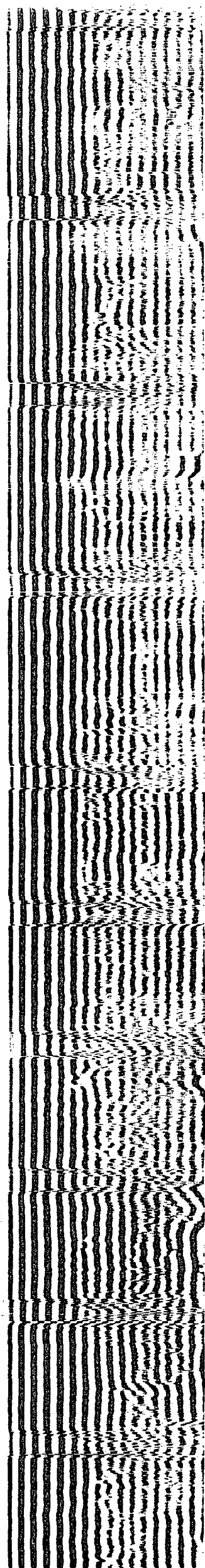
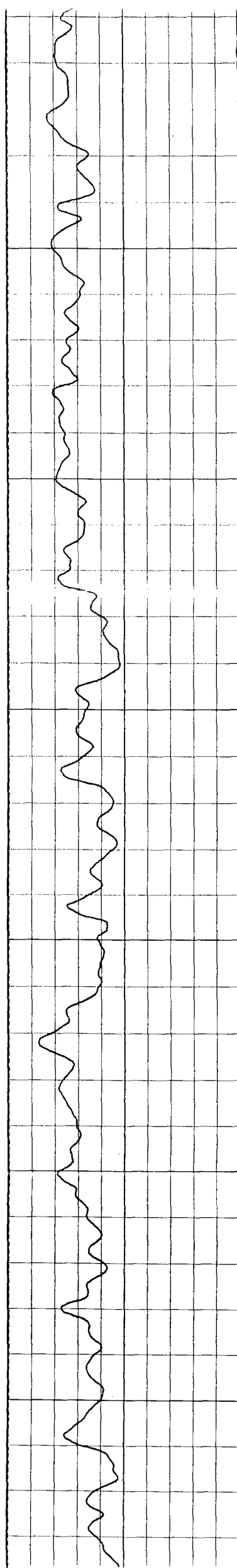


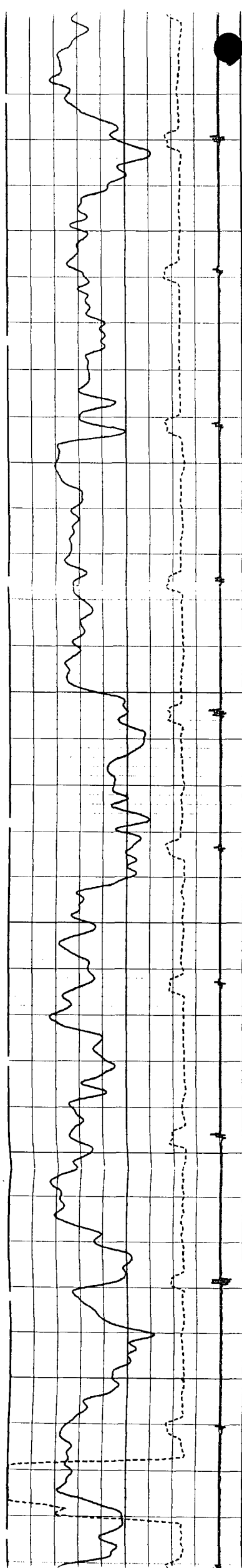


800

900

1000

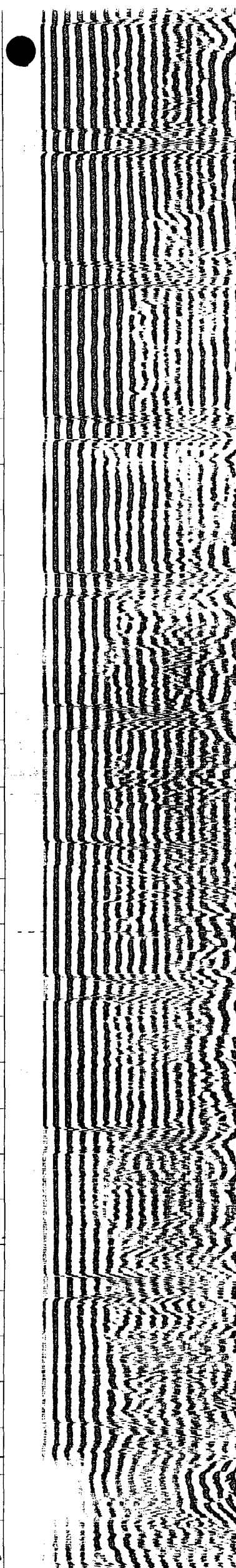
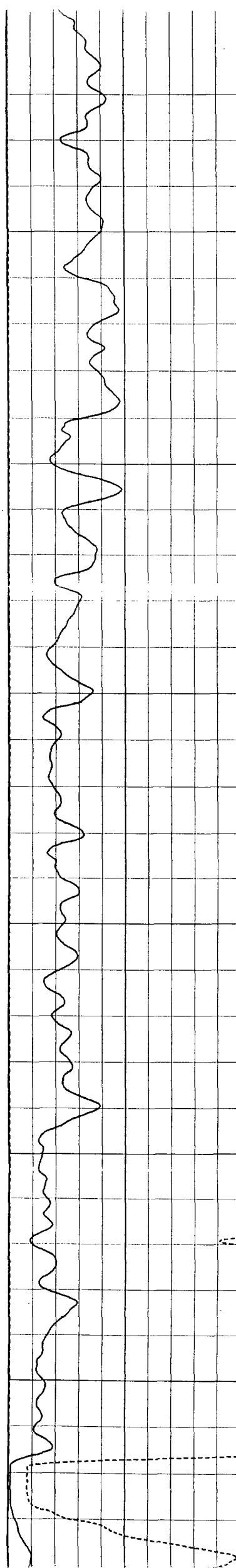




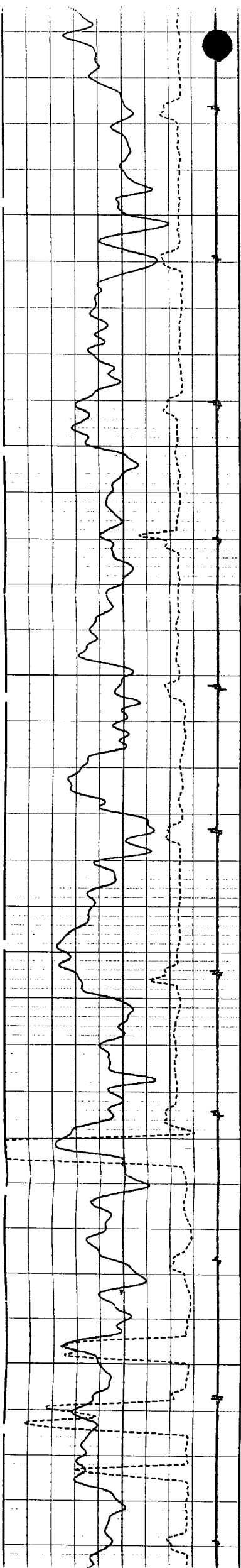
1100

1200

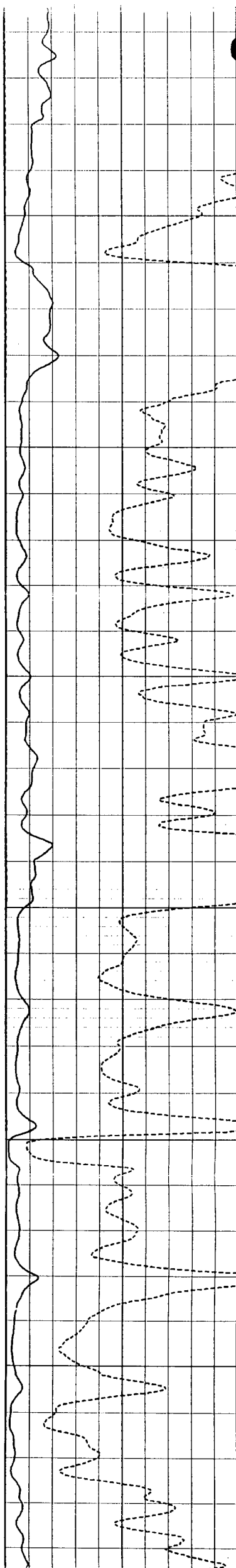
1300





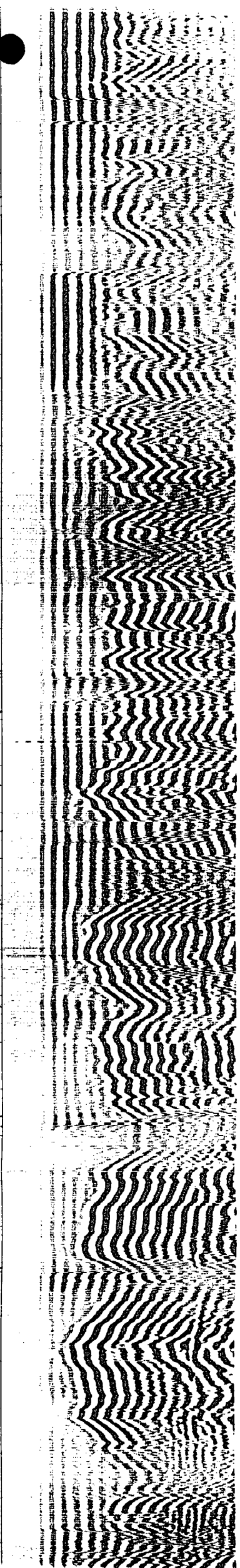


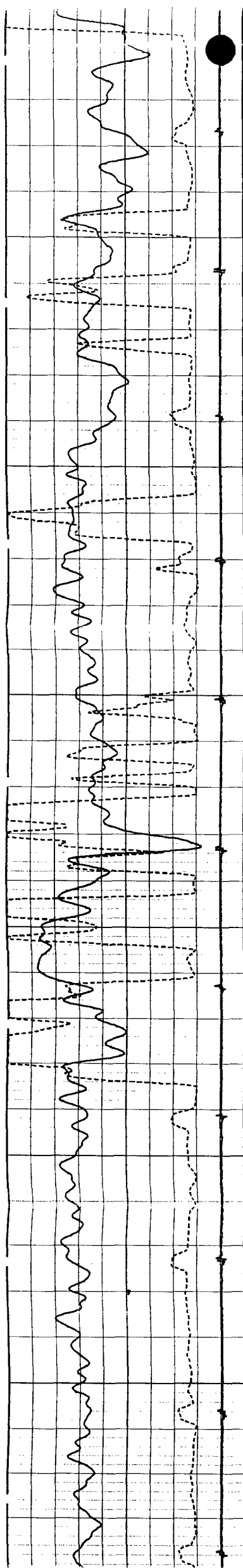
1600



1700

1800

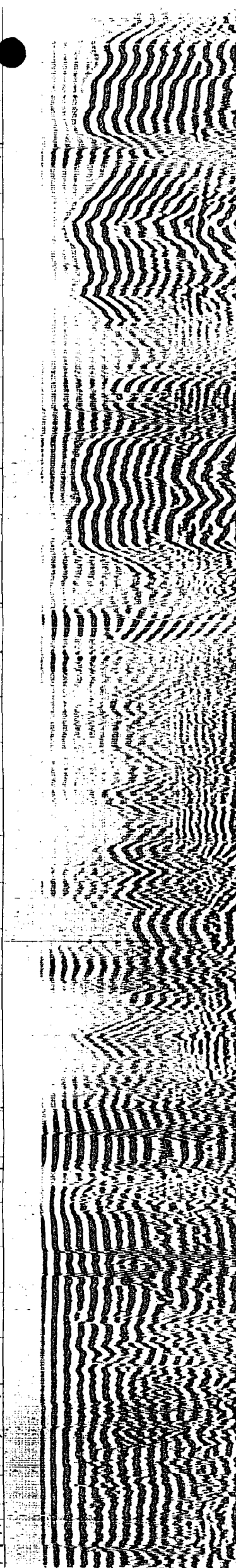
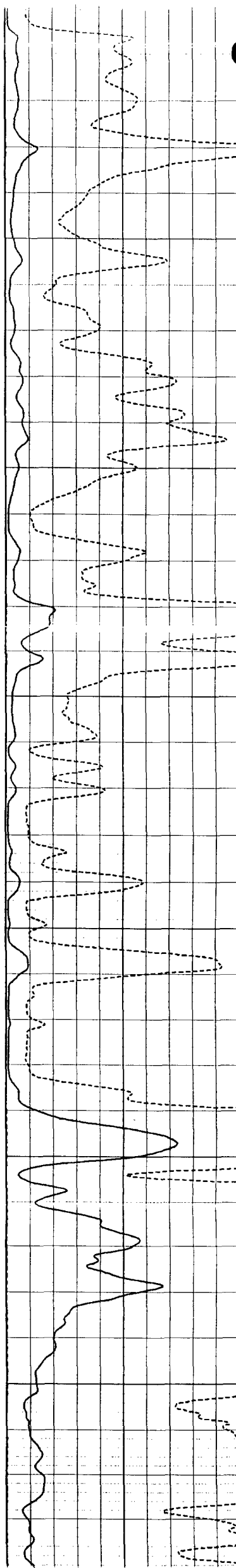


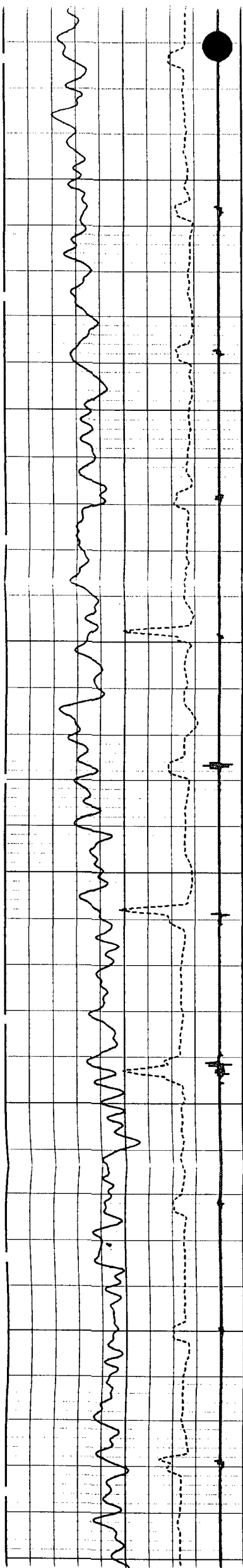


1800

1900

2000

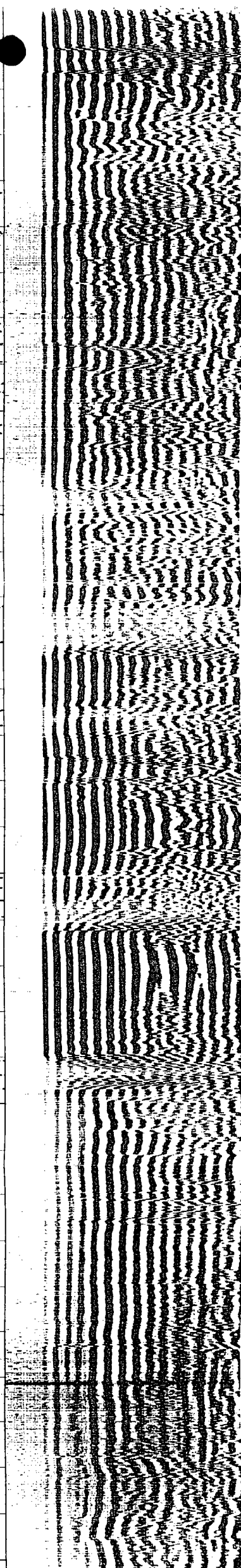
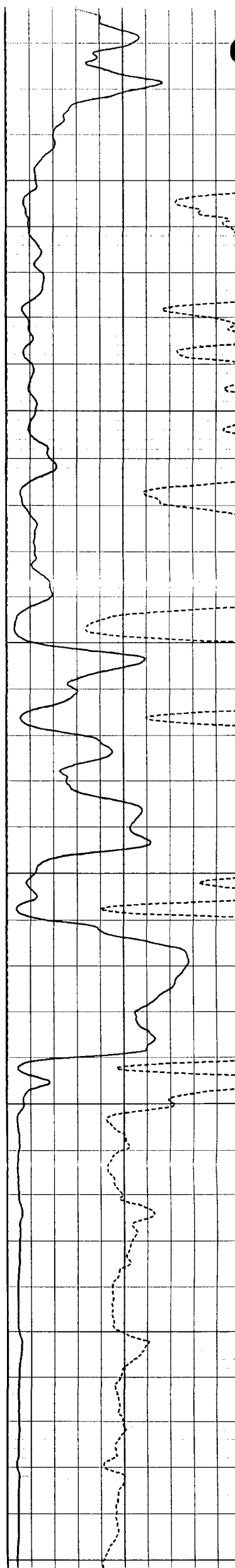


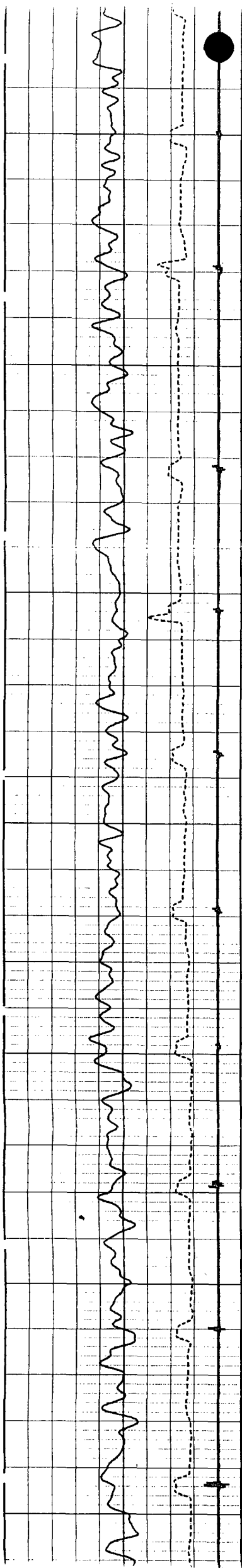


2100

2200

2300



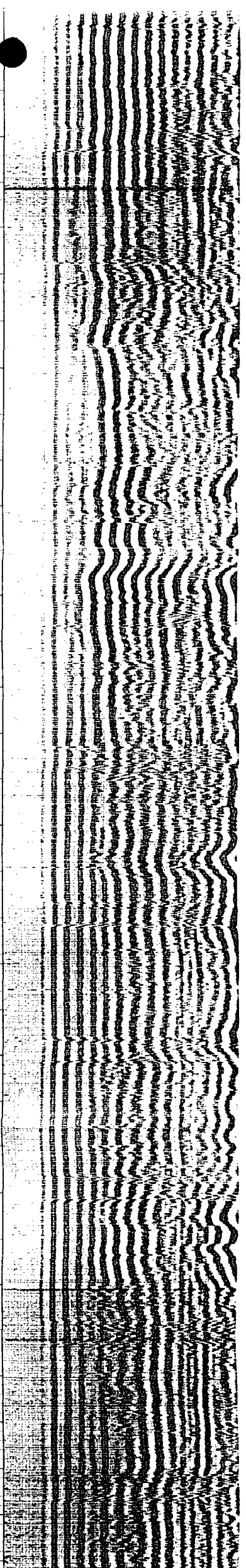
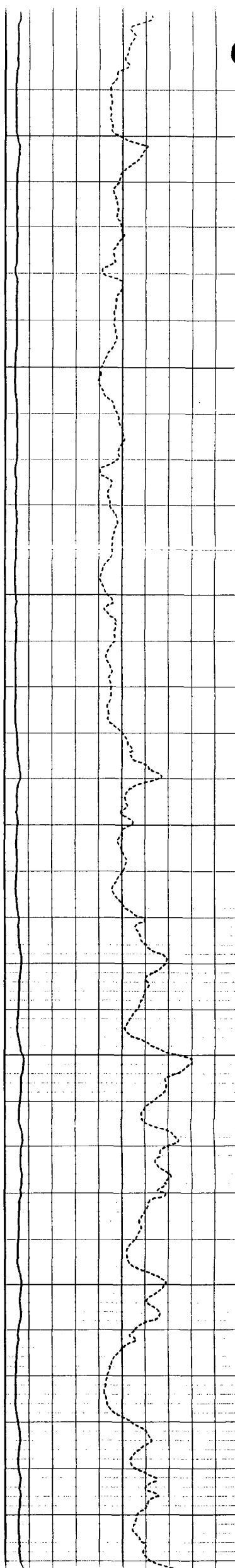


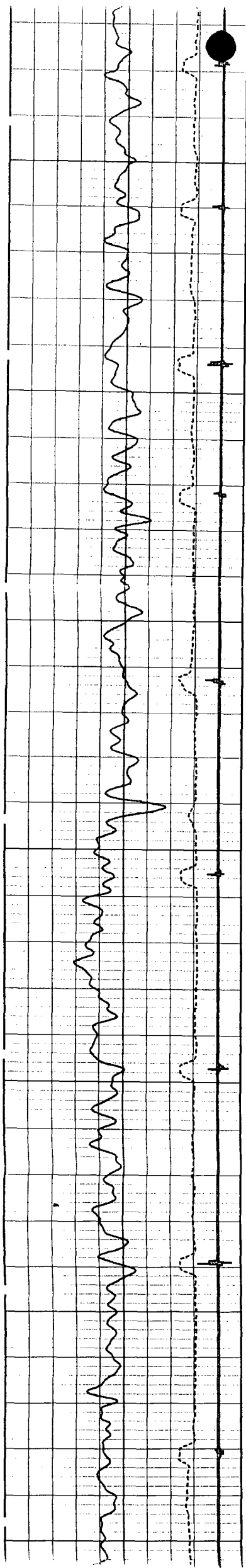
2300

2400

2500

2600

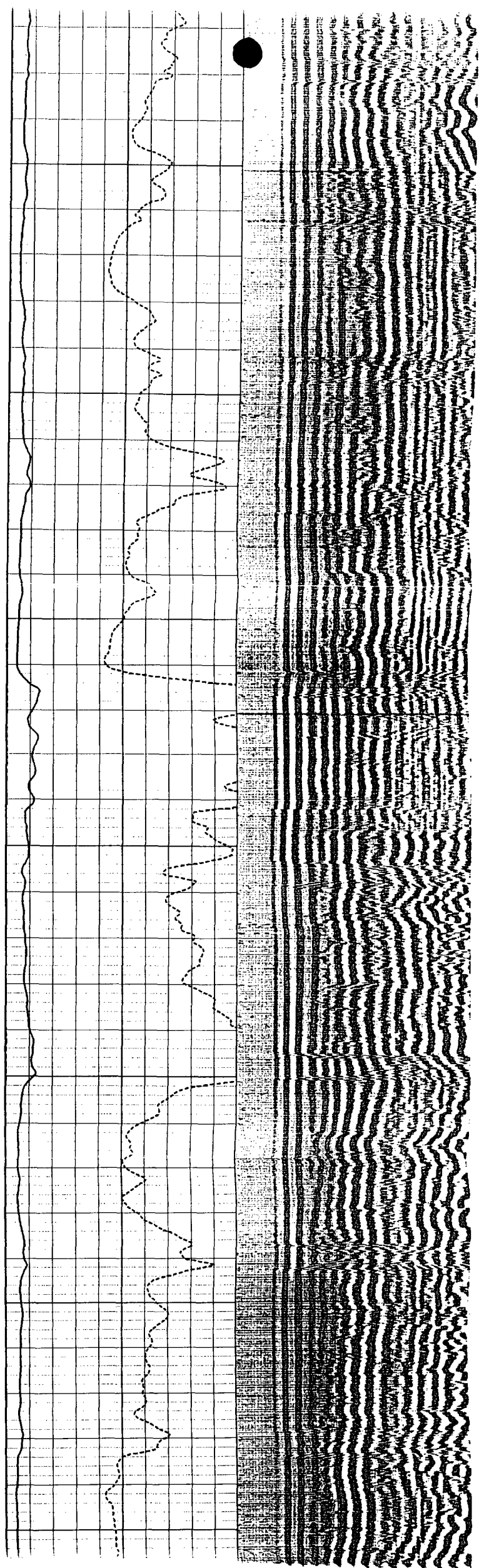


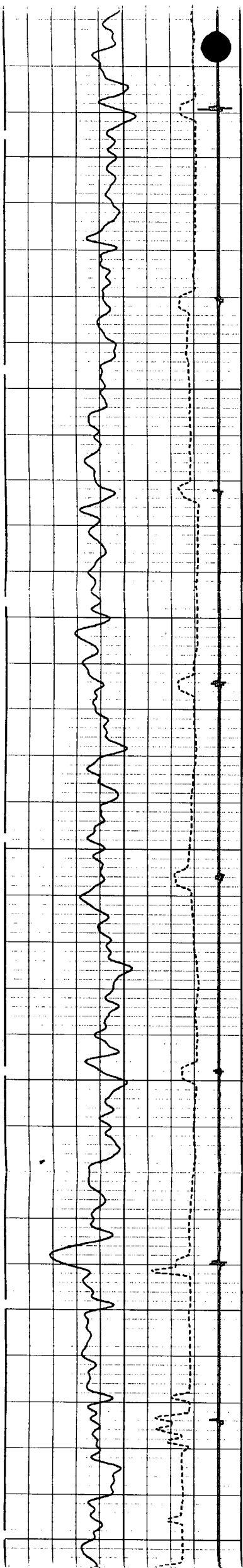


2600

2700

2800



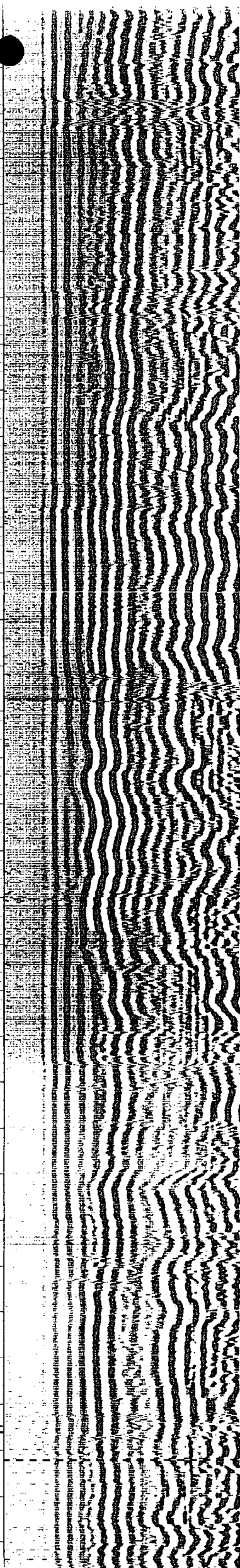
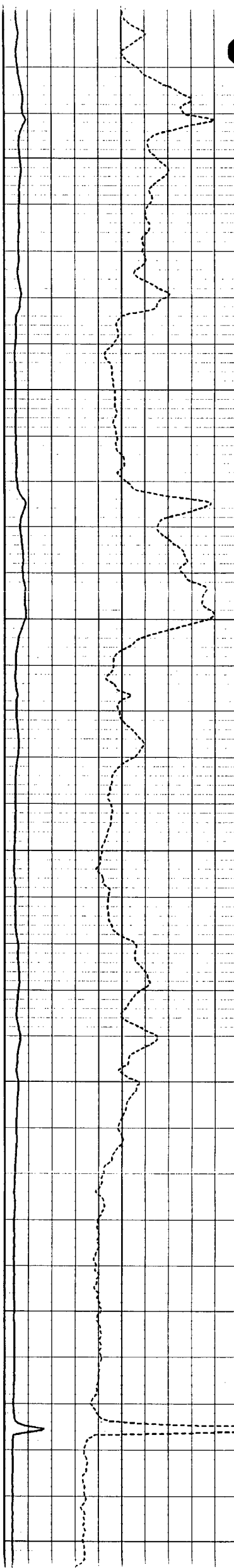


2800

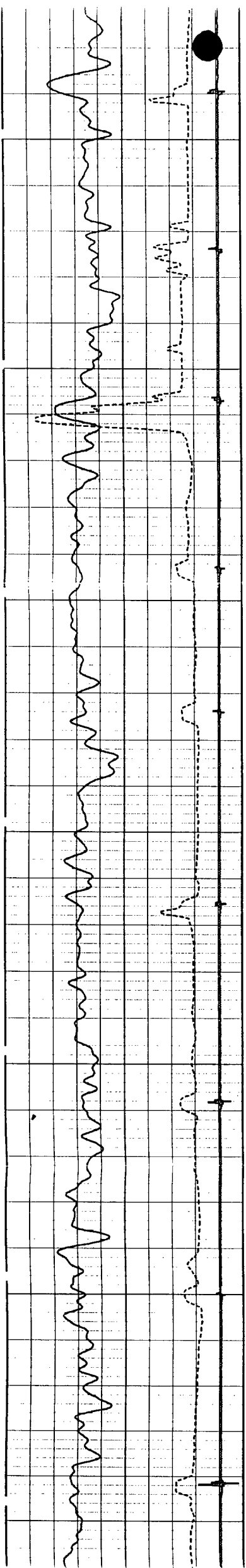
2900

3000

3100



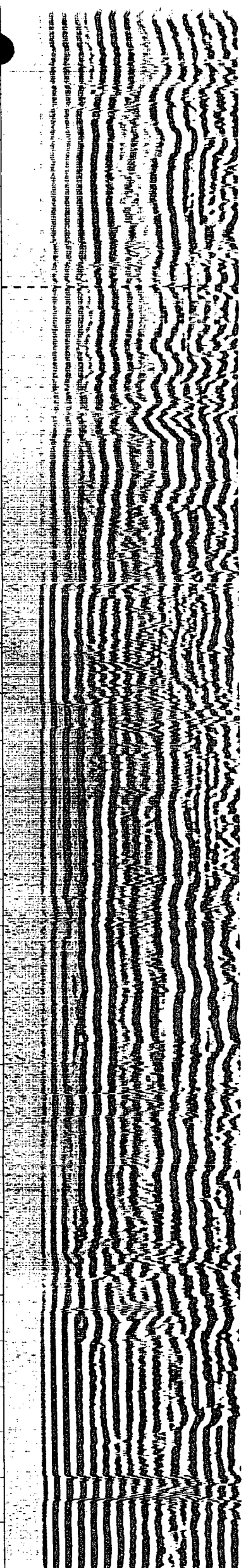
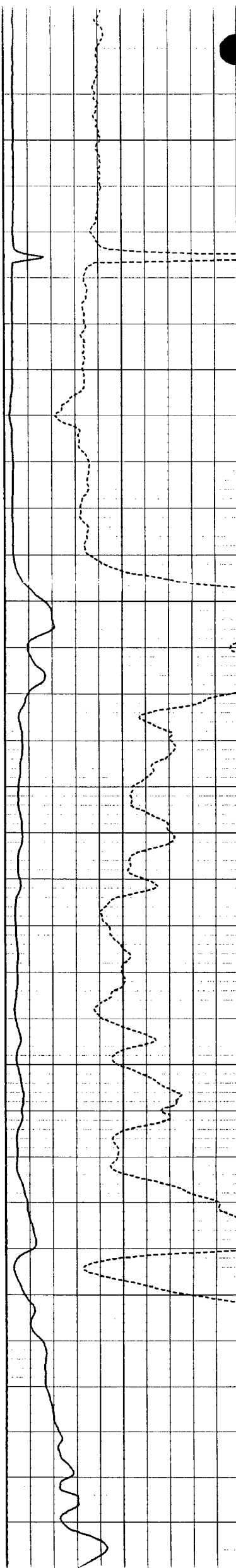


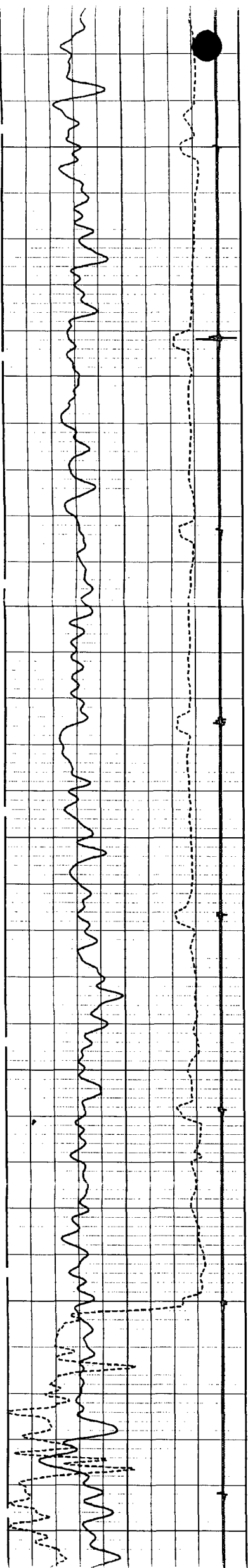


3100

3200

3300



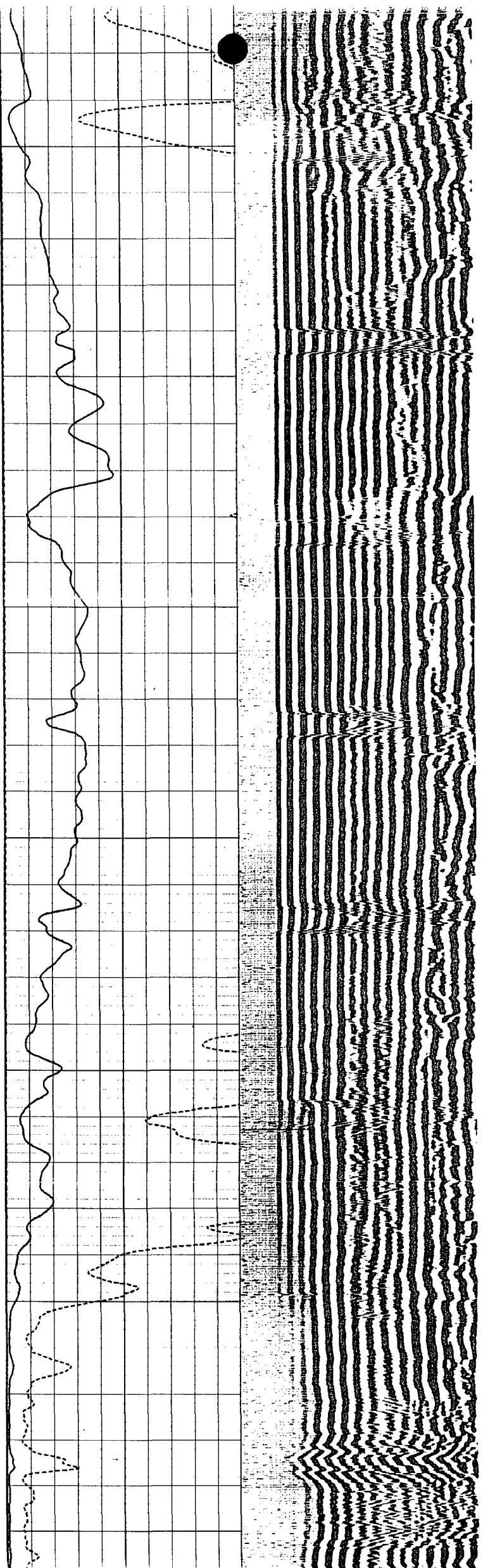


3300

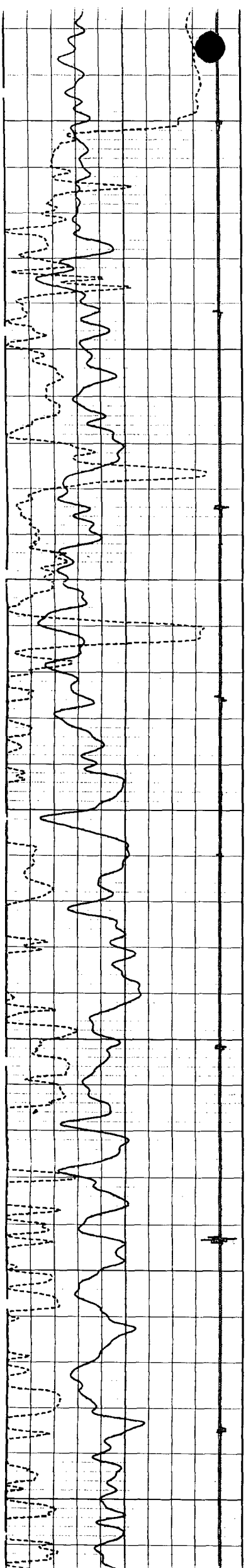
3400

3500

3600



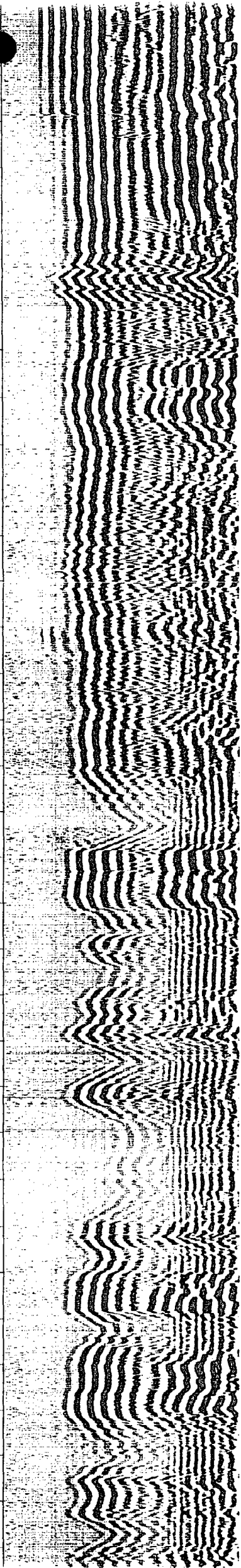
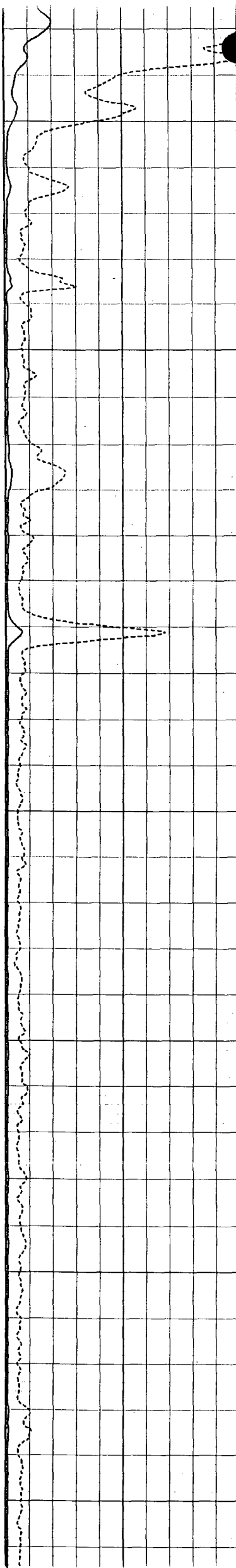


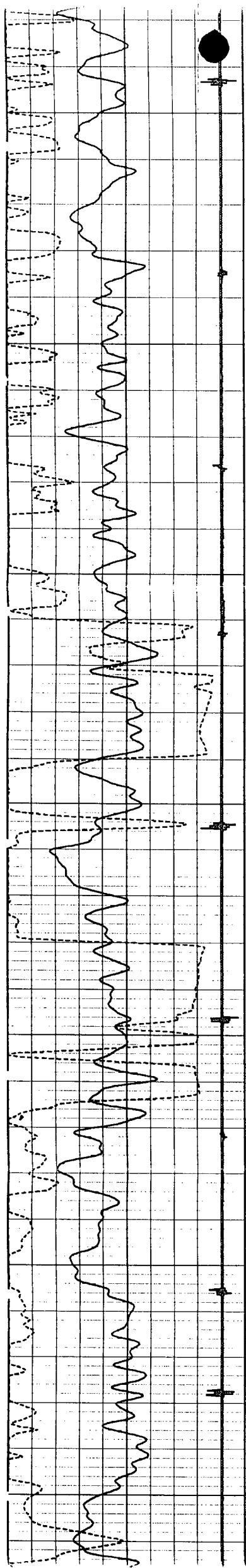


3600

3700

3800



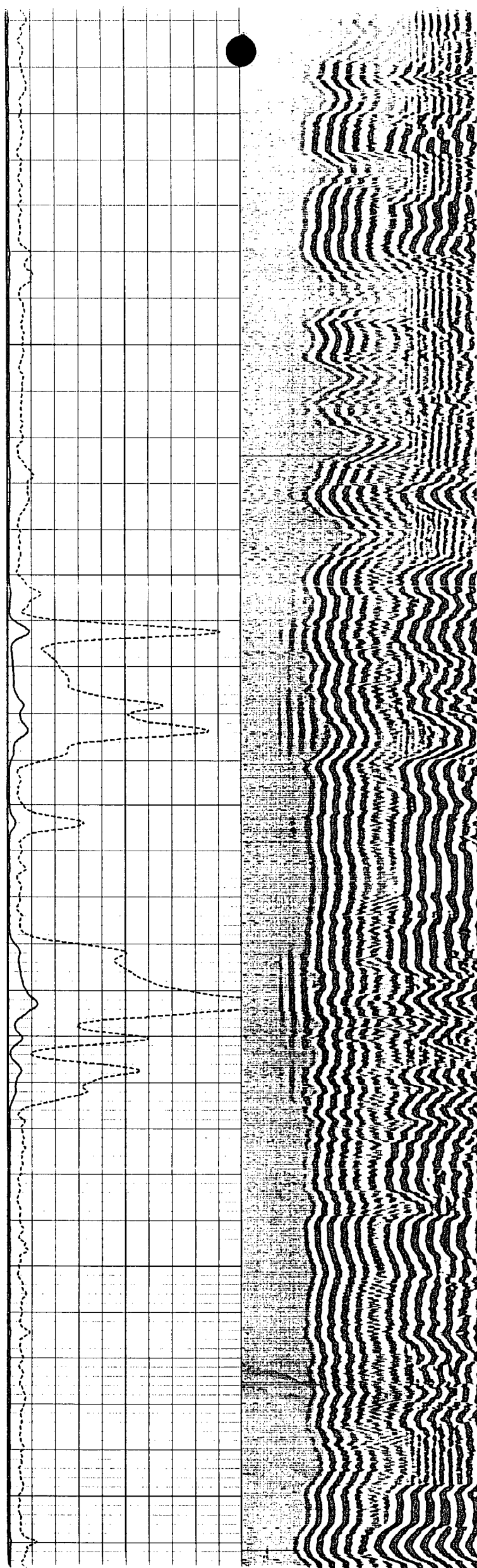


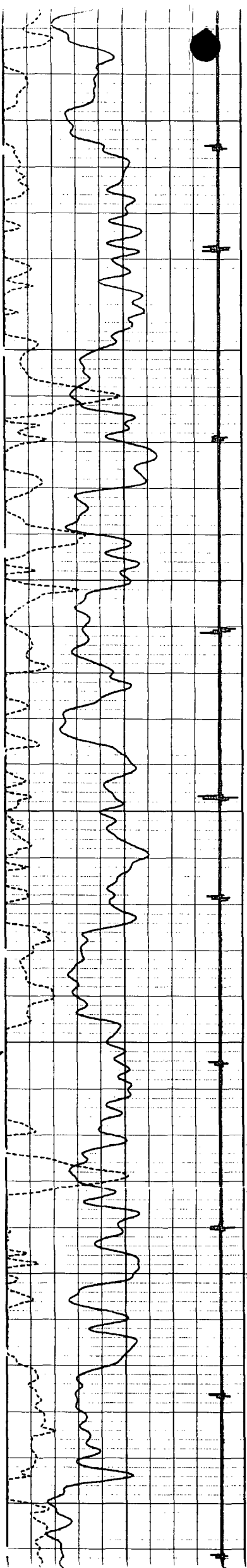
3800

3900

4000

4100

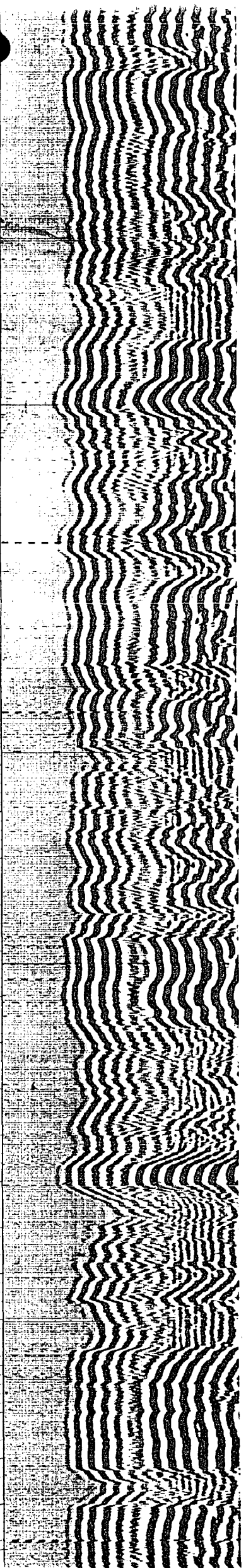
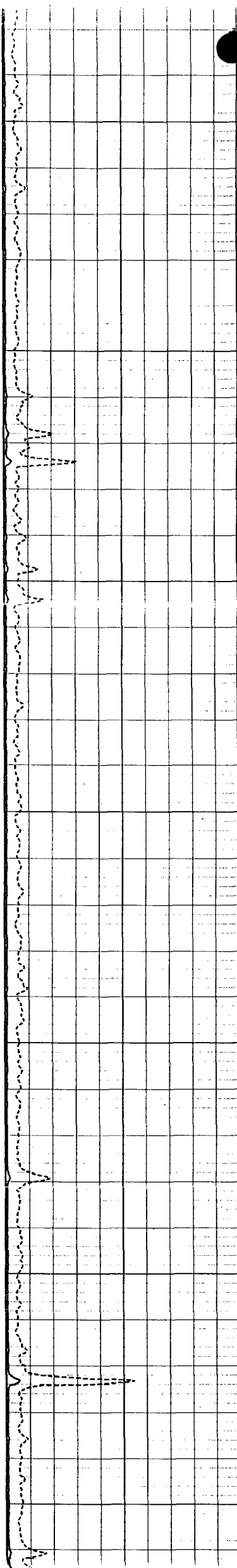


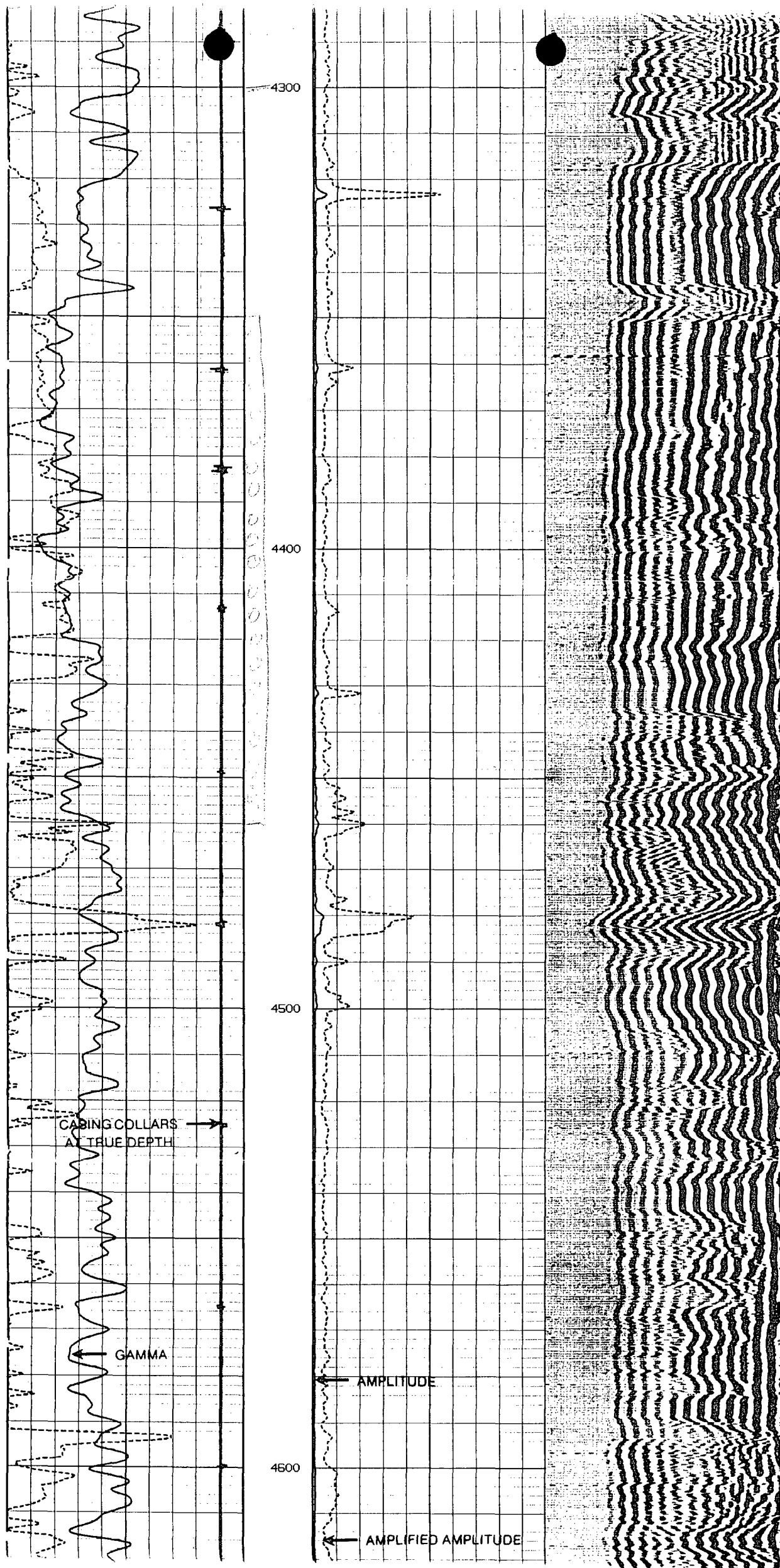


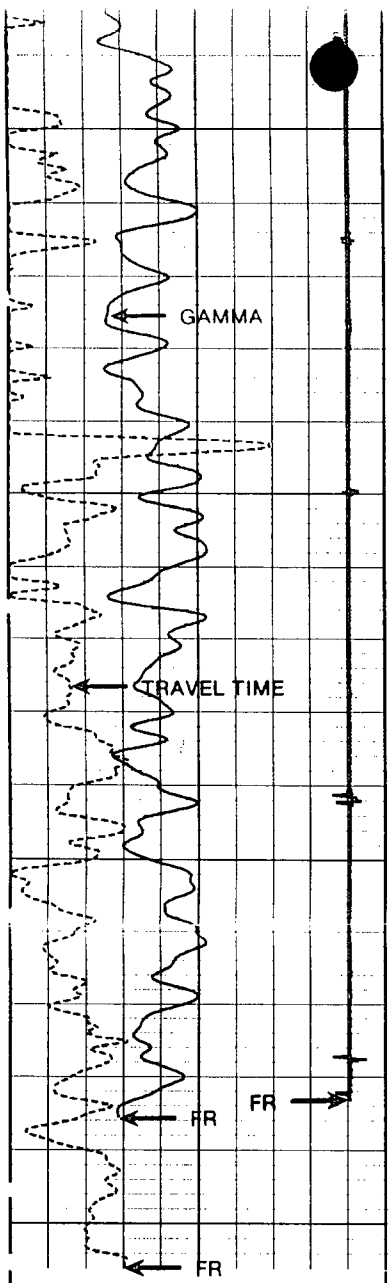
4100

4200

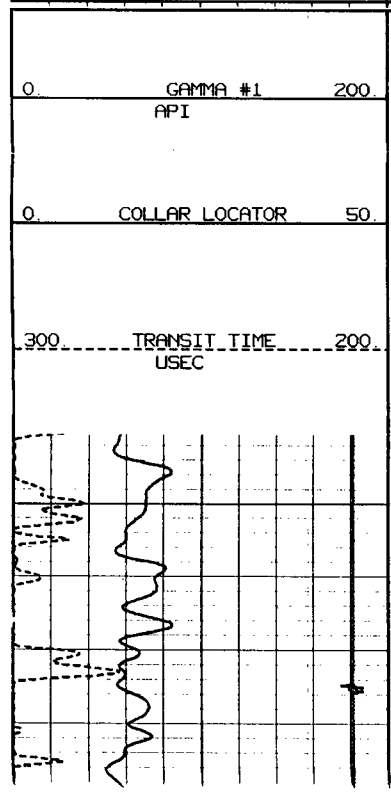
4300



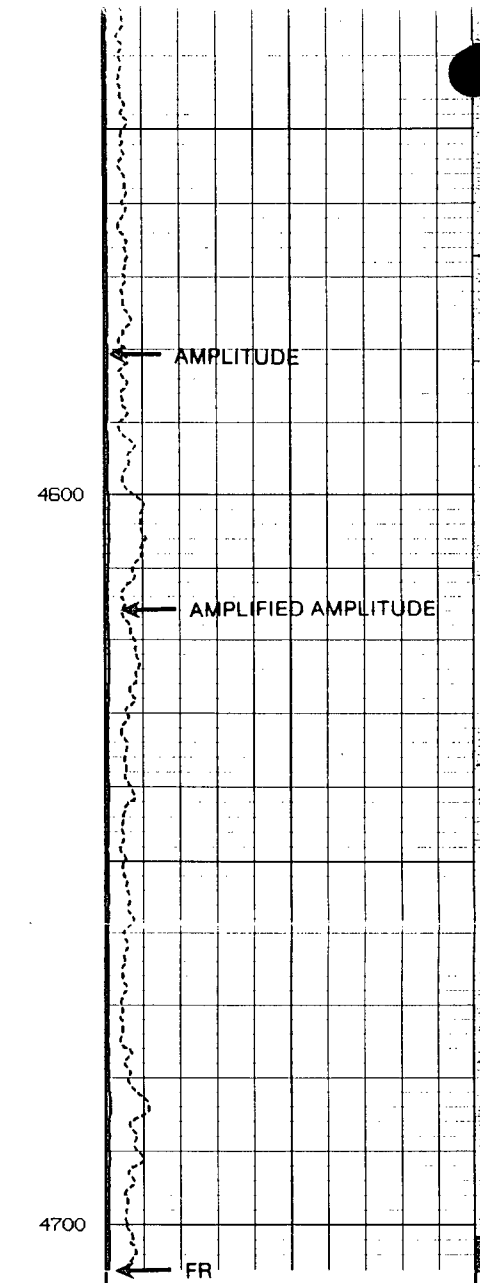




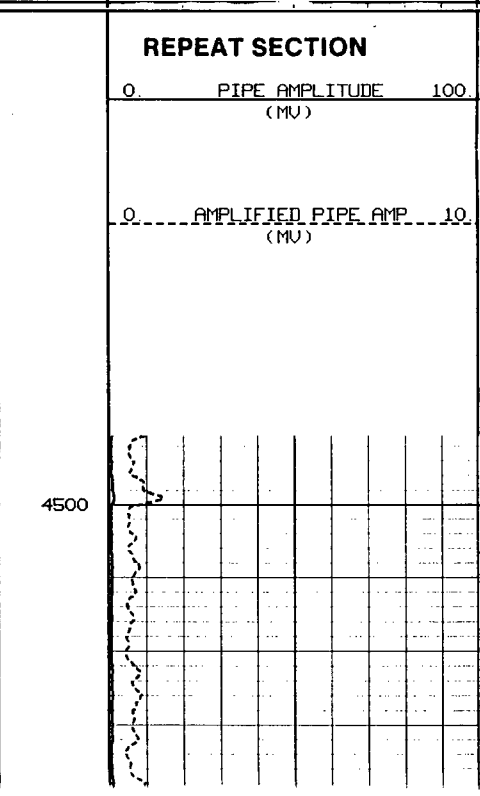
300	TRANSIT TIME	200
USEC		
0	COLLAR LOCATOR	50
0	GAMMA #1	200
API		



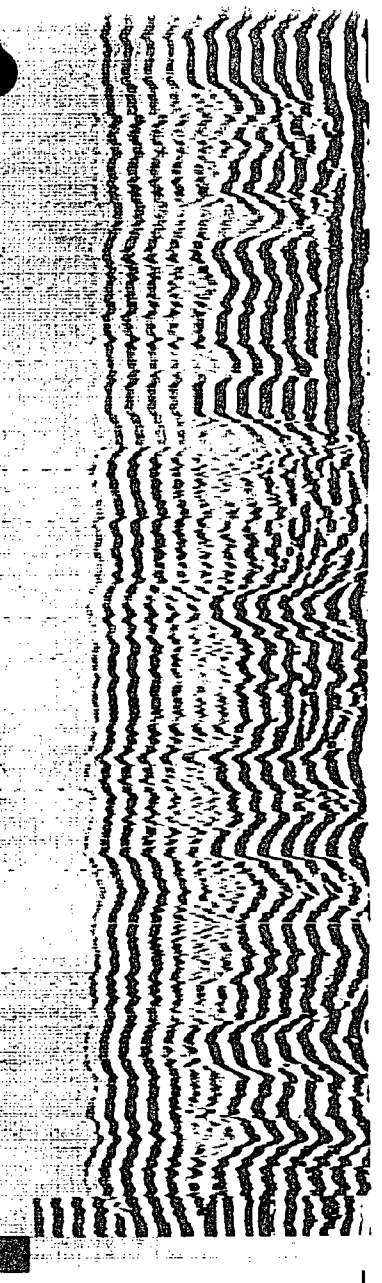
0	GAMMA #1	200
API		
0	COLLAR LOCATOR	50
300	TRANSIT TIME	200
USEC		



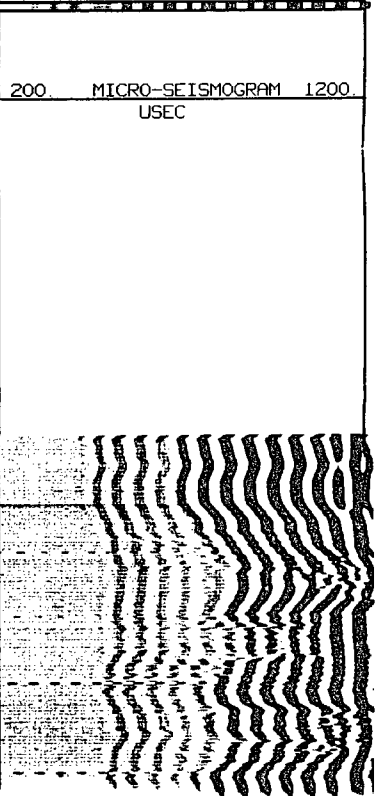
0	AMPLIFIED PIPE AMP	10
(MV)		
0	PIPE AMPLITUDE	100
(MV)		



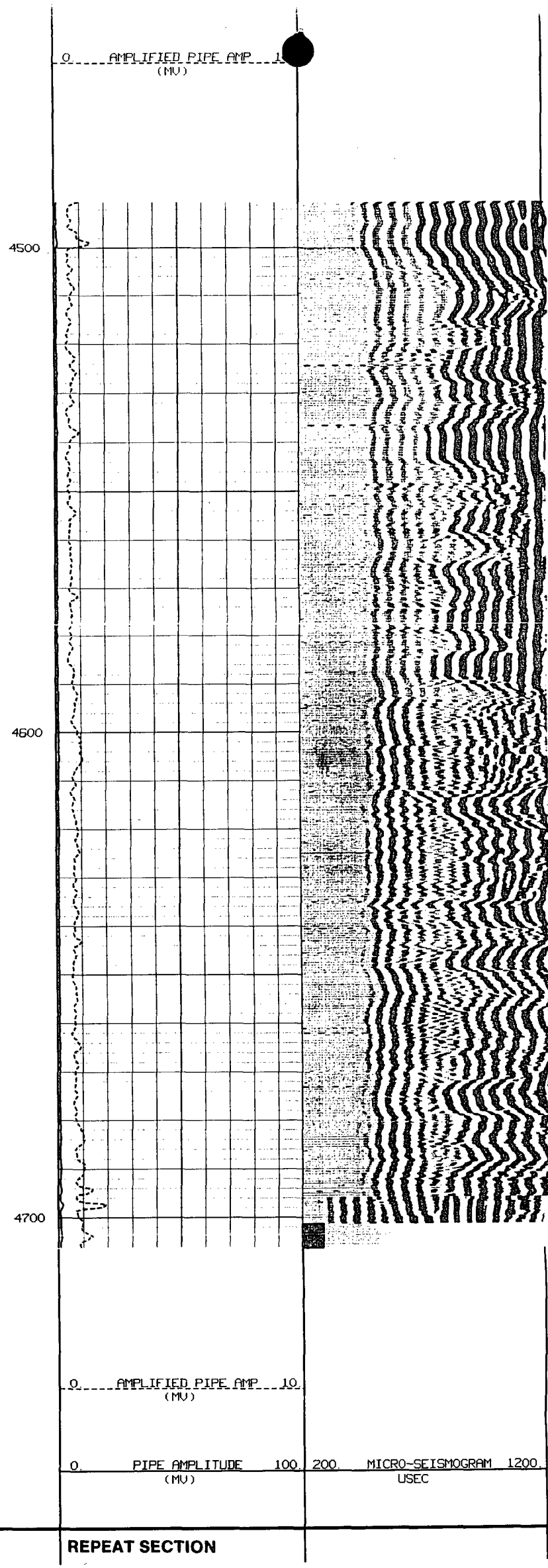
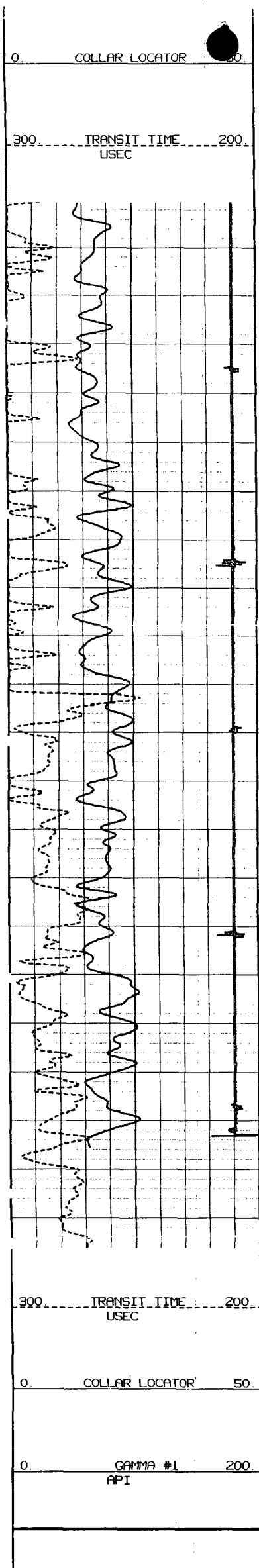
0	AMPLIFIED PIPE AMP	10
(MV)		
0	PIPE AMPLITUDE	100
(MV)		



200	MICRO-SEISMOGRAM	1200
USEC		



200	MICRO-SEISMOGRAM	1200
USEC		



300	TRANSIT TIME	200			
USEC					
0	COLLAR LOCATOR	50	0	AMPLIFIED PIPE AMP	10
			(MV)		
0	GAMMA #1	200	0	PIPE AMPLITUDE	100
API			(MV)		200
					MICRO-SEISMOGRAM
					1200
					USEC
			REPEAT SECTION		





New Mexico Energy, Minerals & Natural Resources Department

Letter of Credit

Bank: First National Bank of Farmington  
Bank Address: P.O. Box 4540, Farmington, NM 87499-4540  
Bank ABA Number: 102200546

Irrevocable Letter of Credit No. 541  
This Letter of Credit is effective: July 5, 1996  
Expiration Date is at the Close of Business on: July 5, 1997

Beneficiary: New Mexico Energy, Minerals & Natural Resources Dept.  
Attn: Mark Ashley  
2040 South Pacheco Street  
Santa Fe, NM 87505

Sir or Madam:

We hereby establish our Irrevocable Letter of Credit in your favor and authorize drawing(s) on First National Bank of Farmington by order(s) and for account of Sunco Trucking Company, Farmington, NM 87401, up to an aggregate amount of Seventeen Thousand Eight Hundred and No/100 U.S. Dollars (\$17,800.00) available by your drafts at sight accompanied by:

Beneficiary's statement certifying that: "The signer is a duly authorized official acting on behalf of the New Mexico Energy, Minerals & Natural Resources Department and that the amount of the accompanying sight draft is due and payable to the New Mexico Energy, Minerals & Natural Resources Department and further that Sunco Trucking Company has for a period of more than 15 days neglected, failed, or refused to pay such amount although requested to do so by the New Mexico Energy, Minerals & Natural Resources Department."

We hereby agree with bona fide holders that all drafts drawn under and in compliance with the terms of this credit shall meet with due honor presentation and delivery of documents as specified to the drawee if drawn and presented for negotiation on or before the expiration date.

***Sharing the Hometown Spirit***

Post Office Box 4540 • Farmington, New Mexico 87499-4540 • (505)326-9000 • TDD(TYY) 326-9035





New Mexico Energy, Minerals & Natural Resources Department  
Sunco Trucking Company  
Letter of Credit No. 541  
Page 2

It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for additional one year periods (not to exceed five consecutive years) from the expiration date, July 5, 1997, unless thirty (30) days prior to any expiration date, we notify you by registered mail that we elect not to consider this Letter of Credit renewed for any such additional period.

Such notice of our intention not to renew this Letter of Credit as provided for herein shall authorize you to draw upon this Letter of Credit, unless Sunco Trucking Company provides you, at least fourteen (14) calendar days prior to the then current expiration date, with a replacement letter of credit with terms and conditions substantially identical to those contained herein.

We certify that the amount of the credit herein established will not be reduced for any reason during the period of this instrument without your written consent.

We will promptly notify you of any notice received or action filed alleging the insolvency of bankruptcy of the Bank, or alleging any violations of regulatory requirements which could result in suspension or revocation of the Bank's charter of license to do business.

In the event the Bank becomes unable to fulfill our obligations under this Letter of Credit for any reason, notice shall be given immediately to you.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 version), International Chamber of Commerce Publication No. 400. If this Letter of Credit expires during an interruption of business as described in Article 17 of said Publication No. 400, the Bank hereby specifically agrees to effect payment if this Letter of Credit is drawn against within 30 days after the resumption of business.

***Sharing the Hometown Spirit***

Post Office Box 4540 • Farmington, New Mexico 87499-4540 • (505)326-9000 • TDD(TYY) 326-9035



Charter Member FDIC

New Mexico Energy, Minerals & Natural Resources Department  
Sunco Trucking Company  
Letter of Credit No. 541  
Page 3

IN WITNESS WHEREOF, the Bank has hereunto set its signature  
and seal this 5th day of July, 1996.

FIRST NATIONAL BANK OF FARMINGTON

By: Len Scalzi

Len Scalzi  
Senior Vice President

By: James D. Rose

James D. Rose  
Executive Vice President

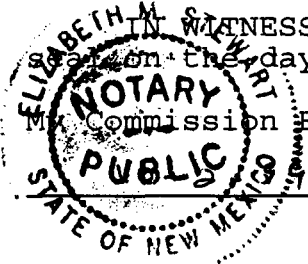


#### ACKNOWLEDGEMENT

On this 5th day of July, 1996, before me, a Notary Public in and for the County of San Juan, in the State of New Mexico, appeared Len Scalzi, to me personally known who, being by me duly sworn, did say that he is Senior Vice President of First National Bank of Farmington, and James D. Rose, to me personally known who, being by me duly sworn, did say that he is Executive Vice President, of First National Bank of Farmington, the bank named in and which executed the within instrument, and that the seal affixed to said instrument is the seal of said Bank, and that said instrument was signed, sealed and delivered in behalf of said Bank by authority of its Board of Directors, and they, as such, offer acknowledged said instrument to be the free act and deed set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and official  
seal on the day, month, and year aforesaid.

My Commission Expires:



Elizabeth M. Stewart  
Notary Public in and for said  
County and State

**Sharing the Hometown Spirit**

Post Office Box 4540 • Farmington, New Mexico 87499-4540 • (505)326-9000 • TDD(TYY) 326-9035

District I - (505) 393-6161

P. O. Box 1980

Hobbs, NM 88241-1980

District II - (505) 748-1283

811 S. First

Artesia, NM 88210

District III - (505) 334-6178

1000 Rio Brazos Road

Aztec, NM 87410

District IV - (505) 827-7131

New Mexico

Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505

(505) 827-7131

Revised 12/1

Submit Original

Plus 1 Copy

to Santa Fe

1 Copy to appropriate

District Office

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

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



New



Renewal



Modification

- ✓ 1. Type: Modification
- ✓ 2. Operator: Sunco Trucking Company  
Address: 708 South Tucker Farmington NM 87401  
Contact Person: Chuck Badsgard Phone: 505-327-0416
- ✓ 3. Location:        /4        /4 Section 2 Township 29N Range R12W  
Submit large scale topographic map showing exact location.
- ✓ 4. Attach the name, telephone number and address of the landowner of 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 OGI 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: Chuck Badsgard Title: Vice-President  
Signature: *Chuck Badsgard* Date: May 13, 1996

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

**APPLICANT: SUNCO TRUCKING COMPANY  
708 SOUTH TUCKER AVE.  
FARMINGTON NM 87401**

**SUBMITTED BY: CREATIVE FUTURE TECHNOLOGIES  
P.O. BOX 364  
FARMINGTON NM 87499-0364**

**CONTACTS: CHUCK BADSGARD 505-327-0416  
JERRY CATES 505-632-0662**

**MAY 13, 1996**

1. **Type:** Modification to discharge plan
2. **Operator:** Sunco Trucking Company  
708 South Tucker Ave.  
Farlington NM 87401  
**Contact:** Chuck Badsgard  
505-327-0416
3. **Location:** Section 2 Township 29N Range R12W  
(See Attached Topographic Map)
4. **Land Owner:** Coleman Oil & Gas  
708 South Tucker  
Farlington NM 87401
5. **Description:** See Attached Drawing
6. **Stored Materials:** Potassium Permanganate in 110 LB metal sealed cans of dry product and Sodium Hypochloride 550 LB plastic drums of solution. The products are stored in metal building with portable skid and sealed door.
7. **Effluent and Waste Solids:** The daily water volume averages about 2000-2800 BPD consisting of produced water from natural gas and oil wells. The average quality is saltwater of about 13,000 TDS.
8. **Collection/Treatment/Disposal Procedures:** The water is recieved at the facility by truck and unloaded into oil tank seperator. The water is channeled through an oil production seperator and a series of solids collection tanks removing all oil and as much solids as possible. It also goes through a lined and netted skimmer pond before being temporarily stored in a large lined evaporation pond. In the pond it is treated to maintain a safe H<sub>2</sub>S level and control odors. It is then transfered to the injection pump station where it is filtered and injected into the Point Lookout formation. The disposal rate and volumes are monitered and recorded.
9. **Modifications:** The purpose of this application is to reclassify the existing well from a "Class II" to a "Class I" disposal allowing the acceptance of sources of Oil & Gas produced wastes still to be "non-hazardous" RCRA exempt.
10. **Inspection and Compliance:** The facility is to be walked at least twice a day with hand held H<sub>2</sub>S air monitor and a water sample to be taken once a day. The information is logged in a book kept in the office at the facility. The current training and updated compliance procedures will be handled by the sight disposal manager monitering operations and procedures.

11. **Contingency Plan:** In the unlikely event of an accidental spill or discharge the OCD office shall first be notified and then one of the following procedures; If liquid waste there is a standby 40 BBL trailer mounted vacuum system with hoses for the collection of liquids. If there is a dyke breakage a standby backhoe is available to repair it.

If it is a solid waste there is a standby bobcat to pick it up with.

12. **Geological/Hydrological Information:** See attached.

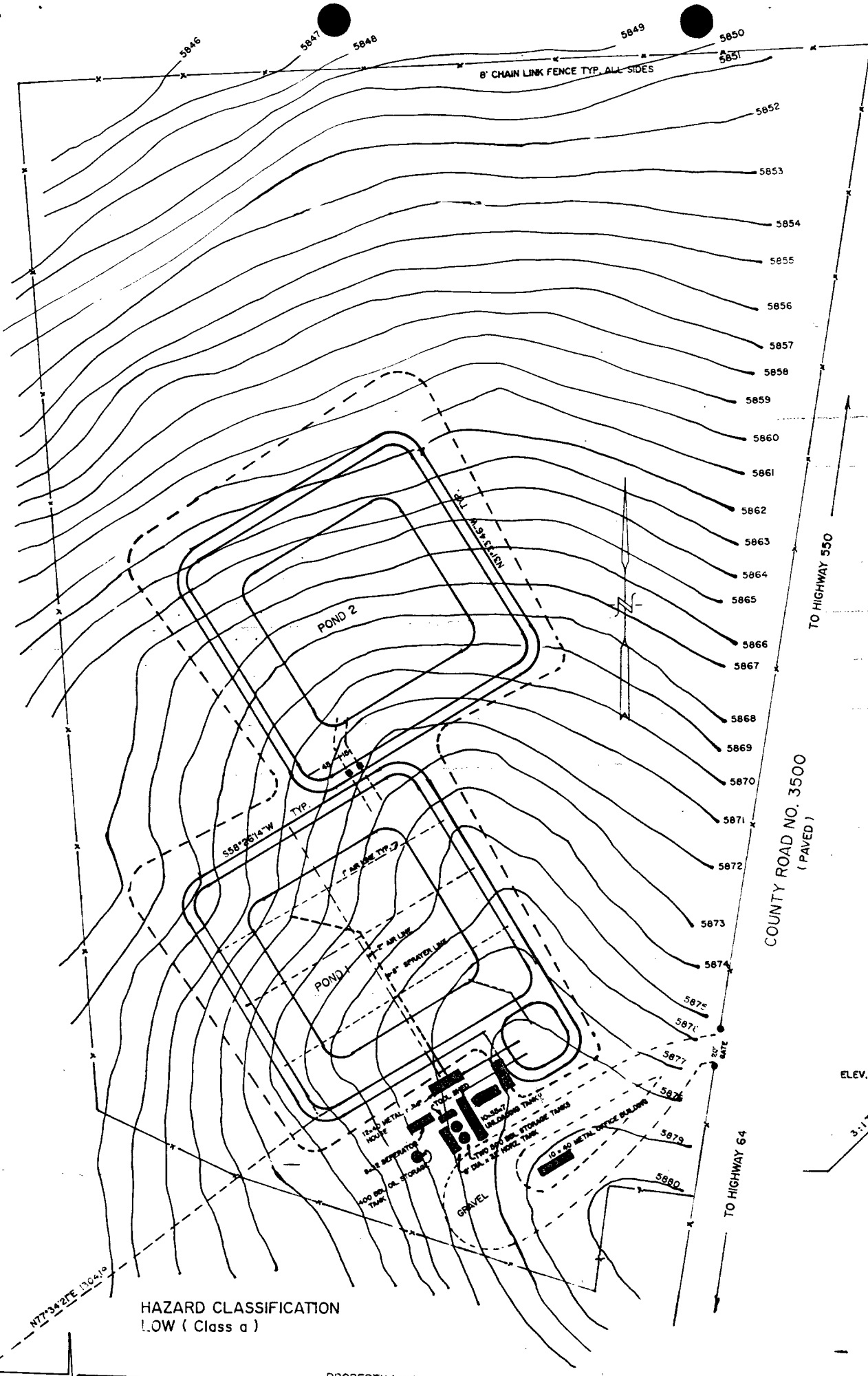
13. **Closure Plan:** Upon the closure of the facility the OCD shall be notified and a reclamation process will be employed to return any soil to its natural condition and no other wastes shall be accepted.

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: Chuck Badsgard Title: Vice-President

Signature: *Chuck Badsgard* Date: 5/13/96



SUMP

POND LI

LINER PENETRAT  
TYP. ANY PENETR

8" PVC LENGTH VARIES

SUMP DETAIL

ELEV. 5881

12" TYP.

ELEV. 5



District I - (505) 393-6161

P. O. Box 1980

Hobbs, NM 88241-1980

District II - (505) 748-1283

811 S. First

Artesia, NM 88210

District III - (505) 334-6178

1000 Rio Brazos Road

Aztec, NM 87410

District IV - (505) 827-7131

New Mexico

Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505

(505) 827-7131

Revised 12/1

Submit Orig

Plus 1 Cop

to Sant

1 Copy to appropr

District Of

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

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



New



Renewal



Modification

1. Type: Modification
2. Operator: Sunco Trucking Company  
Address: 708 South Tucker Farmington NM 87401  
Contact Person: Chuck Badsgard Phone: 505-327-0416
3. Location:        /4        /4 Section 2 Township 29N Range R12W  
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of 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 OCI 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: Chuck Badsgard Title: Vice-President

Signature: *Chuck Badsgard* Date: May 13, 1996

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

**APPLICANT: SUNCO TRUCKING COMPANY  
708 SOUTH TUCKER AVE.  
FARMINGTON NM 87401**

**SUBMITTED BY: CREATIVE FUTURE TECHNOLOGIES  
P.O. BOX 364  
FARMINGTON NM 87499-0364**

**CONTACTS: CHUCK BADSGARD 505-327-0416  
JERRY CATES 505-632-0662**

**MAY 13, 1996**

1. **Type:** Modification to discharge plan
2. **Operator:** Sunco Trucking Company  
708 South Tucker Ave.  
Farmington NM 87401  
**Contact:** Chuck Badsgard  
505-327-0416
3. **Location:** Section 2 Township 29N Range R12W  
(See Attached Topographic Map)
4. **Land Owner:** Coleman Oil & Gas  
708 South Tucker  
Farmington NM 87401
5. **Description:** See Attached Drawing
6. **Stored Materials:** Potassium Permanganate in 110 LB metal sealed cans of dry product and Sodium Hypochloride 550 LB plastic drums of solution. The products are stored in metal building with portable skid and sealed door.
7. **Effluent and Waste Solids:** The daily water volume averages about 2000-2800 BPD consisting of produced water from natural gas and oil wells. The average quality is saltwater of about 13,000 TDS.
8. **Collection/Treatment/Disposal Procedures:** The water is recieved at the facility by truck and unloaded into oil tank seperator. The water is channeled through an oil production seperator and a series of solids collection tanks removing all oil and as much solids as possible. It also goes through a lined and netted skimmer pond before being temporarily stored in a large lined evaporation pond. In the pond it is treated to maintain a safe H<sub>2</sub>S level and control odors. It is then transfered to the injection pump station where it is filtered and injected into the Point Lookout formation. The disposal rate and volumes are monitered and recorded.
9. **Modifications:** The purpose of this application is to reclassify the existing well from a "Class II" to a "Class I" disposal allowing the acceptance of sources of Oil & Gas produced wastes still to be "non-hazardous" RCRA exempt.
10. **Inspection and Compliance:** The facility is to be walked at least twice a day with hand held H<sub>2</sub>S air monitor and a water sample to be taken once a day. The information is logged in a book kept in the office at the facility. The current training and updated compliance procedures will be handled by the sight disposal manager monitoring operations and procedures.

11. **Contingency Plan:** In the unlikely event of an accidental spill or discharge the OCD office shall first be notified and then one of the following procedures; If liquid waste there is a standby 40 BBL trailer mounted vacuum system with hoses for the collection of liquids. If there is a dyke breakage a standby backhoe is available to repair it.

If it is a solid waste there is a standby bobcat to pick it up with.

12. **Geological/Hydrological Information:** See attached.

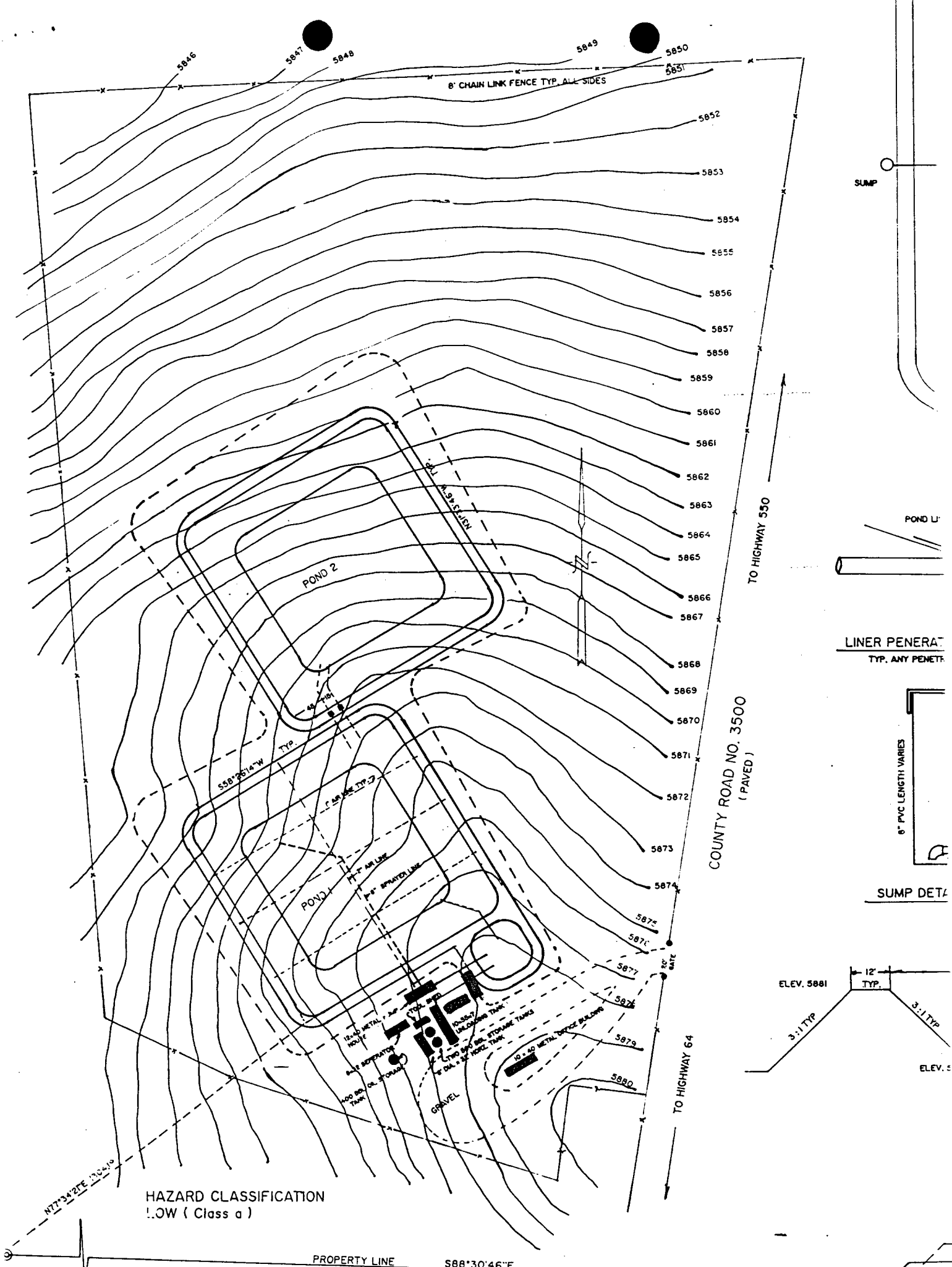
13. **Closure Plan:** Upon the closure of the facility the OCD shall be notified and a reclamation process will be employed to return any soil to its natural condition and no other wastes shall be accepted.

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:** Chuck Badsgard **Title:** Vice-President

**Signature:** *Chuck Badsgard* **Date:** 5/13/96



SUMP

POND LI

LINER PENETR  
TYP. ANY PENETR

8" PVC LENGTH VARIES

SUMP DETAIL

ELEV. 5881

12' TYP.

ELEV. 5

HAZARD CLASSIFICATION  
LOW (Class a)

PROPERTY LINE

S88°30'46"E

S.W.D AND OR INJECTION WELL INSPECTION FORM

DATE: 7-11-96 INSPECTOR: Ernest Cardona P.M.O.C.O

OPERATOR: Coleman O&G, Inc.

WELL NAME: SURCO WELL# 1

LOCATION: UT.LETTER: E SEC: 2 TWN: 29N RGE: 12W

PRESSURE LIMIT: 2850 INJ. PRESSURE TBG: 1980#

TBG\CSG ANNULUS PRESSURE: 125# @ 11:28 am; while injecting

INTERMEDIATE CSG. PRESSURE: N/A

BRADENHEAD PRESSURE: 0

\*REQUIRED POSITIVE TBG\CSG ANNULUS PRESSURE TO BE MAINTAINED ON WELL AS STIPULATED ON WFX OR SWD ORDER: 100# min

TYPE OF INJ. PRESSURE LIMITING DEVICE USED: Murphy Kill switch, electrically shuts off injection pump.

KILL OR POP-OFF PRESSURE SETTING OF PRESSURE LIMITING DEVICE: 2200#

REMARKS: Injection pressure limiting device tested this date  
Murphy switch does shut pump down as required, device was  
manually actuated to test.

**RECEIVED**

**JUL 15 1996**

Environmental Bureau  
Oil Conservation Division



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

June 5, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-951**

Mr. Chuck Badsgard  
Coleman Oil and Gas, Inc.  
c/o Sunco Trucking Company  
P.O. Box 443  
Farmington, New Mexico 87499

**RE: Discharge Plan UIC-CLI-005 (Formerly GW-235)**  
**Class I non-hazardous Oil Field Waste Disposal Well**  
**Coleman Oil and Gas, Inc.**  
**Sunco Disposal Well No. 1**  
**Unit Letter E, Sec. 2, Twn 29 N, Rng 12 W**  
**Sunco Disposal Facility**  
**San Juan County, New Mexico**

Dear Mr. Badsgard:

The New Mexico Oil Conservation Division (OCD) has received and is in the process of reviewing the Coleman Oil and Gas, Inc. (Coleman) discharge plan application dated May 6, 1996 and May 13, 1996 for the Coleman Class I non-hazardous oil field waste disposal well located in unit letter E, Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. Before the review process can be completed, the OCD is requesting the following additional information:

**Area of Review:** The OCD requests that all wells within the area of review have the production casing cemented 500 feet above the proposed injection zone. The top of the proposed injection zone is at 4,350 feet. The OCD has calculated the top of cement (TOC) in the Meredian McGrath A 1 in Unit Letter I, Sec. 3, Twn. 29 N, Rng. 12 W to be at 4,875 feet. For this well Coleman must either submit additional information confirming that there is adequate cement over the proposed injection zone, or submit a schedule for annual pressure monitoring. Pressure monitoring results shall be submitted to the OCD Santa Fe Office within 30 days of recording.

**Plugging Bond:** Coleman shall have in effect, prior to discharge plan approval, a plugging bond approvable by the Division, for the estimated amount required to plug the Sunco Disposal No. 1 according to the proposed closure plan and adjusted for inflation for the estimated life of the well. The required bond shall be a third party estimate.



Mr Chuck Badsgard

June 5, 1996

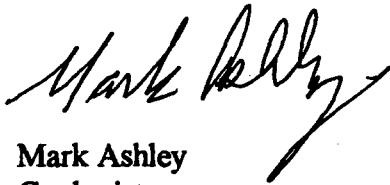
Page 2

Mechanical Integrity Testing: A mechanical integrity test will be conducted on the Sunco Disposal No. 1 prior to discharge plan approval and annually in accordance with OCD testing procedures. The OCD will be notified prior to the test so that they may witness the test.

Well Construction: Cement for all strings of casing will be circulated to surface. For the Sunco Disposal No. 1 Coleman must submit additional information in the form of drilling records, logs, and OCD Aztec verification to the OCD confirming that there is cement circulated behind all strings of casing.

If you have any questions, please call me at (505) 827-7155.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Ashley", with a stylized flourish at the end.

Mark Ashley  
Geologist

xc: OCD Aztec Office

# **CFT**

**CREATIVE FUTURE TECHNOLOGIES**

**INDUSTRIAL PRODUCT SALES AND MARKETING**

Main Office #505-632-0662

P.O. BOX 364 FARMINGTON, NM 87499 PHONE: (505) 327-4919 FAX: (505) 327-4919

**Oil Conservation Division  
State of New Mexico  
2040 South Pacheco  
Santa Fe, New Mexico 87505**

**May 21, 1996**

**Attn: Mark Ashley**

**Reference:** Addition to Coleman Oil & Gas Class I disposal application including water testing procedures, depth to ground water, known surface waters, and current water analysis.

## **I. Test Procedure**

All waters with unknown sources will be rejected at the facility until water analysis can be verified and approved for disposal by NMOCD. All new known sources will have water analysis on file prior to disposal and tests shall be EPA approved methods.

## **II. Ground and Surface Waters**

The depth to ground is estimated between 75 and 100 feet with predicted source being the Nacimiento. The current state records at the State Engineers office does not show any wells in this Section 2, 29N, R12W. Surface waters consist of the Animas River 2 miles to the north and the San Juan River 5 miles to the south of borders of the disposal facility.

## **III. Water Analysis**

The most recent water analysis was taken May 20, 1996 tested for aeromatic and halogenic hydrocarbons, heavy metals, major cations, and PAH. (See attachment L)

**Thank You,**



**Jerry Cates  
President- CFT Inc.**

# Polyaromatic Hydrocarbons EPA Method 8310

## Creative Futures Technologies

Project ID: Sunco  
 Sample ID: Evaporation Pond  
 Lab ID: 3656  
 Sample Matrix: Water

Report Date: 06/13/96  
 Date Sampled: 05/20/96  
 Date Received: 05/21/96  
 Date Extracted: 05/24/96  
 Date Analyzed: 06/03/96

Target Analyte	Concentration (µg/L)
Acenaphthene	<2.13
Acenaphthylene	<3.74
Anthracene	< 1.49
Benzo(a)anthracene	< 0.88
Benzo(a)pyrene	< 0.39
Benzo(b)fluoranthene	< 0.19
Benzo(k)fluoranthene	< 0.34
Benzo(ghi)perylene	< 1.23
Chrysene	< 0.88
Dibenzo(a,h)anthracene	< 0.72
Fluoranthene	< 0.15
Fluorene	< 1.29
Indeno(1,2,3-cd)pyrene	< 1.05
Naphthalene	< 5.82
<b>Phenanthrene</b>	<b>3.28</b>
Pyrene	< 0.13

### Quality Control:

#### Surrogate

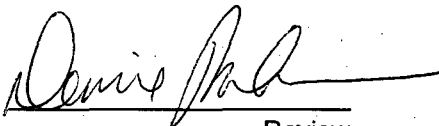
1,4-Dichlorobutane

#### Percent Recovery

101

#### Acceptance Limits

80 - 120%



Review

# Chlorinated Hydrocarbons

EPA Method 8010

## Creative Futures Technologies

Project ID: Sunco  
 Sample ID: Evaporation Pond  
 Lab ID: 3656  
 Sample Matrix: Water

Report Date: 06/13/96  
 Date Sampled: 05/20/96  
 Date Received: 05/21/96  
 Date Extracted: 05/24/96  
 Date Analyzed: 06/03/96

Target Analyte	Concentration (µg/L)
Bromoform	<2.5
Bromomethane	<5.0
Carbon Tetrachloride	<2.5
Chlorobenzene	<2.5
Chlorodibromomethane	<2.5
Chloroethane	<5.0
2 - Chloroethyl vinyl ether	<5.0
Chloroform	<2.5
Chloromethane	<5.0
Dichlorobromomethane	<2.5
Dichlorodifluoromethane	<5.0
1,1-Dichloroethane	<2.5
1,2-Dichloroethane	<2.5
1,1-Dichloroethene	<2.5
trans-1,2-Dichloroethene	<2.5
cis-1,2-Dichloroethene	<2.5
1,2-Dichloropropane	<2.5
cis-1,3-Dichloropropene	<2.5
trans-1,3-Dichloropropene	<2.5
Methylene chloride	<2.5
1,1,2,2-Tetrachloroethane	<2.5
Tetrachloroethene	<2.5
1,1,1-Trichloroethane	<2.5
1,1,2-Trichloroethane	<2.5
Trichloroethene	<2.5
Trichlorofluoromethane	<5.0
Vinyl chloride	<5.0
1,2-Dichlorobenzene	<2.5
1,3-Dichlorobenzene	<2.5
1,4-Dichlorobenzene	<2.5

Quality Control:

Surrogate

Percent Recovery

Acceptance Limits

1,4-Dichlorobutane

101

80 - 120%

Review

**PURGEABLE AROMATICS****Creative Futures Technologies**

Project ID: Sunco  
Sample ID: Evaporation Pond  
Lab ID: 3656  
Sample Matrix: Water  
Preservative: Cool  
Condition: Intact

Report Date: 6/3/96  
Date Sampled: 5/22/96  
Date Received: 5/22/96  
Date Analyzed: 5/23/96

Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	16.3	5.00
Toluene	33.1	5.00
Ethylbenzene	ND	5.00
m,p-Xylenes	147	10.0
o-Xylene	42.6	5.00


Total BTEX	239
------------	-----


ND - Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	98	88 - 110%
	Bromofluorobenzene	107	86 - 115%

**Reference:** Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

**Comments:**

  
Analyst

  
Review

## General Water Quality

### Creative Futures Technologies, Inc.

Project ID:	Sunco	Date Reported:	05/31/96
Sample ID:	Evaporation Pond	Date Sampled:	05/20/96
Laboratory ID:	3656	Time Sampled:	NA
Sample Matrix:	Water	Date Received:	05/21/96

Parameter	Analytical Result	Units
<b>General</b>		
Lab pH.....	7.8	s.u.
Lab Conductivity @ 25° C.....	45,700	µmhos/cm
Total Dissolved Solids @ 180°C.....	41,700	mg/L
Total Dissolved Solids (Calc).....	35,800	mg/L
<b>Anions</b>		
Total Alkalinity as CaCO <sub>3</sub> .....	1,640	mg/L
Bicarbonate Alkalinity as CaCO <sub>3</sub> .....	1,640	mg/L
Carbonate Alkalinity as CaCO <sub>3</sub> .....	NA	mg/L
Hydroxide Alkalinity as CaCO <sub>3</sub> .....	NA	mg/L
Chloride.....	20,500	mg/L
Sulfate.....	853	mg/L
Nitrate + Nitrite - N.....	NA	
Nitrate - N.....	NA	
Nitrite - N.....	NA	
<b>Cations</b>		
Total Hardness as CaCO <sub>3</sub> .....	1,260	mg/L
Calcium.....	49.8	mg/L
Magnesium.....	276	mg/L
Potassium.....	170	mg/L
Sodium.....	13,000	mg/L

**Data Validation**

		Acceptance Level
Cation/Anion Difference.....	2.69	+/- 5 %
TDS (180):TDS (calculated).....	1.2	1.0 - 1.2

**Reference**

U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 198  
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.

Review

**General Water Quality**  
**Creative Futures Technologies, Inc.**

Project ID: Sunco  
Sample ID: Evaporation Pond  
Laboratory ID: 3656  
Sample Matrix: Water

Date Report: 06/03/96  
Date Sample: 05/22/96  
Time Sample: NA  
Date Receive: 05/22/96

Parameter	Analytical Result	Units
<b>Total Metals</b>		
Arsenic.....	0.107	mg/L
Barium.....	3.15	mg/L
Cadmium.....	<0.02	mg/L
Chromium.....	<0.20	mg/L
Lead.....	0.007	mg/L
Mercury.....	<0.001	mg/L
Selenium.....	0.348	mg/L
Silver.....	0.098	mg/L

**Reference** U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.  
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.



Review

# General Water Quality Quality Control Report

Creative Futures Technologies, Inc.

Report Date: 06/03/96

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Laboratory pH	9.06	9.05	8.85 - 9.25	s.u.
Conductivity	1340	1210	1030 - 1400	μmhos/cm
Total Dissolved Solids	990	905	787 - 1020	mg/L
Total Alkalinity	167	174	155 - 193	mg/L
Chloride	155	155	144 - 167	mg/L
Sulfate	119	116	99.8 - 132	mg/L
Total Hardness	249	254	218 - 290	mg/L
Calcium	79.8	78.8	66.9 - 88.7	mg/L
Magnesium	NA	NA	NA	mg/L
Potassium	110	112	95.2 - 129	mg/L
Sodium	180	180	153 - 207	mg/L

**Reference:** U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and W  
1983. Standard Methods For The Examination Of Water And Wastewater,  
1992.

**Comments:**



Review



# General Water Quality Quality Control Report

Creative Futures Technologies, Inc.

Report Date: 06/03/96

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Arsenic	0.0049	0.0050	0.0043 - 0.0058	mg/L
Barium	4.87	5.00	4.50 - 5.50	mg/L
Cadmium	0.222	0.212	0.174 - 0.250	mg/L
Chromium	0.110	0.098	0.080 - 0.115	mg/L
Lead	0.566	0.576	0.472 - 0.680	mg/L
Mercury	0.0064	0.0059	0.0044 - 0.0073	mg/L
Selenium	0.010	0.010	0.0095 - 0.0115	mg/L
Silver	0.065	0.071	0.058 - 0.083	mg/L

**Reference:** U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and W  
1983. Standard Methods For The Examination Of Water And Wastewater,  
1992.

**Comments:**

  
Review



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



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

December 22, 1993

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

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:

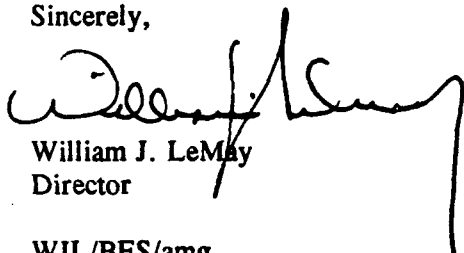
Reference is made to your request dated December 8, 1993 to increase the surface injection pressure on the above referenced well. This request is based on a step rate tests conducted on this well on December 7, 1993. The results of the test have been reviewed by my staff and we feel an increase in injection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



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



January 19, 1993

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

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

Coleman Oil & Gas Company  
P.O. Drawer 3337  
Farmington, New Mexico 87499

Mike Leonard

RE: *Injection Pressure Increase*  
*Sunco Disposal No. 1*  
*"E" 02-29N-12W*  
*San Juan County, New Mexico*

Dear Sir:

Reference is made to your request dated January 15, 1993, to increase the surface injection pressure on the Sunco Disposal Well No. 1. This request is based on step rate tests conducted on the well on January 14, 1993. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on the 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

Sunco Disposal Well No. 1  
1595' FNL & 1005' FWL  
"E" 2-29N-12W

1350 PSIG

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/DC/jc

cc: Oil Conservation Division - Aztec  
File: SWD-457

COLEMAN OIL & GAS COMPANY

P.O. DRAWER 3337

87499

MIKE LEONARD

Re: Injection Pressure Increase

SUNCO DISPOSAL No. 1

"E" 02.29N. 12W

SAN JUAN County, New Mexico

Dear Sir:

Reference is made to your request dated JANUARY 15, 1993, to increase the surface injection pressure on the SUNCO DISPOSAL Well No. 1. This request is based on step rate tests conducted on these wells JAN 14, 1993. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on these wells is justified at this time.

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

## Well & Location

Maximum Injection  
Surface Pressure

SUNCO DISPOSAL WELL No. 1  
1595' FNL & 1005' FNL  
"E" 2-29 N. 12 W

1350 PSIG

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.

XC: ~~T. GALLEGOS~~ ~~D. CATANACH~~ FILE- SWD 457 OCD- AZTEC



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



January 19, 1993

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

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

Coleman Oil & Gas Company  
P.O. Drawer 3337  
Farmington, New Mexico 87499

Mike Leonard

*RE: Injection Pressure Increase  
Sunco Disposal No. 1  
"E" 02-29N-12W  
San Juan County, New Mexico*

Dear Sir:

Reference is made to your request dated January 15, 1993, to increase the surface injection pressure on the Sunco Disposal Well No. 1. This request is based on step rate tests conducted on the well on January 14, 1993. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on the 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

Sunco Disposal Well No. 1  
1595' FNL & 1005' FWL  
"E" 2-29N-12W

1350 PSIG

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/DC/jc

cc: Oil Conservation Division - Aztec  
File: SWD-457



BRUCE KING  
GOVERNOR

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



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

*ADMINISTRATIVE ORDER NO. SWD-457*

*APPLICATION OF COLEMAN OIL & GAS, INC.*

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Coleman Oil & Gas, Inc. made application to the New Mexico Oil Conservation Division on July 1, 1991, for permission to complete for salt water disposal its Sunco Well No. 1 located in Unit E of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

**THE DIVISION DIRECTOR FINDS THAT:**

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations.
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.
- (4) An objection has been received but has subsequently been withdrawn.

**IT IS THEREFORE ORDERED THAT:**

- (1) The applicant herein, Coleman Oil & Gas, Inc. is hereby authorized to complete its Sunco Well No. 1 located in Unit E of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Point Lookout member of the Mesaverde formation at approximately 4380 feet to approximately 4480 feet through 2 7/8 inch plastic lined tubing set in a packer located at approximately 4340 feet.

**IT IS FURTHER ORDERED THAT:**

The operator 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 surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

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 868 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Point Lookout member of the Mesaverde formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment, of the mechanical integrity test, so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec district office 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.


*Administrative Order No. SWD-457  
Coleman Oil & Gas, Inc.  
January 13, 1992  
Page 3*

**PROVIDED FURTHER THAT**, jurisdiction of this cause is hereby retained by the Division for such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 13th day of January, 1992.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

SEAL

cc: Oil Conservation Division - Aztec  
US Bureau of Land Management - Farmington

jc\



# CFT CREATIVE FUTURE TECHNOLOGIES

INDUSTRIAL PRODUCT SALES AND MARKETING

Main Office #505-632-0662

P.O. BOX 364 FARMINGTON, NM 87499 PHONE: (505) 327-4919 FAX: (505) 326-1313

OIL CONSERVATION DIVISION  
RECEIVED

'96 MAR 18 AM 8 52

Oil Conservation Division  
State of New Mexico  
2040 South Pacheco  
Santa Fe, New Mexico 87505  
Office# 505-827-7155

March 6, 1996

RECEIVED

FEB 18 1996

Environmental Bureau  
Oil Conservation Division

Attn: Mark Ashley  
Environmental Geologist

Reference: Meeting on February 23rd, 1996 with Mark Ashley, Denny Foust, Chris Eustice, Pat Sanchez, Frank Chavez, Chuck Badsguard, and Jerry Cates concerning the Class I Disposal Well application requirements.

We at Creative Future technologies Inc. and Sunco Trucking appreciate the time spent in helping to submit our application and would like to confirm the following.

## I. Area of Review

- a. The radius will be determined by the mathematical model equation which best suits the hydrogeological conditions and not necessarily the one in the Water Quality Regulations Handbook.
- b. The radius can fall under one mile using the model equation however the current minimum is to be one mile as determined by the NMOCD.
- c. The variables in the equation such as injection rate, time, and storage co-efficient can be determined by the operator now Sunco Trucking.

## II. Chemical Testing Requirements

- a. The water Sunco has recieved from Giant Refinery has been tested and is considered non-hazardous non-exempt by the NMOCD. This water has been authorized for disposal until the Class I application is complete. Any new sources of non-exemt commercial

Oil & Gas waste shall be tested by the operator and approved by the NMOCD prior to the acceptance at the disposal sight.

- b. The evaporation pond will not have to be tested because the non-exempt will be tested before acceptance.

### III. Training and Awareness

- a. With the help of the NMOCD an awareness program can be developed for Sunco employee's especially concerning the "exempt and non-exempt" waste classification.
- b. The Sunco Disposal Manager can be utilized to explain regulations and keep operators informed on changing polocies.

### VI. Other Discussions

- a. It will not be necessary to net or cover the evaporation pond.
- b. The current monitering equipment is sufficient for thr well.
- c. The original application fee shall be \$1,380.00.
- d. The Point Lookout formation thickness can be determined by the well log.

The above meeting and discussion was an attempt to determine the economic feasibility of the new classification and most questions were of that intention.

Thank You,



Jerry Cates  
President- CFT Inc.



Chuck Badsgard  
Vice-president- Sunco

CC; Denny Foust  
Roger Anderson  
Frank Chavez  
Chris Eustice  
Pat Sanchez

# AFFIDAVIT OF PUBLICATION

No. 35890

STATE OF NEW MEXICO  
County of San Juan:

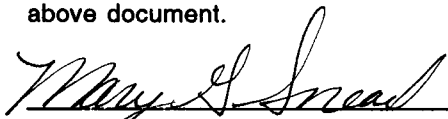
ROBERT LOVETT being duly sworn says: That he is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES,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

Monday, February 12, 1996

and the cost of publication is: \$76.28



On 2/23/96 ROBERT LOVETT appeared before me, whom I know personally to be the person who signed the above document.



My Commission Expires March 21, 1998

## COPY OF PUBLICATION

### Legals



#### NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the 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 shall be held. A hearing will be held if the Director determines that 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 the 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

/s/William J. Lemay  
WILLIAM J. LEMAY, Director

SEAL

Legal No. 35890 published in The Daily Times, Farmington, New Mexico on Monday, February 12, 1996.

# AFFIDAVIT OF PUBLICATION

No. 35890

STATE OF NEW MEXICO

County of San Juan:

ROBERT LOVETT being duly sworn says: That he 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 meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Monday, February 12, 1996

and the cost of publication is: \$71.19

*Robert Lovett*

*2/14/96* ROBERT LOVETT

appeared before me, whom I know personally to be the person who signed the above document.

*May H. Innes*

My Commission Expires March 21, 1998

## COPY OF PUBLICATION

### Legals

#### NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the 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 shall be held. A hearing will be held if the Director determines that 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 the 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

/s/William J. Lemay  
WILLIAM J. LEMAY, Director

SEAL

Legal No. 35890 published in The Daily Times, Farmington, New Mexico on Monday, February 12, 1996.



CREATIVE FUTURE TECHNOLOGIES

INDUSTRIAL PRODUCT SALES AND MARKETING

Main Office #505-632-0662

P.O. BOX 364 FARMINGTON, NM 87499 PHONE: (505) 327-4919 FAX: (505) 326-1313

Oil Conservation Division  
State of New Mexico  
2040 South Pacheco  
Santa Fe, New Mexico 87505  
Office# 505-827-7155

March 6, 1996

RECEIVED  
FEB 18 1996  
Environmental Bureau  
Oil Conservation Division

Attn: Mark Ashley  
Environmental Geologist

Reference: Meeting on February 23rd, 1996 with Mark Ashley, Denny Foust, Chris Eustice, Pat Sanchez, Frank Chavez, Chuck Badsguard, and Jerry Cates concerning the Class I Disposal Well application requirements.

We at Creative Future technologies Inc. and Sunco Trucking appreciate the time spent in helping to submit our application and would like to confirm the following.

I. Area of Review

- a. The radius will be determined by the mathematical model equation which best suits the hydrogeological conditions and not necessarily the one in the Water Quality Regulations Handbook.
- b. The radius can fall under one mile using the model equation however the current minimum is to be one mile as determined by the NMOCD.
- c. The variables in the equation such as injection rate, time, and storage co-efficient can be determined by the operator now Sunco Trucking.

II. Chemical Testing Requirements

- a. The water Sunco has recieved from Giant Refinery has been tested and is considered non-hazardous non-exempt by the NMOCD. This water has been authorized for disposal until the Class I application is complete. Any new sources of non-exemt commercial

Oil & Gas waste shall be tested by the operator and approved by the NMOCD prior to the acceptance at the disposal sight.

- b. The evaporation pond will not have to be tested because the non-exempt will be tested before acceptance.

### III. Training and Awareness

- a. With the help of the NMOCD an awareness program can be developed for Sunco employee's especially concerning the "exempt and non-exempt" waste classification.
- b. The Sunco Disposal Manager can be utilized to explain regulations and keep operators informed on changing polocies.

### VI. Other Discussions

- a. It will not be necessary to net or cover the evaporation pond.
- b. The current monitering equipment is sufficient for thr well.
- c. The original application fee shall be \$1,380.00.
- d. The Point Lookout formation thickness can be determined by the well log.

The above meeting and discussion was an attempt to determine the economic feasibility of the new classification and most questions were of that intention.

Thank You,



Jerry Cates  
President- CFT Inc.



Chuck Badsgard  
Vice-president- Sunco

CC; Denny Foust  
Roger Anderson  
Frank Chavez  
Chris Eustice  
Pat Sanchez

NOTICE OF PUBLICATION

RECEIVED

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

FEB - 7 1996  
2058  
USFWS - NMESD

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.

NO EFFECT FINDING

The described action will have no effect on listed species, wetlands, or other important wildlife resources.

Date February 13, 1996

Consultation # GW96OCD-1

Approved by

U.S. FISH and WILDLIFE SERVICE

NEW MEXICO ECOLOGICAL SERVICES FIELD OFFICE

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

# The Santa Fe New Mexican

Since 1849. We Read You.

NEW MEXICO OIL CONSERVATION

AD NUMBER: 466615

ACCOUNT: 56689

LEGAL NO: 59060

P.O. # 96199002997

206 LINES once at \$ 82.40

Affidavits: 5.25

Tax: 5.48

Total: \$ 93.13

## 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 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 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 available. 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 shall 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 available. 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.

## AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper 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 # 59060 a copy of which is hereto attached was published in said newspaper once each week for one consecutive week(s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 9th day of FEBRUARY 1996 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/

Betsy Perner  
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 9th day of FEBRUARY A.D., 1996



OFFICIAL SEAL

Candace C. Ruiz

NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 9/29/99

Candace C. Ruiz

O/K  
MA  
2-16-96

• P.O. Box 2048 • Santa Fe, New Mexico 87501

505-983-3303 • (FAX) 505-984-1785





STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

February 7, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-765-962-932**

Mr. Chuck Badsgard  
Coleman Oil and Gas, Inc.  
c/o Sunco Trucking Company  
P.O. Box 443  
Farmington, New Mexico 87499

**RE: Authorization to Discharge Without  
an Approved Discharge Plan  
Coleman Oil and Gas, Inc.  
Sunco Disposal Well No. 1  
Unit Letter E, Sec. 2, Twn 29 N, Rng 12 W  
Sunco Disposal Facility  
San Juan County, New Mexico**

Dear Mr. Badsgard:

The New Mexico Oil Conservation Division (OCD) has received the Coleman Oil and Gas, Inc. (Coleman) request, dated February 1, 1996, for authorization to dispose of non hazardous and exempt fluids by injection without an approved discharge plan. The authorization is requested for the time period during review of the discharge plan application for the reclassification of the permitted Class II disposal well to a Class I disposal well for the above referenced facility.

Pursuant to New Mexico Water Quality Control Commission Regulation 3106, and for good cause shown, authorization to discharge without an approved discharge plan is hereby granted until June 7, 1996 with the following conditions:

- 1) **Maximum Injection Pressure:** The maximum operating pressure at the wellhead will be 2,850 psi in accordance with OCD Order SWD-457. A minimum of 100 psi will be maintained on the casing-tubing annulus.
- 2) **Continuous Monitoring:** Continuous monitoring and recording devices will be installed and records made of injection pressure, flow rate, flow volume, and annular pressure. Records are to be maintained at Coleman for a period of not less than five years.

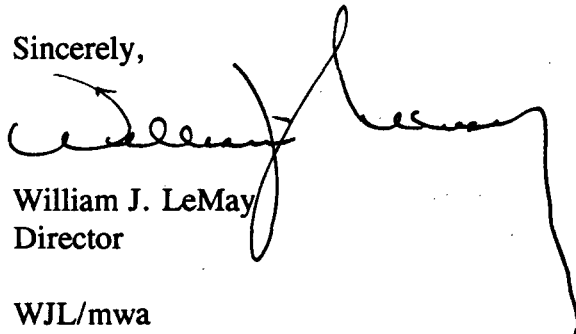
Mr. Chuck Badsgard  
February 7, 1996  
Page 2

- 3) Wastes Permitted for Injection: Injection will be limited to fluids as permitted under OCD Order SWD-457, and a one time injection of the non-exempt fluids accepted by Giant Refining Company-Bloomfield. No other Class I non-exempt fluids will be accepted for injection unless a discharge plan reclassifying the Class II well to a Class I well is approved by the OCD.

Please be advised this authorization does not relieve Coleman of liability should operations result in pollution of surface waters, ground waters or the environment.

If you have any questions, please call Roger Anderson at (505) 827-7152.

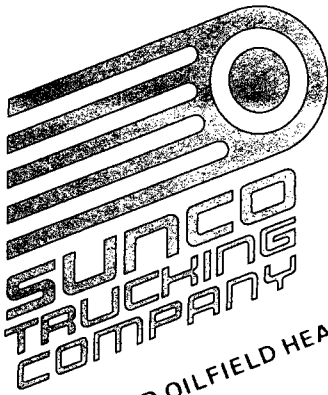
Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long, sweeping horizontal stroke extending to the right.

William J. LeMay  
Director

WJL/mwa

xc: OCD Aztec Office



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

RECEIVED

FEB 6 1996

Environmental Bureau  
Oil Conservation Division

Environmental Bureau  
Oil Conservation Division  
2040 S. Pacheco  
Santa Fe, New Mexico 87505  
Fax# 505-827-8177

February 1, 1996

Attn: William LaMay

Reference: Reclassification of disposal well status from  
Class II Commercial Facility to a Class I Commercial Disposal  
Facility.

Dear Sir,

Sunco Trucking is requesting a change of operational status at our existing water disposal facility from ~~Class II~~ to ~~Class~~ I Commercial to provide extended service to the San Juan Oil and Gas Industry. There is an urgent need and have been numerous requests by our industry to accept Non-Exempt, Non-Hazardous waste. The acceptance of this proposal would lighten the current burdens of our industry and provide proper management of such waste.

Sunco would also like to request a 120 day extension to inject fluids during this status change application process. The following is a list of the necessary technical information:

Owner- Sunco Trucking  
708 S. Tucker  
Farmington NM 87401

Evaporation Pond TDS-  
23,610 MG/L

Location- Section 2, Township 29N,  
Range 12W

Evaporation Pond TSS-  
78.8 MG/L

Depth to Ground Water- 78-90'

Disposal Well Injection  
Rate- 2000 BPD

Ground Water Formation- Blue Shale Gravel

Disposal Well Injection  
Pressure- 1800 PSI

Estimated Ground Water TDS- 450 MG/L

Sunco Information Continued-

Depth of Perforation- 4380' to 4480'

Injection Zone- Point Lookout Formation

We would like to express our appreciation for your current co-operation in this matter and please call for any additional information needed in expediting this application.

Thank You,

A handwritten signature in cursive script, appearing to read "Chuck Badsgard".

Chuck Badsgard  
Vice- President- Sunco Trucking Company

February 6, 1996

NEW MEXICAN  
202 E. Marcy  
Santa Fe, New Mexico 87501

RE: NOTICE OF PUBLICATION

PO #96-199-002997

ATTN: BETSY PERNER

Dear Sir/Madam:

Please publish the attached notice one time. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

1. Publisher's affidavit.
2. Invoices for prompt payment.

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice on Friday, February 9, 1996.

Sincerely,

  
Sally E. Martinez  
Administrative Secretary

Attachment



*mark*

February 6, 1996

**FARMINGTON DAILY TIMES**  
**P. O. Box 450**  
**Farmington, New Mexico 87401**

**RE: NOTICE OF PUBLICATION**

**ATTN: ADVERTISING MANAGER**

Dear Sir/Madam:

Please publish the attached notice <sup>(S)</sup> one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

1. Publisher's affidavit in duplicate.
2. Statement of cost (also in duplicate.)
2. **CERTIFIED** invoices for prompt payment.

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice no later than February 13, 1996.

Sincerely,

*Sally Martinez*  
Sally E. Martinez  
Administrative Secretary

Attachment

**VILLAGRA BUILDING - 408 Galisteo**  
Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830  
Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465

**2040 South Pacheco**  
Office of the Secretary  
827-5850  
Administrative Services  
827-5925  
Energy Conservation & Management  
827-5900  
Mining and Minerals  
827-5970  
Oil Conservation  
827-7131

## 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 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

## 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 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





WATER AND OILFIELD HEAVY HAULING

P.O. BOX 443, FARMINGTON, NM 87499

(505) 327-0416

320-5754

MOBILE

GLW-235

Environmental Bureau  
Oil Conservation Division  
2040 S. Pacheco  
Santa Fe New Mexico, 87505  
Fax# 505-827-8177

February 1, 1996

Attn: William LaMay

Reference: Reclassification of disposal well status from  
Class II Commercial Facility to a Class I Commercial Disposal  
Facility.

Dear Sir,

Sunco Trucking is requesting a change of operational status at our existing water disposal facility from Class II to Class I Commercial to provide extended service to the San Juan Oil and Gas Industry. There is an urgent need and have been numerous requests by our industry to accept Non-Exempt, Non-Hazardous waste. The acceptance of this proposal would lighten the current burdens of our industry and provide proper management of such waste.

Sunco would also like to request a 120 day extention to inject fluids during this status change application process. The following is a list of the necessary technical information:

Owner- Sunco Trucking  
708 S. Tucker  
Farmington NM 87401

Evaporation Pond TDS-  
23,610 MG/L

Location- Section 2, Township 29N,  
Range 12W

Evaporation Pond TSS-  
78.8 MG/L

Depth to Ground Water- 78-90'

Disposal Well Injection  
Rate- 2000 BPD

Ground Water Formation- Blue Shale Gravel

Disposal Well Injection  
Pressure- 1800 PSI

Estimated Groung Water TDS- 450 MG/L


Sunco Information Continued-

Depth of Perforation- 4380' to 4480'

Injection Zone- Point Lookout Formation 13,895 TOS.

We would like to express our appreciation for your current co-operation in this matter and please call for any additional information needed in expediting this application.

Thank You,



Chuck Badsgard  
Vice- President- Sunco Trucking Company

DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY

HYDROGEOLOGY OF THE POINT LOOKOUT SANDSTONE IN THE SAN JUAN  
STRUCTURAL BASIN, NEW MEXICO, COLORADO, ARIZONA, AND UTAH

By Steven D. Craigg, William L. Dam, John Michael Kernodle,  
Conde' R. Thorn, and Gary W. Levings

A contribution of the  
REGIONAL AQUIFER-SYSTEM ANALYSIS PROGRAM

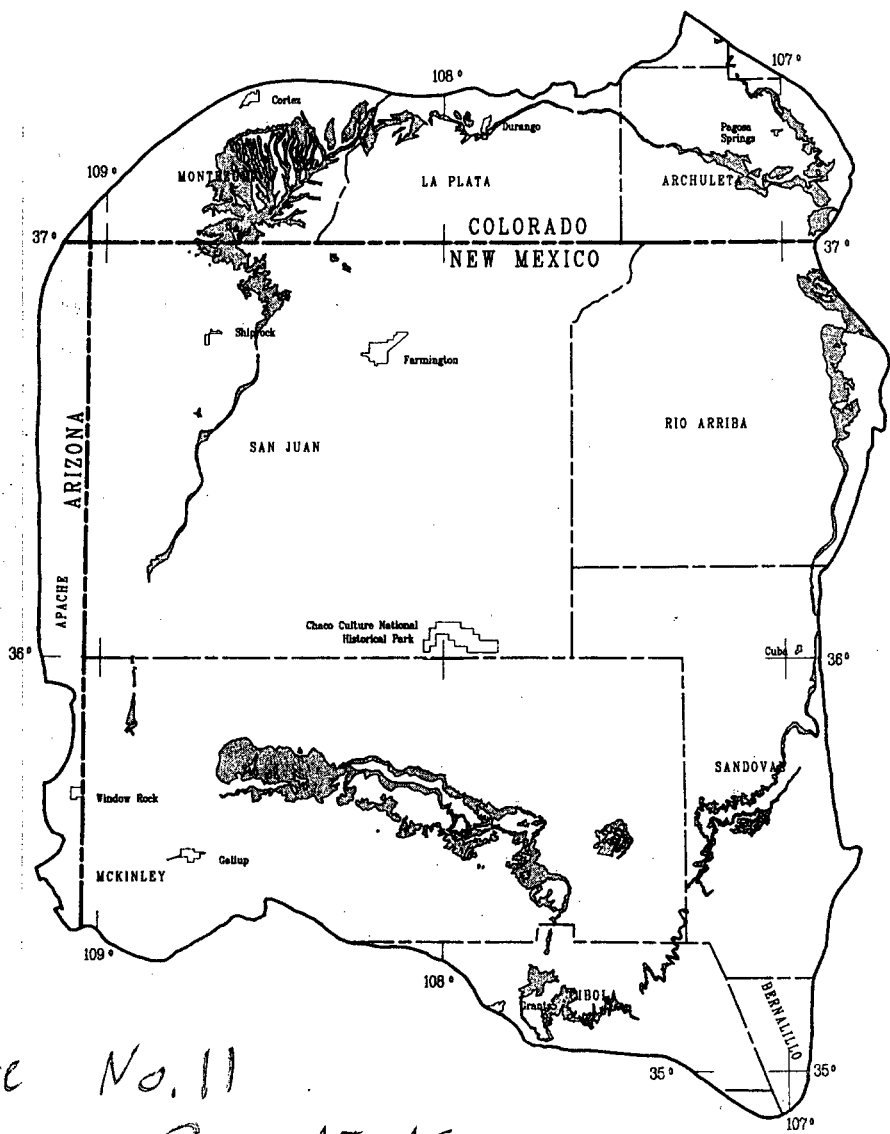


Figure No. 11

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal

Time 3:30 PM

Date 1-24-96

Originating Party

Other Parties

Mr. Shelton - Giant

Pat Sanchez - OLD

Subject

Giant Class I well workover - Backflow water.

Discussion

Mr. Shelton called to inform OLD Santa Fe that Giant had shipped Class I backflow water to Sunco Disposal - A Class II facility. At the time of the workover and shipment Mr. Shelton and his consultant Mr. Paul Thompson did not know that Sunco could not take Non-exempt Class I fluids. Mr. Shelton does not want to involve Sunco since they thought they were taking wastes from an ordinary well workover/produced water.

Conclusions or Agreements

Mr. Shelton will be in touch with Roger Anderson in the morning.

Distribution

Giant, RCA, MA, CE,  
File.

Signed

*Antonio V. Sanchez*

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 4:25 pm	Date 1-24-96
---	--------------	--------------

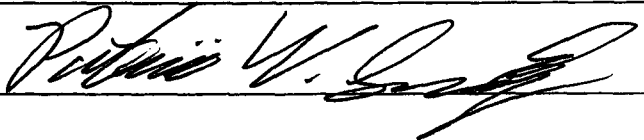
<u>Originating Party</u>	<u>Other Parties</u>
Pat Sanchez - OCD	Chuck Badsgard - Sunco

Subject Water hauled from Giant Class I well to Sunco Class II well.

Discussion Talked to Mr. Badsgard about the water hauled from the Giant Class I well to Sunco Class II well - I explained per Federal UIC / SDWA regulations a Class II well can only take "Exempt" oil field wastes and cannot accept Class I "Non-Exempt" wastes. He thought the "water" was just ordinary produced water / workover flowback. He asked who is the contact at Giant and I told him Mr. Lynn Shelton.

Conclusions or Agreements

Mr. Chuck Badsgard will call Roger Anderson in the morning.

<u>Distribution</u> RCA, CE, MA, File.	<u>Signed</u> 
--	--