

**3R - 57**

**APPROVALS**

**YEAR(S):**

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# NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

## OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505

August 18, 1995

### CERTIFIED MAIL

RETURN RECEIPT NO. Z-765-962-396

Mr. Mario G. Ramon  
Vastar Resources, Inc.  
15375 Memorial Drive  
Houston, Texas 77079

RE: MONITOR WELL PLUGGING REPORT  
WOOD WN FEDERAL COM #1

Dear Mr. Ramon:

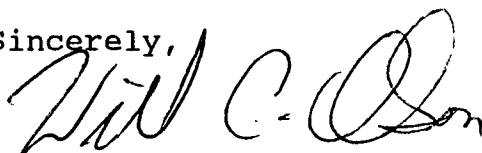
The New Mexico Oil Conservation Division (OCD) has reviewed Vastar Resources, Inc. (VRI) July 28, 1995 "WOOD WN. FEDERAL COM #1, SAN JUAN COUNTY, BLANCO, NEW MEXICO, JANUARY 1995 - MONITOR WELL PLUGGING REPORT". This document contains the results of VRI's July 28, 1995 plugging of monitor wells related to the closure of an unlined pit at VRI's Wood WN Federal Com #1 well site. Also included is VRI's request for final closure of remedial actions at the site.

The above referenced plugging report and final closure request is approved.

Please be advised that OCD approval does not relieve VRI of liability if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve VRI of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,



William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: OCD Aztec Office  
Ilyse Gold, Farmington BLM District 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

June 20, 1995

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-283**

Mr. Mario G. Ramon  
Vastar Resources, Inc.  
15375 Memorial Drive  
Houston, Texas 77079

**RE: GROUND WATER SAMPLING REPORT  
WOOD WN FEDERAL COM #1**

Dear Mr. Ramon:

The New Mexico Oil Conservation Division (OCD) has completed a review of Vastar Resources, Inc. (VRI) May 16, 1995 "WOOD WN. FEDERAL COM #1, SAN JUAN COUNTY, BLANCO, NEW MEXICO, JANUARY 1995 - GROUND WATER SAMPLING RESULTS". This document contains the results of VRI's March 29, 1995 sampling of ground water related to the closure of an unlined pit at VRI's Wood WN Federal Com #1 well site. Also included is VRI's request for final closure of remedial actions at the site and a plan for plugging and abandonment of the monitor wells.

The above referenced final closure request and plugging plan is approved with the following conditions:

1. VRI will submit a plugging and abandonment completion report by July 28, 1995 which will contain information on the actual procedures used during plugging and abandonment of the monitor wells.
5. VRI will notify the OCD at least one week in advance of all scheduled activities such that the OCD has the opportunity to witness the events.
6. VRI will submit all original documents to the OCD Santa Fe Office with copies provided to the OCD Aztec District Office.

Mr. Mario G. Ramon  
June 20, 1995  
Page 2

Please be advised that OCD approval does not relieve VRI of liability if remaining contaminants are found to pose a future threat to surface water, ground water, human health or the environment. In addition, OCD approval does not relieve VRI of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7154.

Sincerely,



William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: OCD Aztec Office  
Ilyse Gold, Farmington BLM District Office

PS Form 3800, June 1990

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State of New Mexico  
**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**  
Santa Fe, New Mexico 87505



OIL CONSERVATION DIVISION  
2040 S. Pacheco St.  
Santa Fe, New Mexico 87505



January 11, 1995

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-199**

Mr. Mario G. Ramon  
Vastar Resources, Inc.  
15375 Memorial Drive  
Houston, Texas 77079

**RE: GROUND WATER SAMPLING REPORT  
WOOD WN FEDERAL COM #1**

Dear Mr. Ramon:

The New Mexico Oil Conservation Division (OCD) has reviewed Vastar Resources, Inc. (VRI) November 15, 1994 "WOOD WN. FEDERAL COM #1, SAN JUAN COUNTY, BLANCO, NEW MEXICO" and November 10, 1994 "GROUNDWATER SAMPLING RESULTS FOR THE WOOD WN FEDERAL #1 WELL SITE, NEAR BLANCO, NEW MEXICO". These documents contain the results of VRI's recent sampling of contaminated ground water related to the closure of an unlined pit at VRI's Wood WN Federal Com #1 well site. Also included is VRI's request for final closure of remedial actions at the site.

The OCD approves of the remedial actions taken to date. However, the ground water directly downgradient of the pit in monitor well MW-4 contains dissolved benzene and xylene in concentrations of 91 parts per billion (ppb) and 720 ppb, respectively. Both of these contaminants are present in excess of New Mexico Water Quality Control Commission (WQCC) ground water standards. Therefore, the OCD defers comment on VRI's request for final closure until the OCD reviews the results of the January monitor well sampling.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

A handwritten signature in black ink, appearing to read "Will C. Olson".

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: OCD Aztec Office  
Ilyse Gold, Farmington BLM District Office

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  
827-7485

2040 South Pacheco  
Office of the Secretary  
827-5950  
Administrative Services  
827-5925  
Energy Conservation & Management  
827-5900  
Mining and Minerals  
827-5970  
Oil Conservation  
827-7131



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

May 17, 1994

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

**CERTIFIED MAIL**

**RETURN RECEIPT NO. P-111-334-105**

Mr. Mario G. Ramon  
Vastar Resources, Inc.  
15375 Memorial Drive  
Houston, Texas 77079

**RE: PIT CLOSURE REPORT  
WOOD WN FEDERAL COM #1  
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Ramon:

The New Mexico Oil Conservation Division (OCD) has reviewed Vastar Resources, Inc. May 4, 1994 "REQUEST FOR EXTENSION OF TIME TO SUBMIT CLOSURE REPORT FOR WOOD WN FEDERAL COM #1, SAN JUAN COUNTY, NEW MEXICO". This document requests a 60 day extension of the time schedule for submission of the closure report containing the results of the remediation activities at Vastar's Wood WN Federal Com #1 well site.

The above referenced request to extend the time schedule for submission of the closure report to July 1, 1994 is granted.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: OCD Aztec Office  
Ilyse Gold, Farmington BLM District Office



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT

IN REPLY REFER TO:

24 03 8 39

3162.5-1(a)

MAR 15 1991

Mr. Mario Ramon  
ARCO Oil and Gas Company  
1816 E. Mojave St.  
Farmington, NM 87401

**Re: Pit Closure Plan Acceptance**

The Farmington District Office (FDO) of the Bureau of Land Management (BLM) has completed a review of your companies "San Juan Basin Pit Closure Plan"(Plan).

Your Plan has been accepted and approved with the condition listed below and the attached stipulations:

1. A subsequent report (sundry) is needed for the soil remediation. This subsequent report will be submitted to Bill Liess of the FDO Environmental Protection staff when your project is finished.
2. Ground water remediation will continue until NMOCD approves this cleanup.

This coordination effort will be evaluated at the end of the three month period and if deemed necessary will continue throughout the life of your pit closure project. As BLM inspectors become acquainted with your system, the time frame may be extended to monthly or dropped altogether.

As stated in the NMOCD letter, this approval does not relieve your company of any environmental liability or responsibility for compliance with federal, state, or local laws and regulations.

If you have any questions, please contact Bill Liess of my staff at (505) 599-6321.

Sincerely,

Ilyse K. Gold  
Chief, Branch of Lands, Cultural  
Recreation & Environmental Comp

cc: Roger C. Anderson, NMOCD  
P.O.Box 2088, Santa Fe, NM 87504-2088

## STIPULATIONS

Project: Unlined Surface Impoundment Remediation and Closure for the Farmington and Albuquerque Districts, Northeastern Arizona, and Southeastern Utah  
Applicant: ARCO Oil and Gas Company  
Address: 1816 E. Mojave St., Farmington, NM 87401  
BLM Office: Farmington and Albuquerque District Offices Phone #(505) 599-8900 (505) 761-8700

The following standard operating procedures and/or approved mitigating measures, stipulations, and conditions of approval, etc. will be implemented during (1) the various stages (if specified) of project development/operation implementation and up to a period of (2) approximately two years after all work has been completed for this project. Because of the complexity of this project, this time period may be extended, if additional work and/or monitoring is needed to ensure environmental and operational compliance. If problems arise during or after field work is completed, the applicant(s) is required to promptly notify the authorized representative. Consultation between the applicant(s) and the Bureau of Land Management (BLM) Authorized Officer (AO) may result in additional field work being required of the applicant(s) to fully implement one or more of the following stipulations.

1. Submit a single Sundry Notice (DOI BLM Form 3160-50) for on lease remediation and closure actions. Off lease actions on Federal surface will be authorized by the rights-of-way process. Right-of-way grant holders and transporters will submit a letter requesting approval to conduct pit remediation and/or closure activities.
2. The closure plan will be attached to the Sundry Notice/letter or submitted separately. The following information must be submitted for each unlined pit to be closed. As per the Unlined Surface Impoundment Closure Guidelines (Appendix A) the operators will:
  - a. Submit a list of the locations with legal descriptions, lease number or right-of-way serial number;
  - b. Provide remediation locations (on site or off site) with legal descriptions including footages.
3. When the approved Sundry Notice/Letter has been received and all reporting requirements have been met, operators may proceed with the remediation as specified in the approved Sundry Notice/Letter with any conditions of approval attached to the Sundry Notice/Letter.
4. All remediation locations will be properly bermed, diked, and protected by perimeter trenches/diversion ditches. Geotextile liners or any other techniques that the Bureau of Land Management in consultation with the operators, feels is prudent may be required.
5. For the on-site operations, all applicable Federal and state engineering and environmental safeguards will be followed. The Bureau of Land Management reserves the right to require fencing of all or portions of locations, post signs, or other measures deemed necessary by the Bureau of Land Management to ensure environmental safeguards.



6. Total Petroleum Hydrocarbon tests and other appropriate testing, when deemed necessary by the Authorizing Officer, will be performed by a laboratory following established United State Environmental Protection Agency test methods on each composite grab sample.

7. The unlined pit contents will be backfilled into the original unlined pit and shaped to minimize erosion. Unlined pit contents will not be allowed to remain ex situ (on the surface) after successful on-site remediation, except for the following provision. Excess fill material, if any, will be stockpiled and utilized for soil settling in the pit, recontouring of the surface area of the unlined pit or for the construction of berms around any tanks on location.

8. Those materials removed from unlined pits that contain contaminants that exceeds action levels will have remediation and sampling continue until concentrations of those contaminants fall below the action level and total petroleum is no greater than 100 parts per million, 1000 parts per million, 5000 part per million or current state standards based on the general site characteristics and ranking score determined for each unlined pits. The Bureau of Land Management reserves the right to require split samples be taken from remediated unlined pit contents to ensure that remediation has been successful.

9. Consultation between the Bureau of Land Management, the operators, and New Mexico Oil Conservation Division will be undertaken, as to what measures should be used in those instances where remediation does not successfully reduce the contaminants to acceptable levels.

10. Remediation and sampling will continue until all contaminants fall below the action levels as defined in the Unlined Surface Impoundment Closure Guidelines (Appendix A) and total petroleum hydrocarbon is no greater than 100 parts per million, 1000 parts per million, 5000 parts per million, or current state standards based on the general site characteristics and ranking score determined for each unlined pit.

11. Operators will give immediate notice to the Bureau of Land Management and the appropriate state agency whenever any Resource Conservation and Recovery Act Subtitle C **nonexempt** wastes are discovered. Unlined pit contents, containing Resource Conservation Recovery Act Subtitle C **nonexempt** wastes, will not be removed from Federal or Indian lands. The Authorized Officer will request an investigation including appropriate testing to determine the specific contamination and the extent of any such contamination. The Bureau of Land Management will consult with the New Mexico Oil Conservation Division, New Mexico Environment Department and when applicable Navajo Environmental Protection Administration/U.S. Environmental Protection Agency, U.S Forest Service (Carson National Forest), and Jicarilla Apache Tribe in conjunction with the operator. On Indian Trust lands, BLM will consult with Navajo EPA and USEPA (Region IX).

12. The Bureau of Land Management reserves the right, in consultation with operators, to require that background composite grab samples be taken off the well pad location or right-of-way if Resource Conservation Recovery Act Subtitle C **nonexempt** wastes are discovered.

13. The successfully remediated materials, that are returned to the unlined pit, will be shaped to minimize erosion. The rehabilitated unlined pit will be seeded during the first available seeding period (July 1 through September 15) or as determined by the Bureau of Land Management. If the initial efforts are not successful, reseeding may be required. Reseeding may not be required if the future use of the remediated area deems this not necessary.

14. The Bureau of Land Management approved fill material may be required to properly contour and facilitate proper drainage for remediated and closed unlined pits.

15. The Bureau of Land Management will evaluate the use of materials proposed to be used in on site composting. Only Bureau of Land Management and state pre-approved organic material(s) will be allowed.

16. All operators must ensure that all on-site operations are properly secured and maintained to ensure the efficient and safe operation of the remediation of unlined pits.

17. Remediation and closure activities are restricted to the existing disturbed area. Performing remediation and closure activities outside the existing disturbed area of the existing well pad or right-of-way will require proper authorization.

18. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the operator, or any person working on his behalf, on Federal, or Indian land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The operator will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

19. The Bureau of Land Management reserves the right to require additional information, work, appropriate testing and monitoring which the Bureau of Land Management's Authorized Officer determines prudent and necessary.

20. Unlined pit contents removed from an individual Federal or Indian lease or from a specific right-of-way and associated temporary use area for remediation will not be returned to any Federal or Indian lands. For the purpose of unlined pits, on site is considered within a specific Federal or Indian lease or within a specific right-of-way and associated temporary use area. Off site is considered to be off of an individual lease or outside the granted right-of-way and associated temporary use area.

21. All off-site remediation products shall be properly disposed of according to applicable Federal and state laws and regulations. Off-site remediated materials will not be allowed to be returned to Federal or Indian surface.

22. A final Subsequent Report (using Sundry Form 3160-5) will be submitted to address the action taken to close the unlined pit. A subsequent letter will be submitted for right-of-way actions. The Report/Letter will provide a list of locations and unlined pit types (i.e. dehydrator, separator, compressor etc.) for final closure.



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



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

March 9, 1994

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

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-241-906**

Mr. Mario G. Ramon  
Arco Oil and Gas Company  
Eastern District  
15375 Memorial Drive  
Houston, Texas 77079

**RE: PIT CLOSURE  
WOOD WN FEDERAL COM #1  
SAN JUAN COUNTY, NEW MEXICO**

Dear Mr. Ramon:

The New Mexico Oil Conservation Division (OCD) has completed a review of Arco Oil and Gas Company's February 17, 1994 "PROPOSED PIT CLOSURE, WOOD WN FEDERAL COM #1, SAN JUAN COUNTY, BLANCO, NEW MEXICO", January 1994 "PIT CLOSURE PLAN, WOOD WN FEDERAL COM #1, (B) SECTION 21, T29N, R10W, NMPM, SAN JUAN COUNTY, NEW MEXICO" and September 1993 "LIMITED SITE ASSESSMENT, WOOD WN FEDERAL COM #1, (B) SECTION 21, T29N, R10W, NMPM, SAN JUAN COUNTY, BLANCO, NEW MEXICO". These documents contain the investigation results and a remedial work plan for contaminated soil and ground water related to disposal of produced water at Arco's Wood WN Federal Com #1 well site.

The remedial work plan contained in the above referenced documents is approved with the following conditions:

1. Monitor well MW-2 will not be plugged and abandoned. The OCD staff have met with the New Mexico Highway Department (NMHD) regarding encroachment of road construction on this monitor well. The NMHD has stated that they will ensure the monitor well will not be disturbed and that runoff will be diverted from the area of the monitor well.
2. In addition to the proposed ground water quality sampling, ground water from the monitor wells will be sampled for major cations and anions and New Mexico Water Quality Control Commission heavy metals and polynuclear aromatic hydrocarbons using appropriate EPA approved methods.

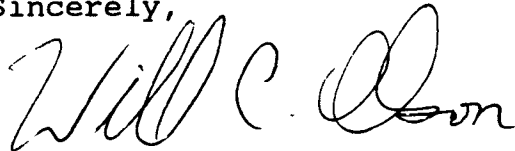
Mr. Mario G. Ramon  
March 9, 1994  
Page 2

3. Arco will submit the results of the pit soil remediation activities to the OCD by May 1, 1994. These results will be submitted to the OCD Santa Fe Office and OCD Aztec District Office on the OCD's "PIT REMEDIATION AND CLOSURE REPORT" form (attached). ✓
4. Arco will submit the proposed location of the additional monitor well and monitor well construction details to OCD for approval prior to installation. ✓
5. Arco will notify OCD at least 72 hours in advance of all scheduled activities such that the OCD may have the opportunity to witness the events and/or split samples. ✓
6. The annual report containing the results of the previous years ground water sampling from the monitor wells will be submitted to the OCD by February 1, 1995.

Please be advised that OCD approval does not relieve Arco of liability if contamination exists which is beyond the scope of the work plan. In addition, OCD approval does not relieve Arco of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please contact me at (505) 827-5885.

Sincerely,



William C. Olson  
Hydrogeologist  
Environmental Bureau

Attachment

xc: OCD Aztec Office  
Ilyse Gold, Farmington BLM District Office  
Michael K. Lane, Envirotech, Inc.