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RECEIVED

JUN 2 1986

June 2, 1986

OIL CONSERVATION DIVISION

Hand Delivered

Mr. Richard C. Stamets, Director New Mexico Oil Conservation Division 310 Old Santa Fe Trail Santa Fe, New Mexico 87501 Case 5929

Re: Emergency Application for Temporary Administrative Exception to Rule 306: Arco Leeson #1, (Unit K), and Arco Leeson #2 (Unit E), SW/4, Section 27, T-25-N, R-3-W NMPM, Rio Arriba County

Dear Mr. Stamets:

On behalf of Arco Oil and Gas Company, we are requesting an emergency administrative order for a temporary exception to OCD Rule 306, the no-flare rule. The exeception is necessary to allow for the flaring of gas volumes in excess of the 30 MCFPD authorized by the district office in Aztec until the above-referenced wells are connected to pipeline facilities.

C-129's for each of the wells and attached narratives are enclosed.

The subject wells are completed in the West Lindrith Gallup-Dakota pool and are producing casinghead gas volumes of approximately 95 MCFPD from the #1 and 129 MCFPD from the #2. Both wells are waiting on connection to a gathering system operated by El Paso Natural Gas Co. Arco applied to the Aztec district office for authority to flare 200 MCFPD from the Leeson #1 and 90 MCFPD from the Leeson #2. Administrative approval was granted on April 18, 1986 for a maximum of 30 MCFPD for each well. I understand that the administrative exception will automatically terminate on July 18, 1986.

As explained by the narratives attached to the C-129's, the shut-in or choke-back of these wells are both impracticable. The paraffin residues associated with the oil production pose unacceptable risks of mechanical damage to the equipment and wellbore and threaten the loss of reserves. As well, unforseen contingincies may delay the actual construction of the gathering facilities beyond the automatic expiration of the district exception resulting in a total lack of authority to flare if an emergency order is not entered.

We request that the Division grant temporary authority to flare the volumes stated on the enclosed C-129's until an order can be issued following an examiner hearing on the matter. Accordingly, I am also submitting an application for hearing and request that this matter be placed on the examiner docket for June 25, 1986.

If you require additional information, please contact me.

Very truly yours,

J. Scott Hall

JSH/ep

cc: Russ Jones Roger Trimble Frank Chavez

BEFORE THE

OIL CONSERVATION DIVISIION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF ARCO OIL AND GAS COMPANY FOR EXECEPTION TO NO-FLARE RULE

RECEIVED

JUN 3 1986

UIL CONSERVATION DIVISION

Case 8929:

APPLICATION

Comes now, ARCO OIL AND GAS COMPANY by their undersigned attorneys, and hereby makes application to the Oil Conservation Division for an Exception to OCD Rule 306 to flare casinghead gas. In support thereof, applicant states:

- (1) Applicant is the operator of the ARCO Leeson #1 Well located 1740 feet from the South line and 1800 feet from the West lines of Section 27, Township 25 North, Range 3 West, N.M.P.M. Rio Arriba County, New Mexico.
- (2) Applicant is also the operator of the ARCO Leeson #2 Well located 1855 feet from the North line and 1855 feet from the West line of Section 27, Township 25 North, Range 3 West, N.M.P.M., Rio Arriba County, New Mexico.
- (3) Both wells produce oil and associated casinghead gas from the West Lindrith Gallup-Dakota pool.
- (4) Based upon oil production of 67 barrels of oil per day, the ARCO Leeson #1 produces an estimated volume of gas of 95 MCFPD.

(5) Based upon oil production of 76 barrels of oil per day, the ARCO Leeson #2 produces approximately 129 MCFPD.

(6) The subject wells are presently waiting on connection to gas gathering facilities.

(7) The shut-in or chokeback of the subject wells pose the risk of loss of otherwise recoverable reserves and premature abandonment of the wells.

(8) The applicant requests that it be allowed to flare volumes no greater than 95 MCFPD from the ARCO Leeson #1 and 129 MCFPD from the ARCO Leeson #2 until each of those wells are connected to a gas gathering facility.

(9) Granting this application will be in the best interests of conservation and the prevention of waste.

WHEREFORE applicant requests that this application be set for hearing on June 25, 1986 before one of the Division's duly appointed examiners, and that after notice and hearing as required by law the, Division enter its order approving the application.

Respectfully submitted,

CAMPBELL & BLACK, P.A.

P.O. Box 2208

Santa Fe, New Mexico 87501

(505) 988-4421

ATTORNEYS FOR APPLICANT

BEFORE THE

OIL CONSERVATION DIVISIION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF ARCO OIL AND GAS COMPANY FOR EXECEPTION TO NO-FLARE RULE

RECEIVED

JUN 2 1986

OIL CONSERVATION DIVISION

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- (3) Both wells produce oil and associated casinghead gas from the West Lindrith Gallup-Dakota pool.
- (4) Based upon oil production of 67 barrels of oil per day, the ARCO Leeson #1 produces an estimated volume of gas of 95 MCFPD.

(5) Based upon oil production of 76 barrels of oil per day, the ARCO Leeson #2 produces approximately 129 MCFPD.

(6) The subject wells are presently waiting on connection to gas gathering facilities.

(7) The shut-in or chokeback of the subject wells pose the risk of loss of otherwise recoverable reserves and premature abandonment of the wells.

(8) The applicant requests that it be allowed to flare volumes no greater than 95 MCFPD from the ARCO Leeson #1 and 129 MCFPD from the ARCO Leeson #2 until each of those wells are connected to a gas gathering facility.

(9) Granting this application will be in the best interests of conservation and the prevention of waste.

WHEREFORE applicant requests that this application be set for hearing on June 25, 1986 before one of the Division's duly appointed examiners, and that after notice and hearing as required by law the, Division enter its order approving the application.

Respectfully submitted,

CAMPBELL & BLACK, P.A.

P.O. Box 2208

Santa Fe, New Mexico 87501

(505) 988-4421

ATTORNEYS FOR APPLICANT

(Commission Use Only)

APPLICATION FOR EXCEPTION TO NO-FLARE RULE 306

NFO Permit No. _

Α.	Applicant, ARCO Oil & Gas Company, A Division of Atlantic Richfield Company		
	whose address is P.O. Box 1610, Midland, TX 79702		
	hereby requests an exception to Rule 306 for	30 days or until	
	<u>June 30</u> , 19 <u>86</u> , for the followi	ng described tank battery (or LACT):	
	Name of Lease ARCO Leeson #1 Name of Pool W. Lindrith GA-DK		
	Location of Battery: Unit Letter K Section 27 T	ownship 25N Range 3N	
	Number of wells producing into battery one		
В.	Based upon oil production ofbarr	els per day, the estimated (*) volume	
	of gas to be flared is95 MCF; Value\$	154per day.	
C.	Name and location of the nearest gas gathering facility:		
	El Paso Natural Gas Co., Leeson #2 Well	, SN 1/4, Sec. 27, T25N,R3N	
D.	Distance 800' Estimated cost of connection \$15,700		
E.	This exception is requested for the following reasons:		
	** Please refer to attached discussion**		
F.	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.	Approved Until	
	Stephen Rose (Signature) Production Superintendent (Title) May 29, 1986	New Mexico Oil Conservation Commission By Title	
	(Date)		

^{*}Gas-Oil ratio test may be required to verify estimated gas volume.

APPLICATION FOR EXCEPTION TO NO-FLARE RULE 306 ARCO OIL AND GAS COMPANY ARCO LEESON # 2 SW/4, NW/4 - SECTION 27-T25N-R3W RIO ARRIBA COUNTY, NEW MEXICO

ARCO Oil and Gas Company respectfully requests permission to flare associated gas production from the subject well until such time as a gas pipeline connection is constructed. ARCO has diligently pursued gas marketing negotiations and has now executed a contract with El Paso Natural Gas for the well's associated gas production. Current estimates indicate that the gas pipeline will be completed by June 30, 1986.

Shutting in this well will result in the potential loss of about 170,000 B0 in oil reserves and 42,500 B0 equivalent in gas reserves. This well has commingled production from the Gallup and Dakota formations. Oil production from both of these formations is paraffin-base with a cloud point of approximately 100° F. Paraffin crystallization is a constant operational problem which requires frequent hot oil treatments of the wellbore.

Shutting in the well would allow the wellbore to cool due to the cessation of fluid flow up the tubing. The cloud point for paraffin deposition would be located at an approximate depth of 2,800'. Therefore, during an extended shut-in period of several days, paraffin deposition would occur both inside and outside the tubing from the surface down to a depth of 2,800'. A substantial risk would then exist that a hot oil treatment would fail to adequately remove paraffin over a 2,800'-interval, thereby preventing restoration of the well's production. Any subsequent workover of the well would also have a significant risk of failing since the paraffin accumulation could result in the tubing becoming stuck in the wellbore.

As the evidence given above indicates, shutting in the ARCO Leeson #2 would result in a substantial risk of loss of the well and its total equivalent reserves of 212,500 BO. A gas contract has been negotiated for the well and gas sales are scheduled to begin by June 30, 1986. Permission to vent the well's associated gas production in the interim will eliminate the risk of loss of the well.

Producing the well at full capacity during this interim period is recommended. Restricting the well's production results in intermittent flowing of oil production. These occasional production surges result in oil being carried over into the gas dump lines. Environmentally hazardous oil spills could thus potentially occur if the well's production rate is curtailed below full capacity.

(Commission Use Only)

APPLICATION FOR EXCEPTION TO NO-FLARE RULE 306

NFO Permit No. _

		C. A. J. Lin Dish Gis L. Commons	
A.	Applicant, ARCO Oil & Gas Company, A Division of Atlantic Richfield Company		
	whose address is P.O. Box 1610, Midland, TX 79702		
	hereby requests an exception to Rule 306 for30	days or until	
	June 30 , 19 86, for the following described tank battery (or LACT):		
	Name of Lease ARCO Leeson #2 Name of Pool W. Lindrith GA-DK		
	Location of Battery: Unit Letter E Section 27	Township 25N Range 3W	
	Number of wells producing into battery one		
В.	Based upon oil production of	rrels per day, the estimated (*) volume	
	of gas to be flared is129 MCF; Value	\$209per day.	
C.	Name and location of the nearest gas gathering facility: El Paso Natural Gas Co., Leeson #2 Well, SW 1/4, Sec. 27, T25N, R3W		
D.	Distance 1200 Estimated cost of connection \$17,300		
Ε.	This exception is requested for the following reasons:		
	** Please refer to attached discussio	n**	
F.	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.	Approved Until	
		New Mexico Oil Conservation Commission	
	Stephen Kosl	Ву	
	Production Superintendent	Title	
	(Title) May 29, 1986	Date	
	(Date)		

^{*}Gas-Oil ratio test may be required to verify estimated gas volume.

APPLICATION FOR EXCEPTION TO NO-FLARE RULE 306 ARCO OIL AND GAS COMPANY ARCO LEESON # 1 NE/4, SW/4 - SECTION 27-T25N-R3W RIO ARRIBA COUNTY, NEW MEXICO

ARCO Oil and Gas Company respectfully requests permission to flare associated gas production from the subject well until such time as a gas pipeline connection is constructed. ARCO has diligently pursued gas marketing negotiations and has now executed a contract with El Paso Natural Gas for the well's associated gas production. Current estimates indicate that the gas pipeline will be completed by June 30, 1986.

Shutting in this well will result in the potential loss of about 200,000 BO in oil reserves and 40,000 BO equivalent in gas reserves. This well has commingled production from the Gallup and Dakota formations. Oil production from both of these formations is paraffin-base with a cloud point of approximately 100° F. Paraffin crystallization is a constant operational problem which requires frequent hot oil treatments of the wellbore.

Shutting in the well would allow the wellbore to cool due to the cessation of fluid flow up the tubing. The cloud point for paraffin deposition would be located at an approximate depth of 2,800'. Therefore, during an extended shut-in period of several days, paraffin deposition would occur both inside and outside the tubing from the surface down to a depth of 2,800'. A substantial risk would then exist that a hot oil treatment would fail to adequately remove paraffin over a 2,800'-interval, thereby preventing restoration of the well's production. Any subsequent workover of the well would also have a significant risk of failing since the paraffin accumulation could result in the tubing becoming stuck in the wellbore.

As the evidence given above indicates, shutting in the ARCO Leeson #1 would result in a substantial risk of loss of the well and its total equivalent reserves of 240,000 BO. A gas contract has been negotiated for the well and gas sales are scheduled to begin by June 30, 1986. Permission to vent the well's associated gas production in the interim will eliminate the risk of loss of the well.

Producing the well at full capacity during this interim period is recommended. Restricting the well's production results in intermittent flowing of oil production. These occasional production surges result in oil being carried over into the gas dump lines. Environmentally hazardous oil spills could thus potentially occur if the well's production rate is curtailed below full capacity.