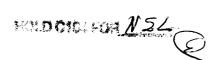
CONFIDENTIAL

Form 3160-3 FORM APPROVED (July 1992) UNITED STATES (Other instructions on OMB NO 1004-0136 DEPARTMENT OF THE INTERIOR reverse side) Expires February 28, 1995 BUREAU OF LAND MANAGEMENT 5. LEASE DESIGNATION AND SERIAL NO. APPLICATION FOR PERMIT TO DRILL OR DEEPEN MDA 701-98-0013 1a. TYPE OF WORK 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Drill X Deepen Jicarilla Apache b. TYPE OF WELL 7. UNIT AGREEMENT NAME Oil Well Gas Well X Other Single Zone Multiple Zone 2. NAME OF OPERATOR 8. FARM OR LEASE NAME, WELL NO. Mailon Oil Company Jicarilla 29-02-29 #1 3. ADDRESS AND TELEPHONE NO. 9, API WELL NO. P.O. Box 2797 30×0 Durango, CO 81302 (970) 382-9100 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) E Blanco, Pictured Cliffs 1768' FSL and 437' FWL (NW/SW) Unit L 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA At proposed prod. zone 1768' FSL and 437' FWL (NW/SW) Unit L Sec. 29, T29N-R02W 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE * 12. COUNTY OR PARISH 13. STATE 56 miles east of Bloomfield, New Mexico Rio Arriba NM 15. DISTANCE FROM PROPOSED * 16. NO OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED LOCATION TO NEAREST 5783 TO THIS WELL PROPERTY OR LEASE LINE, FT. 39.360 (Also to nearest drig. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION® 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING, COMPLETED, 4777 OR APPLIED FOR, ON THIS LEASE, FT. 4500 Rotary 21. ELEVATIONS (SHOW WHETHER DF, RT, GR, Etc.) 7076' GR 22. APPROX.DATE WORK WILL START 12/21/98 23 PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE GRADE, SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH QUANTITY OF CEMENT 12-1/4" 8-5/8" 24# 500' Circulate to surface 7-7/8" 5-1/2" 15.5# 4500 570 sks Mallon Oil Company proposes to drill to a depth sufficient to test the Pictured Cliffs formation. If productive, 5-1/2" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal regulations. Specific programs as per on-shore Oil and Gas Order No. 1 are outlined. in the following attachments: **Drilling Program** Exhibit 1: Blow Out Preventor Equipment/Plan Exhibit D: **Drilling Site Layout** Exhibit A: Location and Elevation Plat Exhibit E: **Production Facilities** Exhibit B: Roads and Pipelines Exhibit F: **H2S Contingency Plan** One Mile Radius Map Exhibit C: Exhibit G: **Environmental Assessment** IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any 24 SIGNED: TITLE: Operations Superintendent DATE 12/14/98 i erry Linkeman (This space for Federal or State office use) PERMIT NO APPROVAL DATE Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle operations thereon. CONDITIONS OF APPROVAL, IF ANY, (Uriginal Signed) HECTOR A. VILLALOBOS TITLE *See Instructions On Reverse Side

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.



Multi-Point Surface Use and Operation Plan

Attached to Form 3160-3
Mallon Oil Company
Jicarilla 29-02-29 #1
1768' FSL and 437' FWL, (NW/SW) Unit L
Sec. 29, T29N-R2W
Rio Arriba County, New Mexico

LEASE NUMBER: MDA 701-98-0013

1. Existing roads:

- A. The well site and elevation plat for the proposed well is shown in Exhibit A. It was staked by Daggett Enterprises, Inc., Farmington, NM.
- B. All roads to the location are shown in Exhibit B. The existing roads are illustrated in pink and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.
- C. Directions to location: From Bloomfield, New Mexico, travel east on Highway 64 for 56 miles to J5. Turn right and travel 5.6 miles. Turn left and travel approximately 0.5 miles. Turn left to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed access road:

Exhibit B shows the new access road to be constructed and is illustrated in yellow. The road will be constructed as follows:

- A. The maximum width of the running surface will be 15'. The road will be crowned and ditched. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, gates, or fence cuts are necessary.
- E. A low water crossing will be utilized to cross natural drainages.
- F. Surfacing material will consist of native soil. Any additional materials that are required will be purchased from the dirt contractor.
- G. The proposed access road as shown in Exhibit B has been center line flagged by Daggett Enterprises, Inc., Farmington, NM.

DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II P.O. Drawer DD, Artesia, N.M. 88211-0719

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office

OIL CONSERVATION DIVISION

State Lease - 4 Copies Fee Lease - 3 Copies

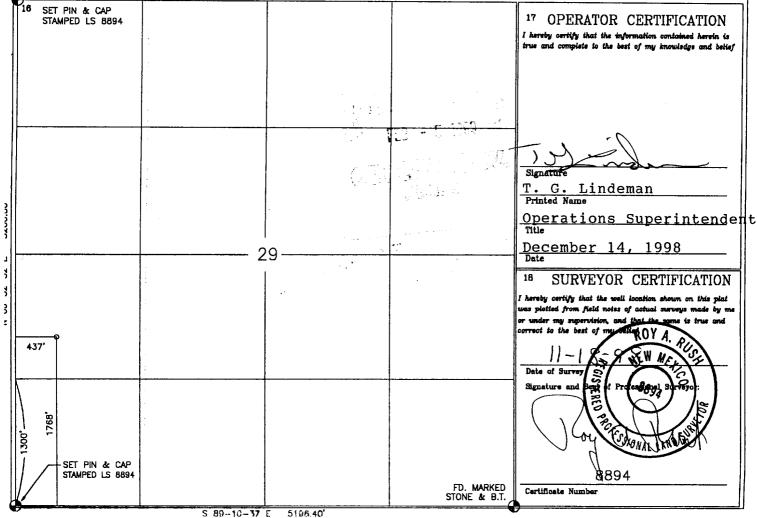
DISTRICT IV PO Box 2088, Santa Fe, NM 87504-2088

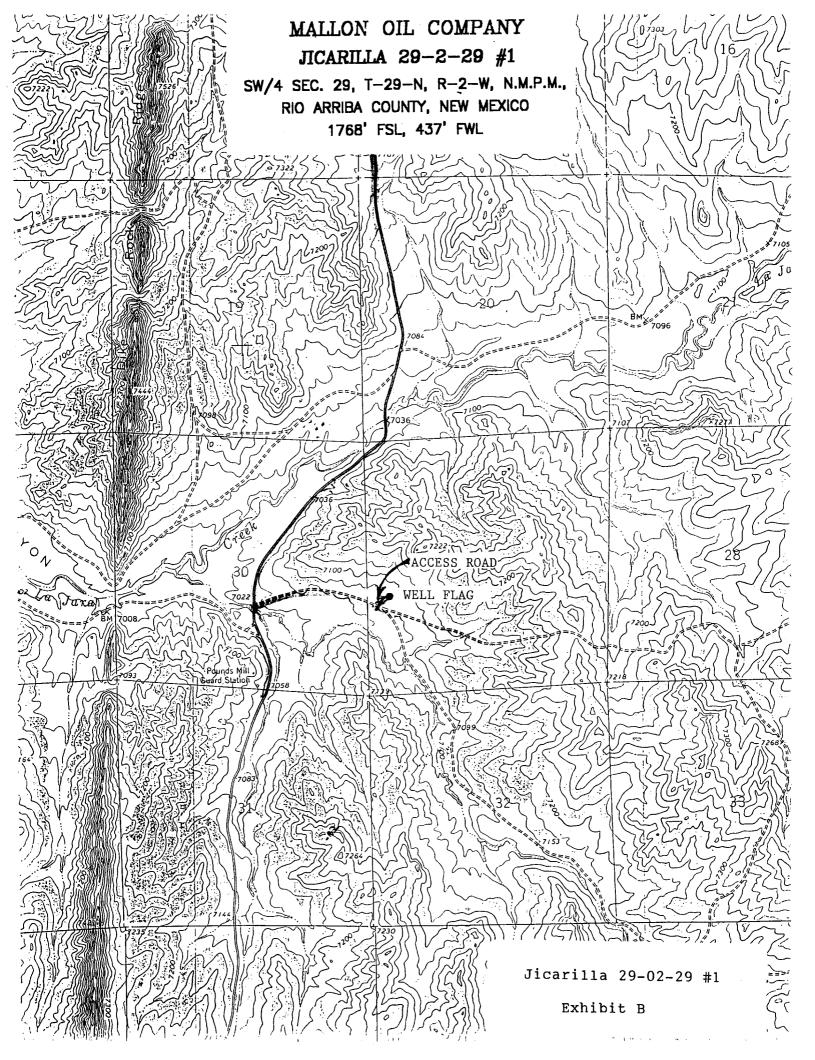
DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

P.O. Box 2088 Santa Fe, NM 87504-2088

☐ AMENDED REPORT

O DOX EUGO, Dai	ica re, Na	01004-2000										
			WELL I	OCATIO	N AND	AC	REAGE DED	ICATION P	LAT			
¹ API Number				Pool Code			Pool Name					
30-039-26115				72400			East Blanco; Pictured Cliffs EXT					
Property Code					Prop	operty Name				• Well Number		
24252					JICARII	LLA	29-02-29	29			1	
TOGRID No.					Oper	ator		[®] Elevation				
72400			MALLON OIL COMPANY							7076'		
¹⁰ Surface Location												
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/West line		County	
L	L 29 29-N		2-W		1768		SOUTH	437	WES	ST	RIO ARRIBA	
11 Bottom Hole Location If Different From Surface												
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	he	North/South line	Feet from the	East/Wes	st line	County	
12 Dedicated Acre	s 13 Joint	or Infill 14 (Consolidation	n Code 150	rder No.							
160												
NO ALLOW	ABLE W	TLL BE A	SSIGNED	TO THI	S COMPL	ETIC	ON UNTIL ALL	INTERESTS F	IAVE BE	CEN CO	NSOLIDATED	
		OR A N	ION-STA	NDARD U	UNIT HAS	BE	EN APPROVED	BY THE DIV	ISION	1111 00	TOOLIDATED	
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6 SET PIN & CAP								17 OPERATOR CERTIFICATION			ELCAPION	
STAMPED LS 8894				ľ		Ì		- 14			rication	
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NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

September 7, 1999

Mallon Oil Company
P. O. Box 2797
Durango, Colorado 81302
Attention: Chirsty Serrano



Telefax No. (970) 382-7650

Administrative Order NSL-4355

Dear Ms. Serrano:

Reference is made to the following: (i) your meeting in Santa Fe, New Mexico on Thursday, May 20, 1999 with the New Mexico Oil Conservation Division's ("Division") Chief Hearing Officer/Engineer, Mr. Michael E. Stogner; (ii) your application submitted at that time for four unorthodox gas well locations on Jicarilla Apache Tribal Lands in Rio Arriba County, New Mexico to be applicable to any and all formations and/or pools developed on 160-acre spacing from the surface to the base of the Pictured Cliffs formation, which presently includes but is not necessarily limited to the Cabresto Canyon-San Jose Pool, Cabresto Canyon-Nacimiento Pool, Cabresto Canyon-Ojo Alamo, East Blanco-Pictured Cliffs, and Undesignated Choza Mesa-Pictured Cliffs Pool; (iii) two similar applications filed with the Division on January 25, 1999; (iv) the Division's initial response to these two particular applications by letter from Mr. Stogner dated February 3, 1999; (v) Mallon Oil Company's ("Mallon") request, also submitted on May 20, 1999, for a procedure allowing for future gas wells to be drilled to those potential gas bearing intervals from the surface to the base of the Pictured Cliffs formation within a particular area operated by Mallon on Jicarilla Apache Tribal Lands; (vi) your telephone conversation with Mr. Stogner on Monday, June 7, 1999; (vii) your supplemental technical data submitted to the Division on July 15, 1999; (viii) the records of the Division in Santa Fe including the files on Division Administrative Orders NSP-1786. NSP-1787, NSP-1788, NSP-1788-A, NSL-2377, NSL-2377-A, NSL-2518, NSL-2518-A, NSL-2575. NSL-2575-A, NSL-2576, NSL-2576-A, NSL-2831, NSL-2831-A, NSL-2831-B, NSL-3981, NSL-3981-A, NSL-3992, NSL-3992-A, NSL-3993, NSL-3993-A, NSL-3994, NSL-3994-A, NSL-3995, NSL-3995-A, NSL-3995-B, NSL-4109, NSL-4109-A, NSL-4110, NSL-4111, NSL-4199, NSL-4200, NSL-4201, NSL-4202, NSL-4229, NSL-4230, NSL-4231, and NSL-4244; and (ix) the record in New Mexico Oil Conservation Commission Case No. 12119, which resulted in Order No. R-11231 on August 12, 1999, that served to amend Division Rule 104.

The Division Director Finds That:

(1) Mallon is the sole owner and operator of oil and gas mineral rights under Indian Mineral Development Agreement ("IMDA") No. 701-98-0013 with the Jicarilla Apache Tribe to a contract area in Rio Arriba County, New Mexico comprising the following described 39,360.00 acres, more or less:

TOWNSHIP 28 NORTH, RANGE 2 WEST, NMPM

Sections 1 through 18:

All

Sections 21 through 24:

All

TOWNSHIP 29 NORTH, RANGE 2 WEST, NMPM

Sections 4 through 9:

All

Sections 15 through 23:

All

Sections 26 through 36:

All

TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM

Sections 1 and 2:

All

Sections 11 through 14:

All

Sections 24:

All

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Section 25:

All

Section 27:

All

Section 28:

E/2

Sections 33 through 36:

All;

- (2) Mallon however is a partial owner but sole operator of oil and gas mineral rights underlying all or portions of ten other offsetting contract areas within Jicarilla Apache Tribal Lands all in Rio Arriba County, New Mexico, as further described below:
 - (a) a portion of IMDA No. 701-90-0002 covering a 640.00-acre area, more or less, comprising:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Section 28:

W/2

TOWNSHIP 31 NORTH, RANGE'3 WEST, NMPM

Section 32:

S/2;

(b) Jicarilla Contract No. 451 covering 2536.29 acres, more or less, of the following described lands:

TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM

Sections 3 and 4:

All

Sections 9 and 10:

All;

(c) Jicarilla Contract No. 452 covering 2235.53 acres, more or less, of the following described lands:

TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM Sections 5 through 8: All;

(d) Jicarilla Contract No. 457 covering 2532.97 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 3 and 4:

All

Sections 9 and 10:

All;

(e) Jicarilla Contract No. 458 covering 2249.19 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM Sections 5 through 8: All:

(f) Jicarilla Contract No. 459 covering 2267.20 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM Sections 17 through 20: All;

(g) Jicarilla Contract No. 460 covering 1999.99 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 15 and 16:

All

Section 21:

All;

(h) Jicarilla Contract No. 461 covering 1972.12 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 13 and 14:

All

Section 24:

All;

(i) Jicarilla Contract No. 462 covering 1920.00 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 22 and 23:

All

Section 26:

All; and

(j) Jicarilla Contract No. 464 covering 2454.35 acres, more or less, of the following described lands:

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 29 through 32:

All.

- (3) At the time these applications were filed the applicable rules and regulations for gas producing intervals developed on 160-acre spacing in northwest New Mexico required: (i) that wells be located no closer than 790 feet to any outer boundary of such tract nor closer than 130 feet to any quarter-quarter section or subdivision inner boundary; and (ii) limited the number of wells for each 160-acre drilling tract to only one;
- (4) On August 31, 1999, certain amendments to Division Rule 104 became effective; therefore, those gas bearing zones developed on 160-acre spacing that are the subject of this application (surface to the base of the Pictured Cliffs formation, including but not necessarily limited to the Cabresto Canyon-San Jose Pool, Cabresto Canyon-Nacimiento Pool, Cabresto Canyon-Ojo Alamo, East Blanco-Pictured Cliffs, and Undesignated Choza Mesa-Pictured Cliffs Pool) within the boundary formed by combining all of the above-described Jicarilla Apache Tribal contract areas, are subject to the current statewide rules for gas wells, which provides for: (i) 160-acre gas spacing and proration units, or drilling units; (ii) requires that wells be located no closer than 660 feet to any outer boundary of such tract nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary; and (iii) limits the number of wells for each 160-acre drilling tract to only one;
- (5) Mallon's applications, having been duly filed with the Division, meet the provisions of Division Rules: (i) 104.F, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999; and (ii) 1207.A(2), revised by Division Order No. R-11205, issued by the New Mexico Oil Conservation Commission in Case No. 12177 on June 17, 1999;
- (6) All oil and gas mineral interests within this combined area have been notified and no objections to Mallon's requests have been filed with the Division;
- (7) Approval of Mallon's existing or proposed:
 - (i) Jicarilla "28-2-11" Well No. 1 (API No. 30-039-26038),

located at an unorthodox gas well location 950 feet from the North line and 2050 feet from the West line (Unit C) of Section 11, Township 28 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within a standard 160-acre gas spacing and proration unit comprising the NW/4 of Section 11;

- (ii) Jicarilla "28-2-4" Well No. 1 (API No. 30-039-26037), located at an unorthodox gas well location 1135 feet from the North line and 1400 feet from the East line (Unit G) of Section 4, Township 28 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within a standard 140.73-acre gas spacing and proration unit comprising Lots 1 and 2 and the S/2 NE/4 (NE/4 equivalent) of Section 4;
- (iii) Jicarilla "28-2-10" Well No. 1 (API No. 30-039-26097), to be drilled at an unorthodox gas well location 754 feet from the North line and 824 feet from the West line (Unit D) of Section 10, Township 28 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within a standard 160-acre gas spacing and proration unit comprising the NW/4 of Section 10;
- (iv) Jicarilla "29-2-16" Well No. 2 (API No. 30-039-26109), to be drilled at an unorthodox gas well location 1761 feet from the North line and 602 feet from the East line (Unit H) of Section 16, Township 29 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within a standard 160-acre gas spacing and proration unit comprising the NE/4 of Section 16;
- (v) Jicarilla "29-2-29" Well No. 1 (API No. 30-039-26115), to be drilled at an unorthodox gas well location 1768 feet from the South line and 437 feet from the West line (Unit L) of Section 29, Township 29 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, within a standard 160-acre gas spacing and proration unit comprising the SW/4 of Section 29;
- (vi) Jicarilla "30-3-36" Well No. 1 (API No. 30-039-26103), to be drilled at an unorthodox gas well location 673 feet from the North line and 580 feet from the West line (Unit D) of Section 36, Township 30 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, within a standard 160-acre gas

spacing and proration unit comprising the NE/4 of Section 36:

are necessary for topographic and/or geological reasons;

- (8) As gas exploration and development on these Jicarilla Apache Tribal contract areas progresses it is anticipated by Mallon that additional unorthodox gas well locations will be necessary in order to: (i) avoid archeological sites; (ii) minimize disturbance to forested and wildlife habitats; (iii) minimize construction of wellpads by avoiding rugged terrain when practical; and (iv) position wellbores within geologically more favorable locations in order to maximize the likelihood of obtaining commercial gas production;
- (9) A procedure allowing Mallon to drill future gas wells to those gas bearing intervals from the surface to the base of the Pictured Cliffs formation that are developed on 160-acre spacing within the above-listed Jicarilla Apache Tribal contract areas at locations that are unorthodox based on the current well location requirements of Division Rule 104.C(3) without further administrative review by the Division Director should be adopted, provided that any such unorthodox location within that area formed by the combining the surface areas of the above-described contract areas is no closer than the required minimum orthodox distance (660 feet) to: (i) the outer boundary of this combined area; (ii) nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary;
- (10) Approval of this application is in the best interest of conservation, will serve to prevent waste, protects correlative rights, exhibits sound engineering principles, and will allow Mallon to develop its gas reserves within those gas producing intervals from the surface to the base of the Pictured Cliffs formation developed on 160-acre spacing underlying the above-described contracted areas; and
- (11) The provisions of this order should be amended if: (i) the operator within this area changes in any way; or (ii) significant changes are made to the oil and gas mineral interest ownership within any of these contracted areas.

It Is Therefore Ordered That:

(1) By the authority granted me under the provisions of Division Rule 104 F(2), revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, Mallon Oil Company ("Mallon") is hereby authorized to complete or drill the following six wells at unorthodox gas well locations to be applicable to any and all formations and/or pools developed on 160-acre spacing from the surface to the base of the Pictured Cliffs formations, all in Rio Arriba County, New Mexico:

Well Name and No.	API Number	Footage Location Section-Township-Range	Unit	Dedicated 160- Acre Tract
Jicarilla "28-2-11" Well No. 1	30-039-26038	950' FNL & 2050' FWL 11-T28N-R2W	С	NW/4
Jicarilla "28-2-4" Well No. 1	30-039-26037	1135' FNL & 1400' FEL 4-T28N-R2W	G	NE/4 equivalent
Jicarilla "28-2-10" Well No. 1	30-039-26097	754' FNL & 824' FWL 10-T28N-R2W	D	NW/4
Jicarilla "29-2-16" Well No. 2	30-039-26109	1761' FNL & 602' FEL 16-T29N-R2W	Н	NE/4
Jicarilla "29-2-29" ✓ Well No. 1	30-039-26115	1768' FSL & 437' FWL 29-T29N-R2W	L	SW/4
Jicarilla "30-3-36" Well No. 1	30-039-26103	673' FNL & 580' FWL 36-T30N-R3W	D	NE/4

It Is Further Ordered That:

Tribal Lands all in Rio Arriba County, New Mexico, hereinafter refereed to as the *Mallon/Jicarilla Consolidated Contract Area*, Mallon is hereby authorized to recomplete existing wells and drill new wells on Jicarilla Apache Tribal Lands in Rio Arriba County, New Mexico to be applicable to any and all formations and/or pools developed on 160-acre spacing from the surface to the base of the Pictured Cliffs formation, which presently includes but is not necessarily limited to the Cabresto Canyon-San Jose Pool, Cabresto Canyon-Nacimiento Pool, Cabresto Canyon-Ojo Alamo, East Blanco-Pictured Cliffs, and Undesignated Choza Mesa-Pictured Cliffs Pool that are unorthodox based on the well location requirements of Division Rule 104.C(3), provided however that any such unorthodox location is no closer than the required minimum orthodox distance (330 feet) to the outer boundary of the Mallon/Jicarilla Consolidated Contract Area nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary:

TOWNSHIP 28 NORTH, RANGE 2 WEST, NMPM

Sections 1 through 18: All Sections 21 through 24: All

TOWNSHIP 29 NORTH, RANGE 2 WEST, NMPM

Sections 4 through 9: All Sections 15 through 23: All Sections 26 through 36: All

TOWNSHIP 29 NORTH, RANGE 3 WEST, NMPM

Sections 1 through 14: All Sections 24: All

TOWNSHIP 30 NORTH, RANGE 3 WEST, NMPM

Sections 4 through 10:

All

Sections 13 through 36:

All

TOWNSHIP 31 NORTH, RANGE 3 WEST, NMPM

Section 32:

S/2

- (3) Any unorthodox location authorized by Ordering Paragraph (2) shall require the submission of a Division Form C-102, in accordance with Division Rules 1101 and 1102, and the approval of the Supervisor of the Division's District Office in Aztec. The Form C-102 for any such well shall include the following additional information: (i) the boundary of the Mallon/Jicarilla Consolidated Contract Area must be outlined; (ii) the designated 160 acres to be dedicated to the well is to be highlighted or outlined; and, (iii) this administrative order (NSL-4355) must be referenced.
- (4) The provisions of this order shall be amended if: (i) the operator within this area changes in any way; or (ii) significant changes are made to the oil and gas mineral interest ownership within any of these contracted areas.
- (5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Lori Wrotenbery

non Wedenberg by Dax

Director

LW/MES/kv

cc:

New Mexico Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Albuquerque