

DATE IN 8/7/01	SUSPENSE 8/27/01	ENGINEER DC	LOGGED KW	TYPE DHC
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122048271

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2948

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

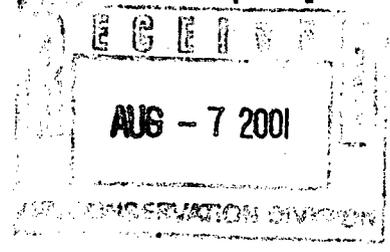
[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

- [A] Location - Spacing Unit - Directional Drilling
 NSL NSP DD SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR



[2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**

- [A] Working, Royalty or Overriding Royalty Interest Owners - (All common interest)
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Amy T. Spang Amy T. Spang Regulatory Compliance Analyst 8/2/01
 Print or Type Name Signature Title Date



ARCO Permian

200 WestLake Park Blvd.
Houston, Texas 77079
Post Office Box 4587
Houston, Texas 77210-4587

August 2, 2001

New Mexico Oil Conservation Division
Attn: David Catanach
2040 S. Pacheco Street
Sante Fe, NM 87505

Bureau of Land Management – Roswell
2909 W 2nd
Roswell, NM 88201

**RE: ARCO Permian Downhole Commingling Application
Jaguar Federal "26", Well No. 1
Wildcat (Atoka & Strawn)
Eddy County, NM**

Mr. Catanach:

ARCO Permian respectfully requests administrative approval for downhole commingling on the Jaguar Federal "26" Well Number 1. Attached are the supporting documents for this application.

If you have any questions, please contact me at (281) 366-7655. Please sent the approved permit to:

ARCO Permian
ATTN: Amy T. Spang
200 Westlake Park Blvd., Rm 266
Houston, TX 77079

Yours very truly,

Amy T. Spang
Regulatory Compliance Analyst

Attachments

xc: NMOCD District 2 – Artesia Office
Mike Brock – EUN
Jeff Robinson – WL4-245
Central Files – WL1 – 0.320
R/C Files

District I
1625 N. French Drive, Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Grande Road, Amarillo, NM 89410

District IV
1220 E. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

APPLICATION TYPE
 Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Arco Permian, P.O. Box 1610, Midland, TX. 79701
Address
Lease Jaguar Federal "26" #1 Well No. A, S26 T20S R21E County Eddy
Unit Letter-Section-Township-Range
OGRID No. 000990 Property Code 25336 API No. 30-015-31566 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Wildcat (Strawn)		Wildcat (Atoka)
Pool Code			
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	7358' - 7363' 7445' - 7451'		7673' - 7668'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure <small>(Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)</small>			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	sg. = 0.650		sg. = 0.650
Producing, Shut-In or New Zone	Producing		Producing
Date and Oil/Gas/Water Rates of Last Production. <small>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)</small>	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage <small>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)</small>	Oil Gas % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Amy T. Spang TITLE Regulatory Analyst DATE 8/2/01
TYPE OR PRINT NAME Amy T. Spang TELEPHONE NO. (281) 366-7655

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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

DISTRICT III
1000 Rio Brazos Ed., Artec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-31566	Pool Code	Pool Name Wildcat (Atoka + Strawn)
Property Code NM 25336	Property Name JAGUAR FEDERAL	Well Number 1
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 4403

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	26	20 S	21 E		735	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Amy T. Spang</i> Signature</p> <p>Amy T Spang Printed Name</p> <p>Regulatory Compliance Title Analyst</p> <p>8/2/01 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>OCTOBER 19, 2000 Date Surveyed JLP</p> <p><i>Ronald J. Eidson</i> Signature & Seal of Professional Surveyor</p> <p>W.O. Num 00-11-1311</p> <p>Certificate No. RONALD J. EIDSON, 3239 GARY G. EIDSON, 12641</p>

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address ARCO PERMIAN P.O. BOX 1610 MIDLAND, TX, 79702		² OGRID Number 000990
		³ Reason for Filing Code NW
⁴ API Number 30-015-31566	⁵ Pool Name WILDCAT (ATOKA & STRAWN)	⁶ Pool Code
⁷ Property Code NM 25336	⁸ Property Name JAGUAR FEDERAL "26"	⁹ Well Number 1

II. 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
A	26	20S	21E		735	NORTH	660	EAST	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County

¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 7/17/01	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
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III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ POD	²¹ O/G	²² POD ULSTR Location and Description
007057	EL PASO FIELD SERVICES	2812284	G	SAME
015694	NAVAJO		O	SAME

IV. Produced Water

²³ POD	²⁴ POD ULSTR Location and Description
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V. Well Completion Data

²⁵ Spud Date 2/11/01	²⁶ Ready Date 7/17/01	²⁷ TD 8395	²⁸ PBTD 7910	²⁹ Perforations 7358-8045	³⁰ DHC, MC DHC
³¹ Hole Size 12-1/4	³² Casing & Tubing Size 8-5/8	³³ Depth Set 1400	³⁴ Sacks Cement SURF		
7-7/8	5-1/2	8395	590' RKB		
	2-3/8 (TUBING)	7660			

VI. Well Test Data

³⁵ Date New Oil 7/17/01	³⁶ Gas Delivery Date 7/17/01	³⁷ Test Date 7/24/01	³⁸ Test Length 24 HRS.	³⁹ Tbg. Pressure 300	⁴⁰ Csg. Pressure 460
⁴¹ Choke Size 32/64	⁴² Oil 0	⁴³ Water 5	⁴⁴ Gas 83	⁴⁵ AOF	⁴⁶ Test Method F

⁴⁷ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Amy T. Spang</i> Printed name: AMY T. SPANG Title: REGULATORY COMPLIANCE ANALYST Date: 8/2/01 Phone: 281-366-7655	OIL CONSERVATION DIVISION	
	Approved by:	
	Title:	
	Approval Date:	

⁴⁸ If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date
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**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137

Expires: February 28, 1995

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM-25336	
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR ARCO Permian		7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. P.O. Box 1610, Midland, TX 79702 281-366-7655		8. FARM OR LEASE NAME, WELL NO. JAGUAR FEDERAL "26" 1	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 735' ENL & 660' FEL At top prod. interval reported below At total depth		9. API WELL NO. 30-015-31566	
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT WILDCAT (ATOKA & STRAWN)	
DATE ISSUED		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 26-T20S-R21E	
15. DATE SPUDDED 2/11/01		12. COUNTY OR PARISH EDDY	
16. DATE T.D. REACHED 5/12/01		13. STATE NM	
17. DATE COMPL. (Ready to prod.) 7/16/01		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 4403' GR	
19. ELEV. CASINGHEAD		20. TOTAL DEPTH, MD & TVD 8395'	
21. PLUG, BACK T.D., MD & TVD 7910'		22. IF MULTIPLE COMPL., HOW MANY* 2	
23. INTERVALS DRILLED BY →		ROTARY TOOLS X	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* 7358'-7673' (Atoka + Strawn)		CABLE TOOLS	
26. TYPE ELECTRIC AND OTHER LOGS RUN MICRO CEL/ GR		25. WAS DIRECTIONAL SURVEY MADE N	
27. WAS WELL CORED N		28. CASING RECORD (Report all strings set in well)	

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8	32	1400	12-1/4	SURF	NA
5-1/2	17	8395	7-7/8	590' RKB	NA

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8	7660	

31. PERFORATION RECORD (Interval, size and number) 7358-7363 (6 HOLES) & 7451'-7445' (7 HOLES) 7668-7673 (12 HOLES) 8010-8014 (8 HOLES) & 8043-8045 (5 HOLES)		32. ACID SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 7668'-7673' ACID W/ 600 GALS 7.5% HCL 7358'-7445' ACID W/ 1500 GALS 7.5% HCL 7358'-7673' FRAC W/ 52000 # 20/40 SAND 8010'-8045' CTRP SET @ 7910'	
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33. PRODUCTION							
DATE FIRST PRODUCTION 7/17/01		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) FLOWING				WELL STATUS (Producing or shut-in) PRODUCING	
DATE OF TEST 7/26/01	HOURS TESTED 24	CHOKE SIZE 32/64	PROD'N. FOR TEST PERIOD →	OIL - BBL. 0	GAS - MCF. 83	WATER - BBL. 5	GAS - OIL RATIO
FLOW. TUBING PRESS. 300	CASING PRESSURE 460	CALCULATED 24-HOUR RATE →	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) SOLD	TEST WITNESSED BY
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35. LIST OF ATTACHMENTS

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

SIGNED *Amy T. Spang* TITLE REGULATORY COMPLIANCE ANALYST DATE 8/2/01

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
ABO SHALE	3482					
CISCO	5802					
CANYON	6552					
STRAWN	7193					
ATOKA	7480					
MORROW	7722					
MISSISSIPPIAN	8092					

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30 2000

5. Lease Serial No.
NM 25336

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
JAGUAR FEDERAL #1

9. API Well No.
30-015-31566

10. Field and Pool, or Exploratory Area
WILDCAT (ATOKA & STRAWN)

11. County or Parish, State
EDDY NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
ARCO Permian

3a. Address
P.O. BOX 1610, MIDLAND, TX 79702

3b. Phone No. (include area code)
281-366-7655

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**735' ENL & 660' FEL
SEC 26, T20S, R21E**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent - <i>DHC Application</i>	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other <u>COMPLETION</u>
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

6/21/01 Perf'd Morrow @ 8010'-8014' & 8043'-8045' (13 holes). Set RBP @ 8100'.

6/22/01 Acidized Morrow perfs w/ 800 gals 7.5% HCl. No gas produced.

6/23/01 Released RBP & reset @ 7800'.

6/24/01 Perf'd Atoka @ 7668'-7673' (12 holes). Acidized Atoka perfs w 600 gal 7.5% HCl.

6/27/01 Set RBP @ 7550'. Perf'd Strawn @ 7358-7363' (6 holes) & 7451'-7445' (7 holes). Acidize Strawn perfs w/ 1500 gal 7.5% HCl.

7/3/01 Frac'd Atoka/Strawn perfs from 7358-7673' (15 holes) down 3-1/2" frac tubing w/ PKR set @ 7207'.

7/12/01 Drilled on CIBP to 7910'.

7/17/01 TOPS. Initial test (7/26/01): 0 oil, 5 water, 83 gas.

14. I hereby certify that the foregoing is true and correct
Name (Printed Typed) **AMY T. SPANG** Title **REGULATORY COMPLIANCE ANALYST**

Amy T. Spang Date **8/2/01**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office _____

LOCATION Jaguar Federal 26 #1
Sec 26 T20S R21E Eddy County, New Mexico
LEASE & WELL (Give Unit, Section, Township and Range)
OPERATOR BP P. O. Box 1610 Midland, Texas 79701
DRILLING CONTRACTOR NABORS DRILLING USA, INC.

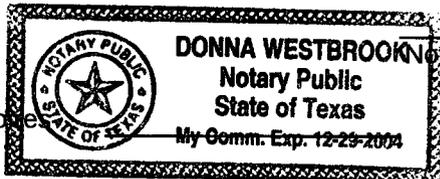
The Undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above-described well and that he has conducted deviation tests and obtained the following results:

<u>DEGREES @ DEPTH</u>	<u>DEGREES @ DEPTH</u>	<u>DEGREES @ DEPTH</u>	<u>DEGREES @ DEPTH</u>
<u>3/4 1979</u>	<u>2 1/4 8400</u>		
<u>3/4 2494</u>			
<u>1 2911</u>			
<u>1/2 3929</u>			
<u>1/2 4410</u>			
<u>1/2 4956</u>			
<u>1 1/4 5471</u>			
<u>1 3/4 5955</u>			
<u>4 1/2 6395</u>			
<u>3 3/4 6555</u>			
<u>3 1/2 6683</u>			
<u>3 1/2 6909</u>			
<u>2 1/2 7166</u>			
<u>2 1/2 7584</u>			
<u>3 8034</u>			

Drilling Contractor Nabors Drilling USA, Inc.
 By *Brent Sanders*
Brent Sanders, Manager-Contracts & Marketing

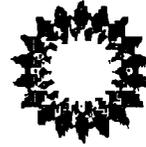
Subscribed and sworn to before me this 26th day of May, 2001

Donna Westbrook



My Commission Expires MIDLAND County TEXAS

bp



Fax

To: David Catanach From: Amy Spang / Arco Permian
Fax: (505) 476-3402 Fax: _____
Phone: _____ Phone: (281) 366-7655
Pages: 3 Date: 8/20/01
Re: Form C-107-A (Incomplete) CC: _____

Urgent For Review Please Comment Please Reply Please Recycle

• Comments:

Mr. Catanach,

Attached is the requested Administrative
Application checklist for Arco Permian's - Jaguar Federal
26' - well # 1. You should also receive the allocation method
data by Fed Ex this morning (8/20/01). Please call me at
(281) 366-7655 if you don't receive it.

Thanks,
Amy



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

August 14, 2001

ARCO Permian
P.O. Box 4587
Houston, Texas 77210-4587

Attention: Ms. Amy T. Spang

Re: Form C-107-A
Jaguar Federal "26" No. 1

Dear Ms. Spang:

This letter acknowledges the receipt of your administrative application dated August 2, 2001, to downhole commingle the the Strawn and Atoka formations in the Jaguar "26" Federal Well No. 1 located in Section 26, Township 20 South, Range 21 East, NMPM, Eddy County, New Mexico. The Division received your application on August 7, 2001.

Our preliminary review indicates that the information provided in the application is not sufficient to process the administrative order. The following information is necessary:

- a) **Administrative Application Checklist**
- b) **A description of the method by which production shall be allocated to each of the commingled zones and supporting data.**

Since the submitted information is insufficient to review, the application was **Ruled Incomplete** on August 14, 2001. Please submit the above stated information by August 21, 2001.

The Division cannot proceed with your application until the required information is submitted. Upon receipt, the division will continue to process your application. The additional information can be faxed, or mailed to the Division. If the necessary information is not submitted, your application will be returned to you.

If you have any questions, please contact me in Santa Fe, at (505) 476-3466.

Sincerely,

David Catanach
Petroleum Engineer

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

- [1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**
- [A] Location - Spacing Unit - Simultaneous Dedication
 NSL NSP SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
 DHC CTB PLC PC OLS OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
 WFX PMX SWD IPI EOR PPR
- [D] Other: Specify _____

- [2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply**
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Amy T. Spang
Print or Type Name

Amy T Spang
Signature

Regulatory Compliance Analyst
Title

8/20/01
Date

amy.t.spang @ bp.com
e-mail Address



ARCO Permian

200 WestLake Park Blvd.
Houston, Texas 77079
Post Office Box 4587
Houston, Texas 77210-4587

August 16, 2001

New Mexico Oil Conservation Division
Attn: David Catanach
2040 S. Poncho Street
Santa Fe, New Mexico 87505

**RE: ARCO Permian Downhole Commingling Application – Additional Information
Jaguar Federal "26" Well No. 1
Wildcat (Atoka & Strawn)
Eddy County, NM**

Mr. Catanach:

ARCO Permian submitted a downhole commingle application to your office on August 2, 2001. I have amended the C-107A form to include the well allocation percentage for each zone and added supporting documentation.

Please contact me if any additional information is required at (281) 366-7655. The approved permit can be sent to:

ARCO Permian
Attn: Amy T. Spang
200 Westlake Park Blvd., Rm 266
Houston, Texas 77079

Yours very truly,

Amy T. Spang
Regulatory Compliance Analyst

Xc: NMOCD District 2 – Artesia Office
Mike Brock – EUN
Jeff Robinson – 245
Central Files
R/C Files

District I
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

District II
811 South First Street, Artesia, NM 88210

OIL CONSERVATION DIVISION

APPLICATION TYPE

District III
1000 Rio Brazos Road, Aztec, NM 87410

2040 South Pacheco
Santa Fe, New Mexico 87505

Single Well
 Establish Pre-Approved Pools
EXISTING WELLBORE
 Yes No

District IV
2040 South Pacheco, Santa Fe, NM 87505

APPLICATION FOR DOWNHOLE COMMINGLING

Operator ARCO Permian, P.O. Box 1610, Midland, TX. 79701
Address
Lease Jaguar Federal "26" #1 Well No. A, S26, T20S, R21E County Eddy
Unit Letter-Section-Township-Range
OGRID No. 000990 Property Code 25336 API No. 30-019-31566 Lease Type: Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<u>Wildcat (Strawn)</u>		<u>Wildcat (Atoka)</u>
Pool Code			
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	<u>7358' - 7363'</u> <u>7445' - 7451'</u>		<u>7673' - 7668'</u>
Method of Production (Flowing or Artificial Lift)	<u>Flowing</u>		<u>Flowing</u>
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	<u>s.g. = 0.650</u>		<u>s.g. = 0.650</u>
Producing, Shut-In or New Zone	<u>Producing</u>		<u>Producing</u>
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil % Gas <u>77</u> %	Oil % Gas %	Oil % Gas <u>23</u> %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No

Are all produced fluids from all commingled zones compatible with each other? Yes No

Will commingling decrease the value of production? Yes No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No

NMOCD Reference Case No. applicable to this well: _____

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Amy T. Spang TITLE Regulatory Comp. Analyst DATE 8/16/01

TYPE OR PRINT NAME Amy T. Spang TELEPHONE NO. (281) 366-7655

Well Allocation Percentage for Each Zone

To downhole commingle the Strawn and Atoka in the Jaguar Federal "26", well no. 1, the production in each zone was calculated based on the porosity and net pay.

The Atoka has 5' of net pay with an average porosity of 8% and the Strawn has 11' with 12% porosity. Based on a weighted average the (porosity X net feet) in each zone the production split is 23% for the Atoka and 77% for the Strawn.

This was calculated by:

$$(5 \cdot .08) / (5 \cdot .08 + 11 \cdot .12) = 23\% \text{ Atoka}$$

$$100 - 23 = 77\% \text{ Strawn}$$

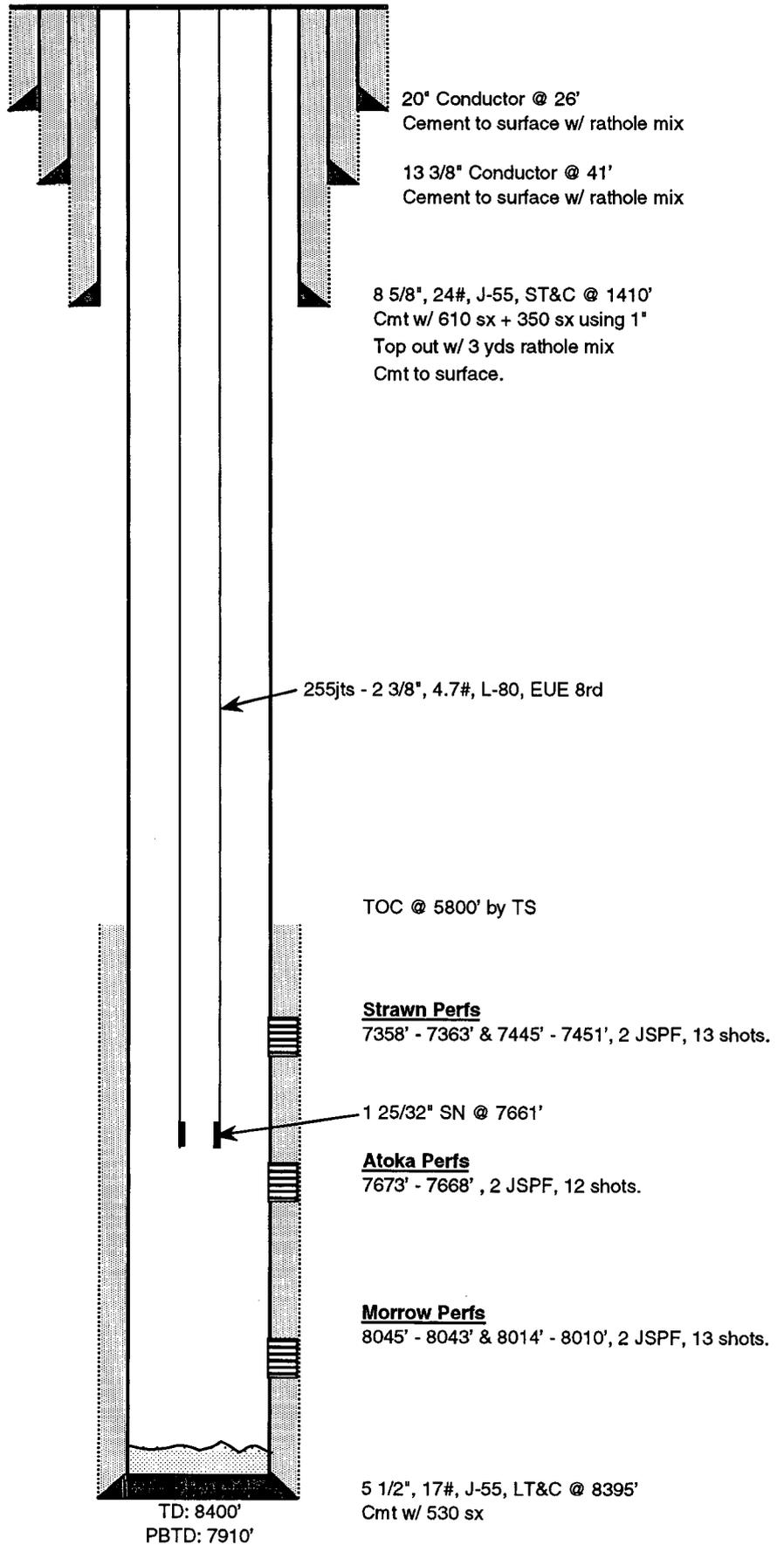
JAGUAR FEDERAL "26" # 1
Little Box (Morrow)

735' FNL & 660' FEL, Sec. 26
Unit A, T-20-S, R-21E
Eddy County, New Mexico

RKB 4421' Spud: 2/12/01
GL 4403' RR: 5/22/01

API # 30-015-31566

NAD 27:
LAT: 32° 32' 50.98" N
LONG: 104° 54' 29.00" W



DISTRICT I
P.O. Box 1000, Hobbs, NM 88241-1000

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0710

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-31566	Pool Code	Pool Name Wildcat (Atoka + Strawn)
Property Code NM 25336	Property Name JAGUAR FEDERAL	Well Number 1
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 4403

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	26	20 S	21 E		735	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p align="center">OPERATOR CERTIFICATION</p> <p><i>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><u>Amy T. Spang</u> Signature</p> <p><u>Amy T. Spang</u> Printed Name</p> <p><u>Regulatory Compliance Analyst</u> Title</p> <p><u>8/2/01</u> Date</p>
	<p align="center">SURVEYOR CERTIFICATION</p> <p><i>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 belief.</i></p> <p align="center">OCTOBER 19, 2000</p> <p>Date Surveyed JLP</p> <p>Signature & Seal of Professional Surveyor <u>Ronald L. Eidson</u> 10/23/00 W.O. Num 00-1311</p> <p>Certificate No. RONALD L. EIDSON, 3239 GARY G. EIDSON, 12641</p>

***New Mexico Oil Conservation Division---Engineering Bureau
Administrative Application Process Documentation***

Date Application Received: 8/7/01

Date of Preliminary Review: 8/14/01
(Note: Must be within 10-days of received date)

Results: Application Complete X Application Incomplete

Date Incomplete Letter Sent: 8/14/01

Deadline to Submit Requested Information: 8/21/01

Phone Call Date: _____
(Note: Only applies if requested data is not submitted within the 7-day deadline)

Phone Log Completed? Yes No

Date Application Processed: _____

Date Application Returned: _____
(Note: Only as a last resort & only after repeated attempts by the Division to obtain the necessary information to process the application)