

Mr. Michael E. Stogner

November 4, 1991

Page 2

Wildcat

In summary, Marathon feels that as a prudent operator, we can effectively downhole commingle the ~~La Huerta~~ ⁶⁰³ Strawn and La Huerta Atoka and maximize production by doing so. We look forward to your approval of this application.

Sincerely,

Undesignated

Steven P. Guidry

Steven P. Guidry
Production Superintendent

Area Super

ATTACHMENT NO. 1

Request for exemption to Rule 303-A

Pioneer Federal Com No. 1

Worldcat Gas
~~La Huerta (Strawn)~~, La Huerta (Atoka) pools
Eddy County, New Mexico

Undesignated Gas
Reference: Section C-2 Rule 303

- A. Marathon Oil Company
P. O. Box 552
Midland, TX 79702
- B. Pioneer Federal Com No. 1
Unit G, 1980' FNL & 1740' FEL
Section 19, T-21-S, R-27-E
Eddy county, New Mexico (See attachment No. 2 Form 3160-5)
- C. Plat of area can be seen on attachments 3 & 4.
- D. Form C-116 for ~~La Huerta~~ *Worldcat* Strawn Completion (Attachment 5)
Form C-116 for La Huerta Atoka Completion (Attachment 6)
- E. Natural Completion - Both the ~~La Huerta Strawn~~ & ~~La Huerta Atoka~~ *Undesignated Gas* were perforated and hooked up to flow w/no stimulation. Based on pressure response following perforating, the La Huerta Strawn is providing the majority of the wells production.
- F. Bottomhole pressure for both zones in question was estimated from hydrostatic fluid column used during workover operations.

La Huerta Strawn - 4621 PSI

La Huerta Atoka - 4729 PSI
- G. Fluids have been analyzed and no incompatibilities exist.
- H. Analysis of the produced fluid indicates no reduction in value from commingling.

- I. Estimated production assuming 90% contribution for the ~~La Huerta~~ Strawn based on pressure response following perforating.

<u>Zone</u>	<u>Oil (BOPD)</u>	<u>Oil (%)</u>	<u>Gas (MCFPD)</u>	<u>Gas (%)</u>	<u>Water (BWPD)</u>
<i>Wildcat</i> La Huerta Strawn <i>Gas</i> (Estimated)	13.5	90	2285.8	82.8	0
<i>Undesignated</i> La Huerta Atoka <i>Gas</i> (Estimated)	1.5	10	476.2	17.2	0

- J. By copy of this letter via certified mail, we are notifying all offset operators of the proposed commingling.

ATTACHMENT NO. 2

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
 Marathon Oil Company

3. Address and Telephone No.
 P. O. Box 552 Midland, TX 79702

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
 Unit G 1980' FNL & 1740' FEL
 Sec. 19, T-21-S, R-27-E

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
 Pioneer Federal Com #1

9. API Well No.
 30-015-24777

10. Field and Pool, or Exploratory Area
 La Huerta-Strawn/Atoka *gas*

11. County or Parish, State
 Eddy County, New Mexico *Witka*

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Downhole Commingle</u>	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Request authorization to downhole commingle the La Huerta Strawn and La Huerta Atoka zones.

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

Signed Steven P. Guidry *Steven P. Guidry* Title Production Superintendent Date 11-5-91

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
 Conditions of approval, if any:

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 statement or representations as to any matter within its jurisdiction.

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

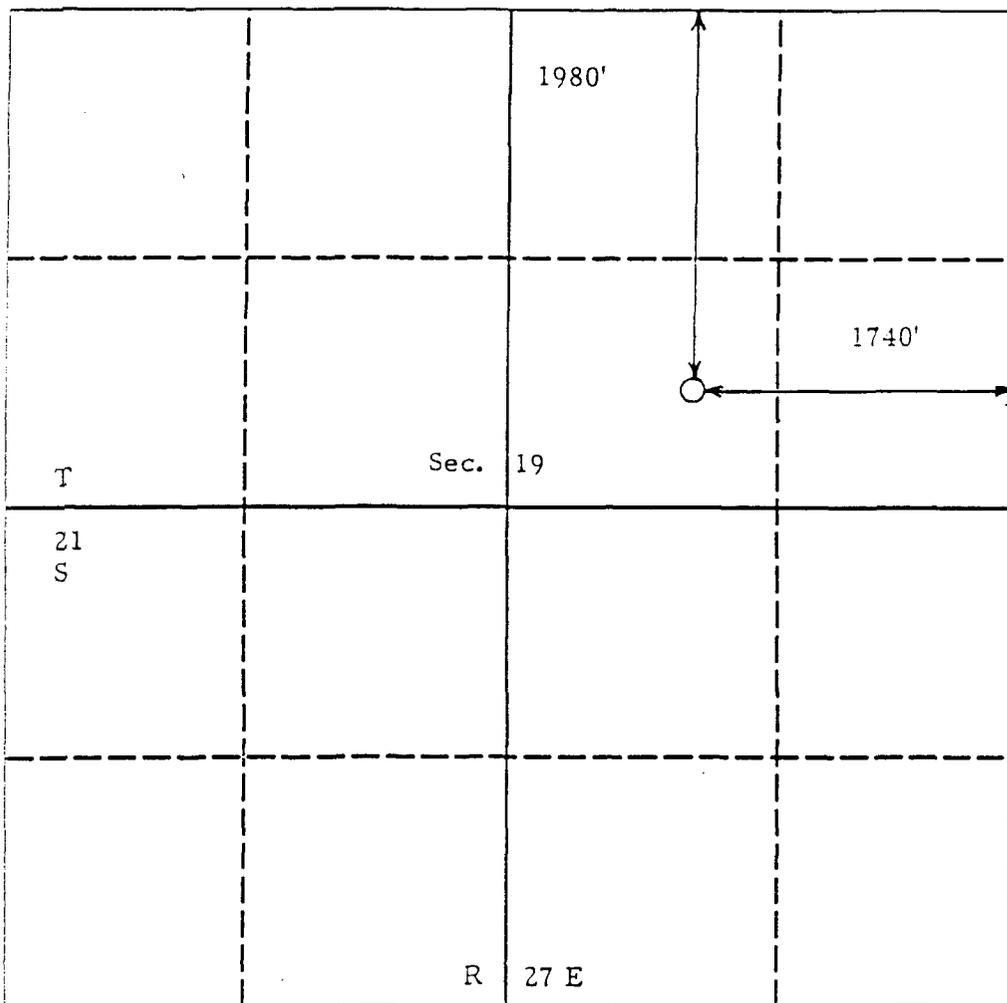
Operator Marathon Oil Company			Lease Pioneer Federal		Well No. 1
Unit Letter G	Section 19	Township 21S	Range 27E	County NMPM Eddy	
Actual Footage Location of Well: 1980 feet from the North line and 1740 feet from the East line					
Ground level Elev. 3181'	Producing Formation Wildcat La Huerta Strawn		Pool La Huerta Strawn	Dedicated Acreage: 320 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

Yes No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Steven P. Guidry
Signature

Steven P. Guidry
Printed Name

Production Superintendent
Position

Marathon Oil Company
Company

11-5-91
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

Signature & Seal of Professional Surveyor _____

Certificate No. _____

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

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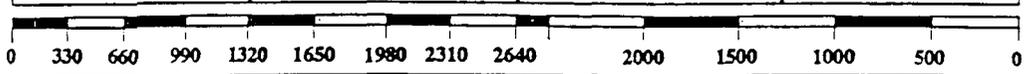
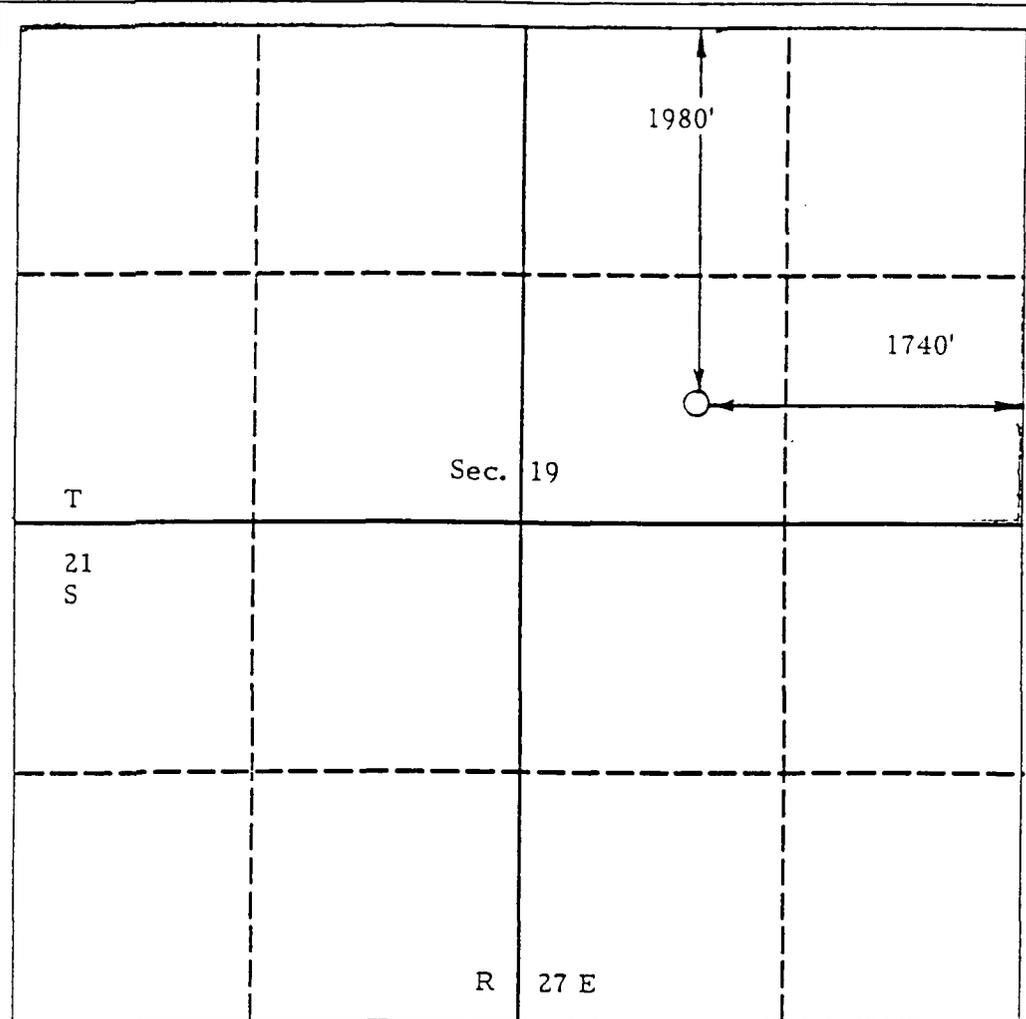
Ground level Elev. 3181'	Producing Formation La Huerta Atoka	Pool <i>Under is needed</i> La Huerta Atoka	Dedicated Acreage: 320 Acres
-----------------------------	--	---	---------------------------------

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
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Steven P. Guidry
Printed Name
Production Superintendent
Position
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Company
11-5-91
Date

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Signature & Seal of Professional Surveyor _____

Certificate No. _____

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Submit 2 copies to appropriate District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
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P.O. Drawer DD, Artesia, NM 88210
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1000 Rio Brazos Rd., Aztec, NM 87410

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Address P. O. Box 552 Midland, TX 79702		Pool La Tierra (Strawn) 2 & 5		County Eddy						
LEASE NAME Pioneer Federal Com	WELL NO. 1	LOCATION			DATE OF TEST 10/15/91 (Estimated)	CHOKE SIZE 13/64"	TBG PRESS 3000	DAILY ALLOW. ABLE Gas	LENGTH OF TEST IN HOURS 24	Completion		Special <input checked="" type="checkbox"/>
		U F	S 19	T 21						R 27	WATER BBL'S 0	

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Steven P. Guidry
Signature
Steven P. Guidry, Production Superintendent

Printed name and title

11-5-91
Date

505-393-7106
Telephone No.

Submit 2 copies to Appropriate District Office.
 DISTRICT I
 P.O. Box 1980, Hobbs, NM 88240
 DISTRICT II
 P.O. Drawer DD, Artesia, NM 88210
 DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
 Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
 P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

Form C-116
 Revised 1/1/89

GAS - OIL RATIO TEST

Operator Marathon Oil Company		Pool La Huerta (Atoka) <i>Gas</i>		County Eddy											
Address P. O. Box 552 Midland, TX 79702		TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Completion		Special <input checked="" type="checkbox"/> X											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU FT/BBL		
		U	S	T						R	WATER BBL.	GRAV. OIL		OIL BBL.	GAS M.C.F.
Pioneer Federal Com	1	6	19	21	27	10/15/91 (Estimated)	13/64"	3000	Gas	24	0	53	1.5	276.2	18,400

INSTRUCTIONS:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.
 Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
 Report casing pressure in lieu of tubing pressure for any well producing through casing.
 (See Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature Steven P. Guidry (Rats are estimated)
 Steven P. Guidry, Production Superintendent
 Printed name and title
 Date 11-5-91 Telephone No. 505-393-7106



Laboratory Services

1331 Tasker Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Marathon Oil Co.
Attention: Mr. Mike Greenough
P. O. Box 2409
Hobbs, New Mexico 88240

SAMPLE Pioneer Federal
IDENTIFICATION: Com Well No. 1
COMPANY: Marathon Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED:	GAS ()	LIQUID (XX)
ANALYSIS DATE: 11-04-91	SAMPLED BY: Mike Greenough	
PRESSURE - PSIG	ANALYSIS BY: Rolland Perry	
SAMPLE TEMP. °F	C1 to C2 RATIO	
ATMOS. TEMP. °F	CO2 to C2 RATIO	

REMARKS: Sample Of Condensate.

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	LIQ. VOL. PERCENT
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.00	0.00
Carbon Dioxide (CO2)	0.00	0.00
Methane (C1)	0.26	0.10
Ethane (C2)	0.69	0.43
Propane (C3)	2.29	1.47
I-Butane (IC4)	2.14	1.63
N-Butane (NC4)	4.14	3.03
I-Pentane (IC5)	5.80	4.94
N-Pentane (NC5)	4.62	3.89
Hexane (C6)	12.65	12.10
Heptanes Plus (C7+)	<u>67.41</u>	<u>72.41</u>
	100.00	100.00

SPECIFIC GRAVITY -
CALCULATED

0.664

API Gravity - 55.5 @ 60 F

VAPOR PRESSURE (ABSOLUTE) -
CALCULATED

30.17

MOLECULAR WT.

90.87

CU. FT. /GAL

23.81

SURFACE CASING 13 3/8", 48#, H-40 set @ 517'

w/475 sx (circ).

INTERMEDIATE CASING 8 5/8", 24 & 32# set @ 2609'

w/DV tool @ 1503'. Cemented w/a total of 2510 sx
(did not circ).

PRODUCTION CASING 4 1/2", 11.6 & 13.5#, N-80 set @

11,500'. Cemented w/325 sx (did not circ).

TUBING 2 3/8" w/packer set @ 10,116'.

LINER No liner.

RODS None

PUMPING UNIT None

PRESENT COMPLETION: (Formation and Interval)

Strawn 10,258'-10,594'

8 5/8" @ 2609'

Wolfcamp 8952-60'
squeezed w/100 sx

DV Tool @ 9979'

2 3/8" tbg & pkr
@ 10,116'

Strawn 10,258-10,594'

CIBP @ 11,150'
w/45' cmt

Morrow 11,187-
11,216'

CIBP @ 11,150'
w/10' cmt

Morrow 11,267-
11,332'

Morrow 11,361-
11,431'

4 1/2" @ 11,500'

PBTD
1,458'

HISTORY

PREPARED BY: Carl A. Bagwell

DATE 10/01/91