

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



G-32-TZIS-R37E

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.

Print or Type Name

Signature

Title

Date

e-mail Address

Chevron-Texaco

North America Upstream
Midcontinent Business Unit
11111 S. Wilcrest, Rm S1052
Houston, Texas 77099
Tel (281) 561-3659
Fax (281) 561-3576
mrvillalva@chevrontexaco.com

Michael R. Villalva
Petroleum Engineer

RECEIVED

MAR 07 2005

OIL CONSERVATION
DIVISION

March 2, 2005

ChevronTexaco

Request for Administrative Approval of
Unorthodox Oil Well Location and
Simultaneous Dedication

Mr. Michael E. Stogner
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Stogner:

ChevronTexaco respectfully requests administrative approval of an unorthodox oil well location for the following well:

W.T. McComack #23
2300' FNL & 1400' FEL, SW/4 NE/4 of
Section 32, T21S, R37E, Unit Letter G
Lea County, New Mexico

The proposed well will be as an infill producer in the Penrose Skelly, Grayburg Pool, which is an oil pool spaced on 40 acres. This well is a follow-up to our recent infill drilling in the same Pool which recently concluded. ChevronTexaco's technical analysis of the reservoir still supports the contention that typical Grayburg wells cannot drain 40 acres.

The SW/4 NE/4 of Section 32 will be simultaneously dedicated in the Penrose Skelly, Grayburg Pool to the proposed well and to the W.T. McComack #21. The W.T. McComack #21 was drilled in 2004 and is currently producing as a Penrose Skelly, Grayburg producer. ChevronTexaco also requests approval of the simultaneous dedication.

This application is based on geological and engineering analysis. The analysis and justification for this request is attached as Exhibit 1, along with other supporting documentation. There are six wells that have produced the Grayburg formation in the S/2 NE/4 and N/2 SE/4 of Section 32. The proposed well will be located in the approximate center of those wells. Based on drainage calculations, ChevronTexaco believes that drilling the infill well will recover reserves that would not be recovered by existing Grayburg producers.

A land plat highlighting the proposed well's location is attached as Exhibit 2. The E/2 of Section 32 is covered by a single fee lease and has common royalty and working interest ownerships. For that reason and the proposed location of the infill well, there are no adversely affected interest owners and no one has been notified of this application.

30-025-
36744

March 2, 2005

Page 2

If you have any questions concerning this application or need additional information, please contact me by phone at (281) 561-3659 or by email at mrvallalva@chevrontexaco.com. If I am not available, you can also reach George Pritchard by phone at (281) 561-4918 or by email at GPritchard@chevrontexaco.com. Thank you for consideration of this matter.

Sincerely,

A handwritten signature in black ink that reads "Michael R. Villalva". The signature is written in a cursive style with a large, stylized 'M' and 'V'.

Michael R. Villalva
Petroleum Engineer

Attachments

cc: NMOCD District 1 – Hobbs, NM
Michael R. Villalva
George Pritchard
Well File

NOTIFICATION LIST

Application of Chevron U.S.A. Inc. for Administrative Approval of an Unorthodox Oil Well Location and Simultaneous Dedication:

W.T. McComack #23

2300' FNL & 1400' FEL

Section 32, T21S, R37E, Unit Letter G

Lea County, New Mexico

Offset Operators, Working Interest Owners, E/2 Section 32:

- | | | |
|----|---|------------------|
| 1. | Chevron U.S.A. Inc.
11111 S. Wilcrest
Houston, TX 77099 | Operator/100% WI |
|----|---|------------------|

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



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Check One Only for [B] or [C]

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☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

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U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
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Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Michael R. Villalva
 Print or Type Name

Signature

Petroleum Engineer
 Title

Mar 2, 2005
 Date

mrvillalva@chevrontexaco.com
 e-mail Address

EXHIBIT 1

ENGINEERING AND GEOLOGICAL JUSTIFICATION

Application of Chevron U.S.A. Inc. for Administrative Approval of an Unorthodox Oil Well Location and Simultaneous Dedication:

W.T. McComack #23

2300' FNL & 1400' FEL

Section 32, T21S, R37E, Unit Letter G

Lea County, New Mexico

PRIMARY OBJECTIVE: GRAYBURG

SUPPORTING DATA:

1. Chevron U.S.A. Inc. (Chevron) is the operator of the proposed W.T. McComack #23 well (Exhibit 3). The proposed total depth is 4300' in the top of the San Andres formation.
2. The completion will be in the Penrose Skelly, Grayburg Oil Pool and the proposed location encroaches toward the following wells (Exhibit 4).

Operator	Well	Location	Formation	Cum Prod		Current Prod		Status
				MBO	MMCF	BOPD	MCFPD	
Chevron	McComack #5	32-G	Grayburg	76	0			P&A
Chevron	McComack #6	32-J	Grayburg	78	523	6	258	Producing
Chevron	McComack #7	32-J	Grayburg	33	0			P&A
Chevron	McComack #8	32-H	Grayburg	65	694	4	292	Producing
Chevron	McComack #17	32-I	Grayburg	7	206	12	570	Producing
Chevron	McComack #21	32-G	Grayburg	0	5	15	159	Producing

3. The proposed W.T. McComack #23 unorthodox Grayburg location is based primarily on drainage considerations:

a. Grayburg Reservoir

The Grayburg is a series of alternating subtidal and supratidal dolomites with the subtidal rock having porosity and hydrocarbons while the supratidal rock is tight. The Grayburg depositional environments varied rapidly so that many porous and tight intervals are not continuous from well to well on 40-acre spacing. Tight dolomite and/or anhydrite intervals within the Grayburg create vertical and horizontal flow barriers between different zones of porosity. Additionally, average porosity of the Grayburg is less than 10%, and the average permeability is less than 1 millidarcy. For all of these reasons, Grayburg wells are not usually capable of draining a 40-acre proration unit.

The reservoir was also analyzed by mapping the Hydrocarbon Pore Volume (HCPV) (Exhibit 5). HCPV is the product of feet of net pay (h) times average porosity (phi) times oil saturation (S_o). The attached map is the arithmetic product of grids interpreted from those values. The values were obtained as follows:

1. Net pay was read from either modern neutron-density logs or estimated from a map developed from gross pay times net-to-gross ratio (Exhibit 4).
2. Average porosity was calculated from modern well logs using a minimum of 6% crossplot porosity and a maximum of 20%.
3. Oil saturation was calculated from a fractional flow curve using representative water cut values.

The following table provides drainage areas calculated from the HCPV map and reserves of the offsetting wells.

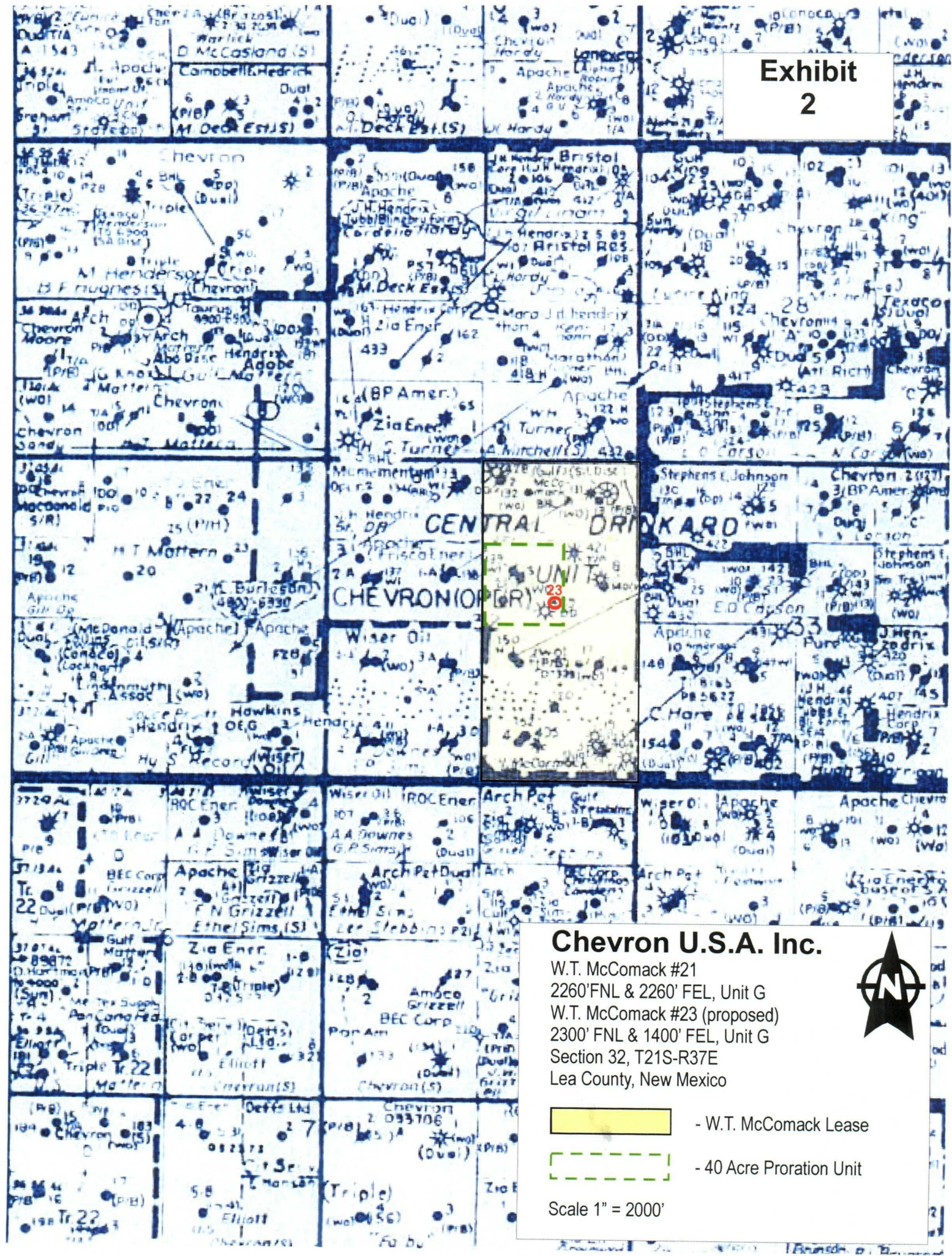
Operator	Well	Location	Formation	Drainage Acres	EUR	
					MBO	MMCF
Chevron	McComack #5	32-G	Grayburg	14	76	0
Chevron	McComack #6	32-J	Grayburg	18	99	844
Chevron	McComack #7	32-J	Grayburg	6	33	0
Chevron	McComack #8	32-H	Grayburg	15	72	1521
Chevron	McComack #17	32-I	Grayburg	2	12	803
Chevron	McComack #21	32-G	Grayburg	9	50	356

As seen above, the average drainage area of the offsetting locations is 16 acres, and additional reserves can be recovered by drilling the proposed infill well. The well will be moved from the approximate center location of the existing offsetting producers due to surface related issues. Reserves for the proposed location were calculated using the HCPV map, a 16 acre drainage area, and a 15% recovery factor. The results are as follows:

Operator	Well	Location	HCPV	Drainage Acres	EUR	
					MBO	MMCF
Chevron	McComack #23	32-G	6.3	16	85	510

4. The E/2 of Section 32 is covered by a single fee lease which has common royalty and working interest ownerships. Chevron is the operator and 100% working interest owner of the Grayburg wells toward which the proposed well will encroach. Therefore, there are no offset interest owners or adversely affected parties to notify of this application.
5. The proposed W.T. McComack #23 will share a 40-acre proration unit and will be simultaneously dedicated with the W.T. McComack #21 (recent new drill) as a Penrose Skelly, Grayburg producer in Section 32, Unit Letter G.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.

Exhibit 2



Chevron U.S.A. Inc.

W.T. McComack #21
 2260' FNL & 2260' FEL, Unit G
 W.T. McComack #23 (proposed)
 2300' FNL & 1400' FEL, Unit G
 Section 32, T21S-R37E
 Lea County, New Mexico



- W.T. McComack Lease
- 40 Acre Proration Unit

Scale 1" = 2000'

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Exhibit 3

Form C-102

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name WT McCOMACK	Well Number 23
OGRID No.	Operator Name CHEVRON U.S.A., INC.	Elevation 3459'

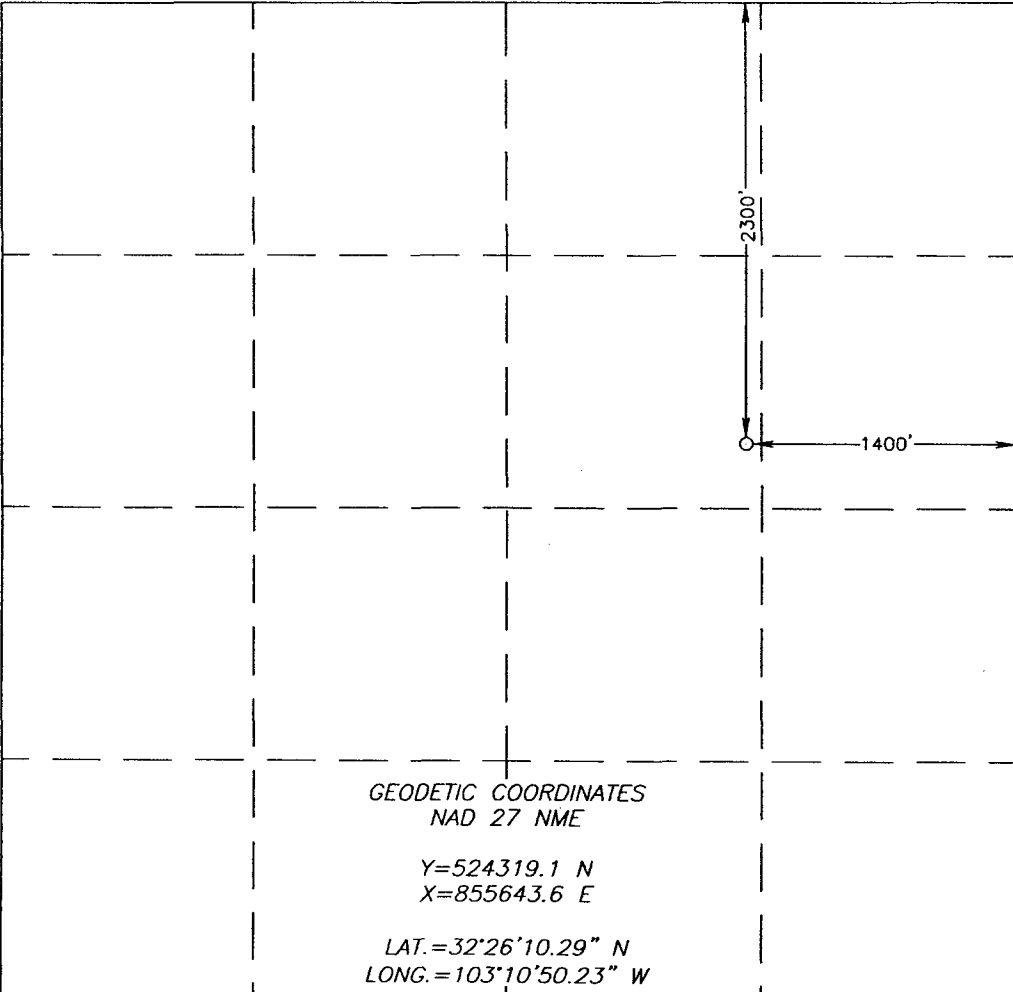
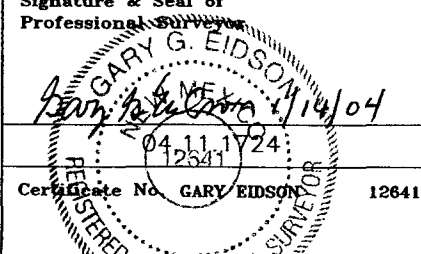
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	32	21-S	37-E		2300	NORTH	1400	EAST	LEA

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	Joint or Infill	Consolidation Code	Order No.						

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>Signature _____</p> <p>Printed Name _____</p> <p>Title _____</p> <p>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>JANUARY 11, 2005</p> <p>Date Surveyed _____ JR</p> <p>Signature & Seal of Professional Surveyor _____</p> <p></p> <p>Certificate No. GARY EIDSON 12641</p>
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GEODETIC COORDINATES
NAD 27 NME
Y=524319.1 N
X=855643.6 E
LAT.=32°26'10.29" N
LONG.=103°10'50.23" W

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised June 10, 2003

OIL CONSERVATION DIVISION Submit to Appropriate District Office
1220 South St. Francis Dr.
Santa Fe, NM 87505

Exhibit 3.1

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-36744	² Pool Code 50350	³ Pool Name Penrose Skelly; Grayburg
⁴ Property Code 2690	⁵ Property Name W.T. McComack	⁶ Well Number 21
⁷ OGRID No. 4323	⁸ Operator Name Chevron U.S.A., Inc.	⁹ Elevation 3463'

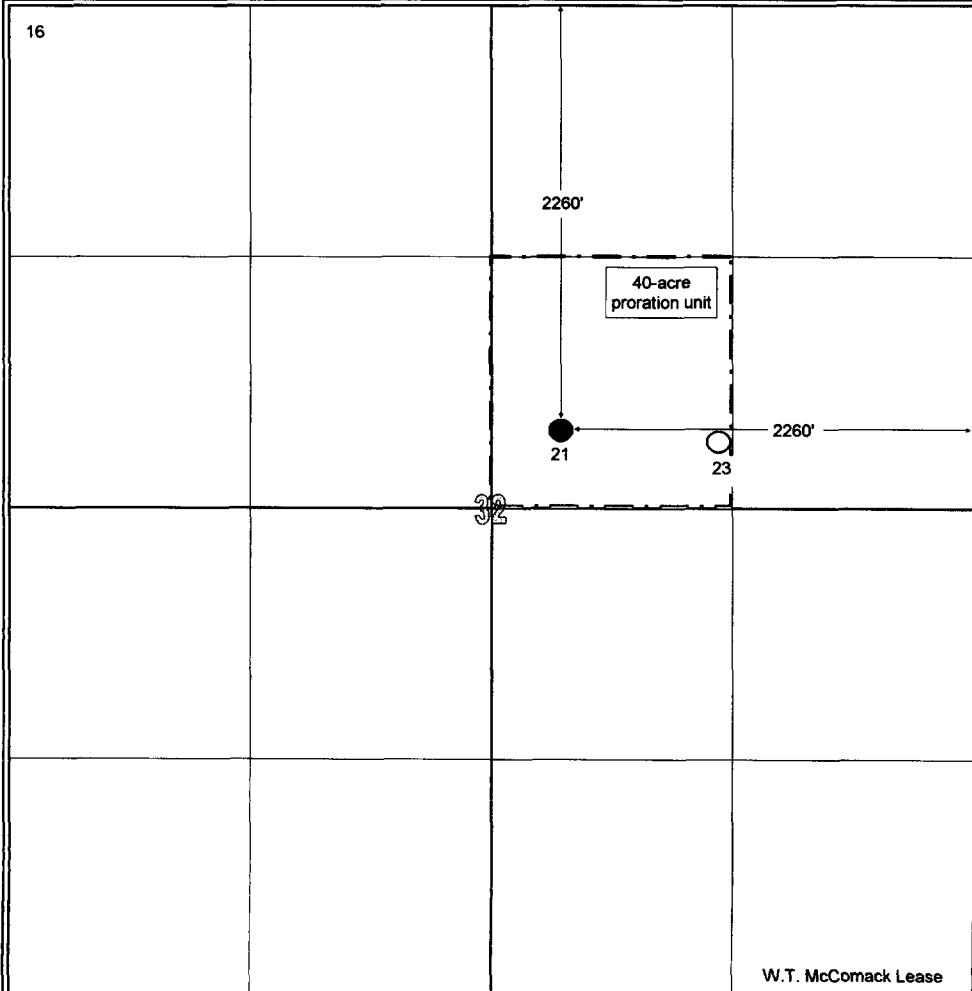
¹⁰ Surface Location

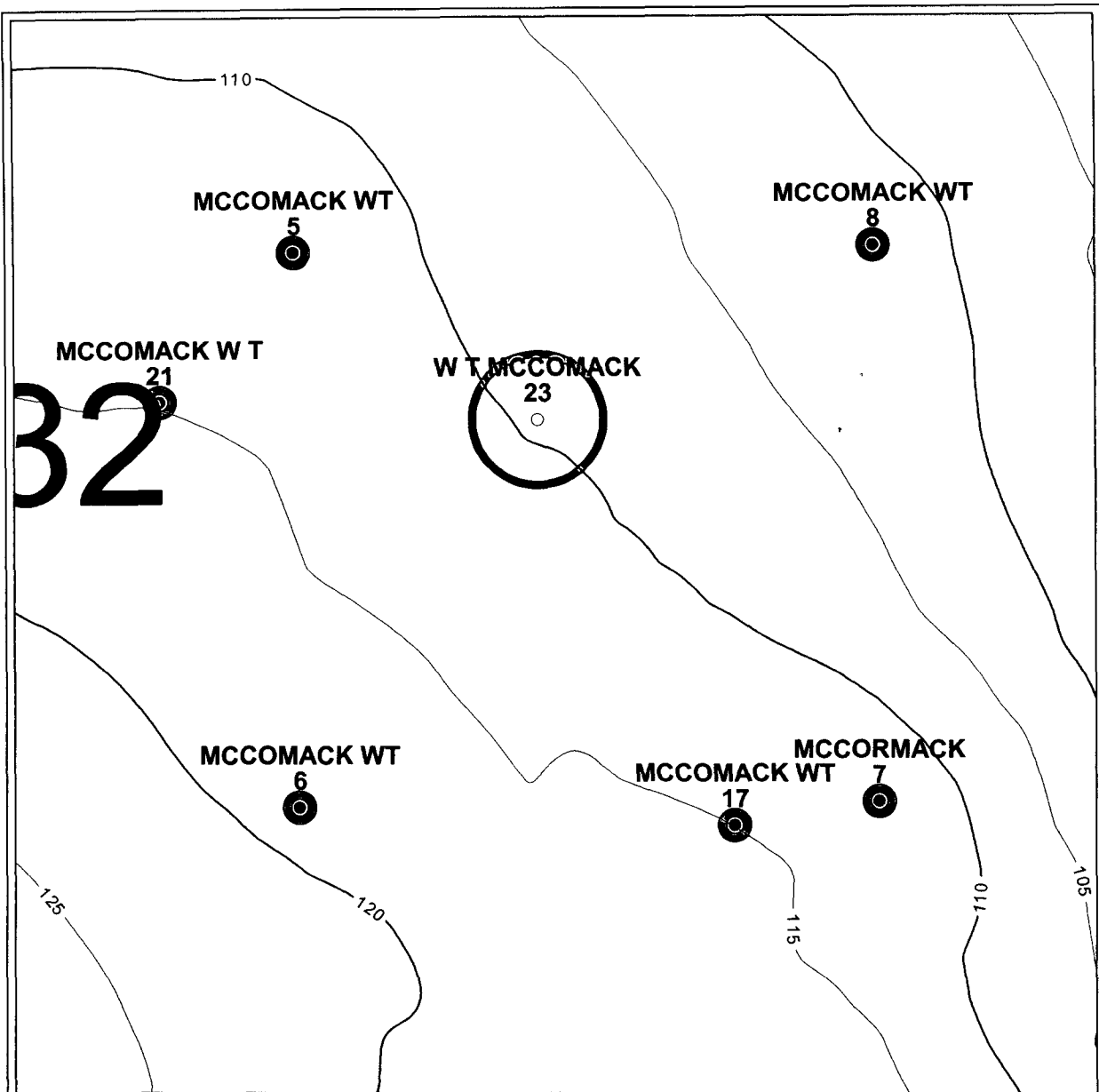
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	32	21S	37E		2260	North	2260	East	Lea

¹¹ 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
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

<div>16</div>  <p>2260'</p> <p>40-acre proration unit</p> <p>21</p> <p>23</p> <p>2260'</p> <p>W.T. McComack Lease</p>	<div>1</div> <p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Michael R. Villalva</i></p> <p>Signature Michael R. Villalva</p> <p>Printed Name Petroleum Engineer</p> <p>Title February 21, 2005</p>
	<div>1</div> <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>Signature and Seal of Professional Surveyor:</p>



PETRA 3/2/2005 11:08:05 AM

ChevronTexaco

EXHIBIT 4

PENROSE-SKELLY FIELD W T MCCOMACK #23

Sec. 32, T21S-R37E, Lea Co, New Mexico

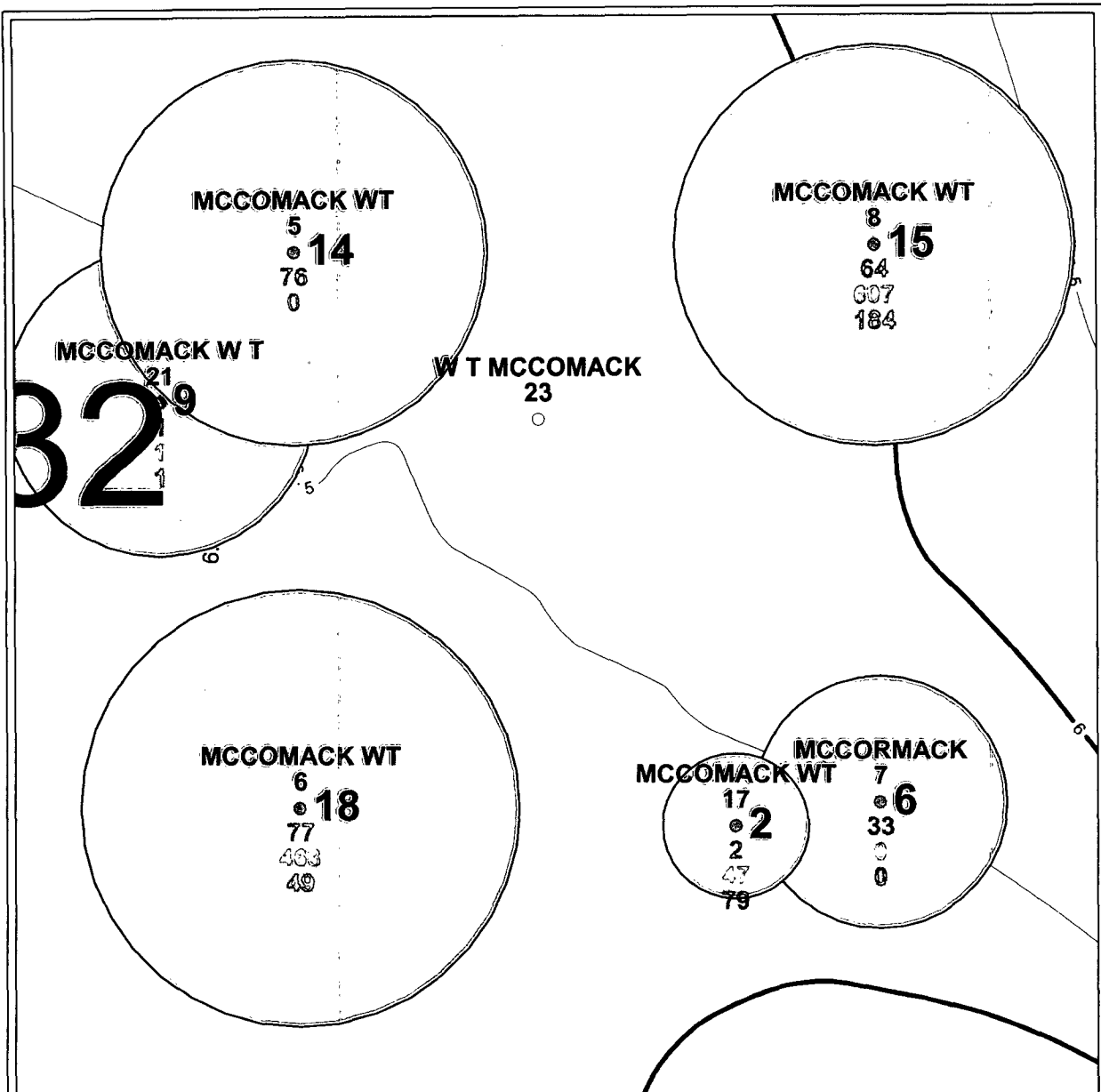
Grayburg Net Pay CI=5.' [Gr<40, Por>6%]

POSTED WELL DATA

Well Name
Well Number



March 2, 2005



PETRA 3/2/2005 11:15:58 AM

ChevronTexaco

EXHIBIT 5

PENROSE-SKELLY FIELD W T MCGOMACK #23

Sec. 32, T21S-R37E, Lea Co, New Mexico

Grayburg HCPV CI=0.5 & EUR Drainage

POSTED WELL DATA

Well Name
Well Number

● GFP_GRAYBURG - EUR-GRAYBURG-ACRES[GFP]

WELL - GRAYBURG-CUM_OIL_(MBO)
WELL - GRAYBURG-CUM_GAS_(MMCF)
WELL - GRAYBURG-CUM_WATER_(MBW)



March 2, 2005

CMD :
OG5SECT

ONGARD

INQUIRE LAND BY SECTION

04/04/05 07:48:15
OGOMES -TPIX
PAGE NO: 1

Sec : 32 Twp : 21S Rng : 37E Section Type : NORMAL

D 40.00 CS B01327 0002 CHEVRON USA INC U 11/02/38 A A	C 40.00 CS B01327 0002 CHEVRON USA INC U 11/02/38 A A	B 40.00 Fee owned U A A A	A 40.00 Fee owned U A A A P P
E 40.00 CS B00085 0014 BP EXPLORATION U 07/28/38 A A A	F 40.00 CS B00085 0014 BP EXPLORATION U 07/28/38 A A	G 40.00 Fee owned U A A A A	H 40.00 Fee owned U A A A
L 40.00 Fee owned A A	K 40.00 Fee owned A A	J 40.00 Fee owned U A A	I 40.00 Fee owned U A A
M 40.00 Fee owned A A	N 40.00 Fee owned A A A	O 40.00 Fee owned U A P A A	P 40.00 Fee owned U A A A A