

DATE IN 11/13/06	SUSPENSE	ENGINEER R. Ezeanyim	LOGGED IN 11/15/06	TYPE NSL	APP NO. PTDS0631936958
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ABOVE THIS LINE FOR DIVISION USE ONLY

SD

PTDS0631937124

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



Cherwon
Bryndon - Ezeanyim
Lease # 5531

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.

Sarah Rittenhouse
Print or Type Name

Sarah Rittenhouse
Signature

Project Manager / Geologist
Title

11/6/2006
Date

Sarah.Rittenhouse@chevron.com
e-mail Address

2006 NOV 13 PM 1 13



Sarah C. Rittenhouse
Project Manager / Geologist

North America Upstream
Midcontinent Business Unit
11111 S. Wilcrest, Rm S1031
Houston, Texas 77099
Tel (281) 561-3773
Fax (281) 561-3576
sarah.rittenhouse@chevron.com

November 6, 2006

2006 NOV 13 PM 1 12

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

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

Dear Mr. Fesmire:

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

Brunson-Eaves Lease Line #1 (Formerly Rollon Brunson #7)
1460' FNL & 1330' FEL, SW/4 NE/4 of
Section 10, T22S, R37E, Unit Letter G
Lea County, New Mexico

The proposed well will be an infill producer in the Penrose Skelly, Grayburg Pool [Pool Code 50350], which is an oil pool spaced on 40 acres. This well is a continuation of our 4 year infill drilling in the same Pool. Chevron'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 10 will be simultaneously dedicated in the Penrose Skelly, Grayburg Pool to the proposed well and to the Brunson #2 and the Brunson-Eaves Lease Line #3. The Brunson #2 was drilled in 1977 as a Penrose Skelly, Grayburg producer. The Brunson-Eaves Lease Line #3 is to be drilled in 2007 as a Penrose Skelly, Grayburg producer. Chevron 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 five wells that have produced the Grayburg formation in the NE/4 of Section 10. The proposed well will be located in the approximate center point of those wells and 330' off the lease line. Based on drainage calculations, Chevron 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 W/2 NE/4 of Section 10 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.

November 6, 2006

Page 2

If you have any questions concerning this application or need additional information, please contact me by phone at (281) 561-3773 or by email at sarah.rittenhouse@chevron.com. If I am not available, you can also reach Michael Gelbs by phone at (281) 561-7939 or by email at mike.gelbs@chevron.com. Thank you for consideration of this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Rittenhouse", with a stylized, flowing script.

Sarah C. Rittenhouse
Project Manager / Geologist

Attachments

cc: NMOCD District 1 – Hobbs, NM
Michael Gelbs
Sarah Rittenhouse
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:

Brunson-Eaves Lease Line #1 (Formerly Rollon Brunson #7)

1460' FNL & 1330' FEL

Section 10, T21S, R37E, Unit Letter G

Lea County, New Mexico

Offset Operators, Working Interest Owners, NE/4 Section 10:

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

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:

Brunson-Eaves Lease Line #1 (Formerly Rollon Brunson #7)

1460' FNL & 1330' FEL

Section 10, 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 **Brunson-Eaves Lease Line #1** 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).
- 3.

Operator	Well	API #	Location	Formation	Cum Prod		Current Prod		Status
					MBO	MMCF	BOPD	MCFPD	
Chevron	Rollon Brunson #1	30025100280000	10-B	Grayburg	69	62	0	0	Inactive
Chevron	Rollon Brunson #6	30025101620000	10-B	Grayburg	7	12	9	389	Active
Chevron	Eaves #6	30025101690000	10-A	Grayburg	131	484	-	-	Inactive
Chevron	So Penrose SU 167	30025101640000	10-H	Grayburg	76	703	-	-	Inactive
Chevron	Brunson #2	30025101710000	10-G	Grayburg	2	79	-	-	Inactive

4. The proposed **Brunson-Eaves Lease Line #1** 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.

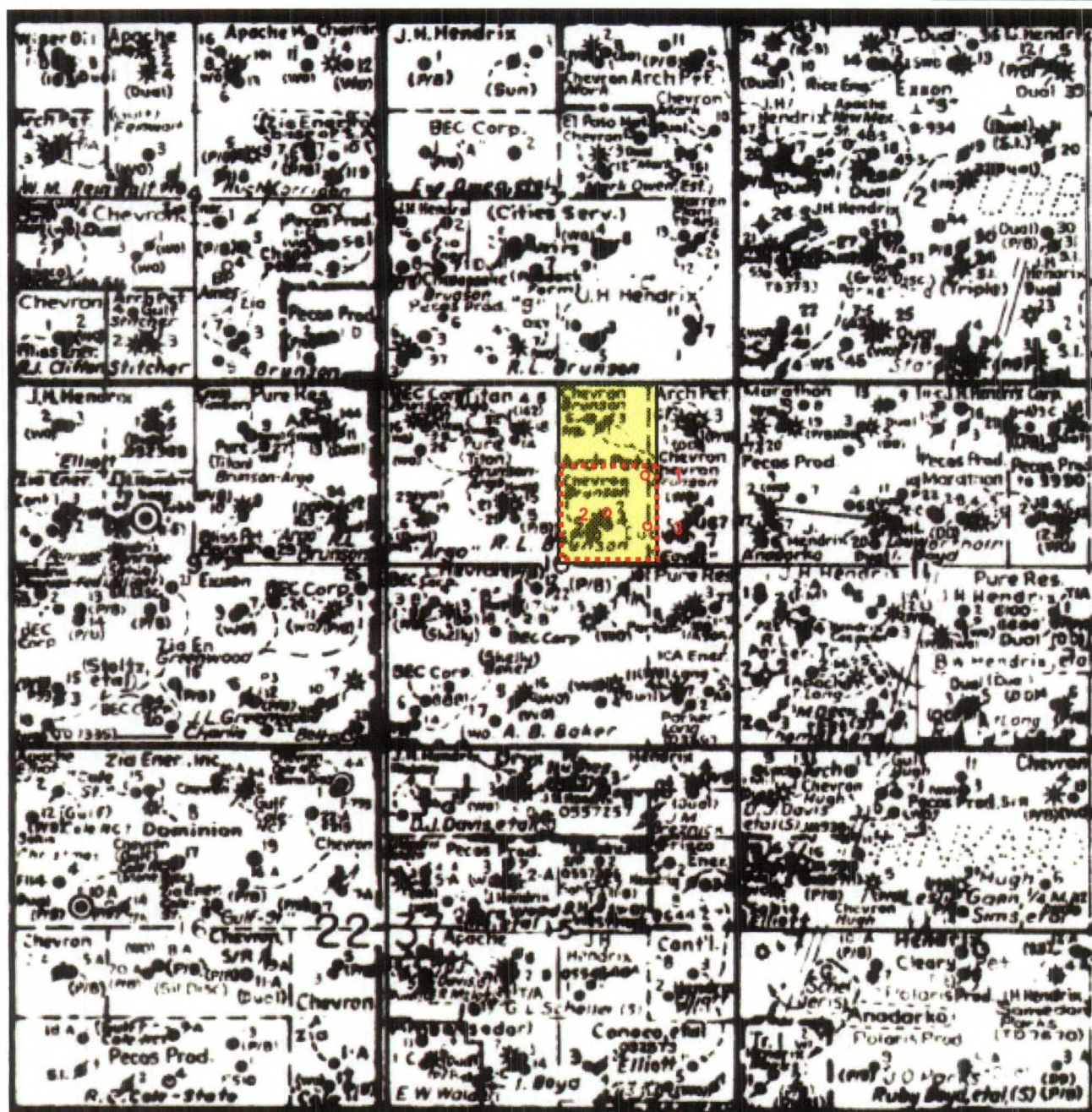
The following table provides drainage areas calculated from the HCPV map and reserves of the offsetting wells.

Operator	Well	API #	Location	Formation	Drainage Acres	EUR	
						MBO	MMCF
Chevron	Rollon Brunson #6	30025101620000	10-B	Grayburg	3	28	203
Chevron	Eaves #6	30025101690000	10-A	Grayburg	17	131	484
Chevron	So Penrose SU 167	30025101640000	10-H	Grayburg	11	76	703
Chevron	Brunson #2	30025101710000	10-G	Grayburg	0	2	79
Chevron	So Penrose SU 141	30025101590000	10-B	Grayburg	9	69	62

As seen above, the average drainage area of the offsetting locations is only 3 acres, and additional reserves can be recovered by drilling the proposed infill well at an approximate equidistant location from the existing offsetting producers. Reserves for the proposed location were calculated using the HCPV map, a 7 acre drainage area, and a 15% recovery factor. The results are as follows:

Operator	Well	Location	HCPV	Drainage Acres	EUR	
					MBO	MMCF
Chevron	Brunson-Eaves Lease Line #1	10-G	13.1	7	47	207

4. The NE/4 of Section 10 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 **Brunson-Eaves Lease Line #1** will share a 40-acre proration unit and will be simultaneously dedicated with the Brunson #2 and the Brunson-Eaves Lease Line #3 as a Penrose Skelly, Grayburg producer in Section 10, Unit Letter G.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.



Brunson #2
1980 FNL & 1980 FEL, Unit G
Brunson-Eaves #3
2310 FNL & 1390 FEL, Unit G
Brunson-Eaves #1 (proposed)
1460 FSL & 1330 FEL, Unit G
Section 10, T22S-R37E
Lea County, New Mexico

 Rollon Brunson Lease

40 Acre Proration Unit

Scale: 1"=2000' Approx.

DISTRICT I

1625 N. FRENCH DR., HOBBES, NM 88240

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

State of New Mexico

Energy, Minerals and Natural Resources Department

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name BRUNSON #7	Well Number 7
OGRID No.	Operator Name CHEVRON U.S.A. INC.	Elevation 3389'

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	10	22-S	37-E		1460	NORTH	1330	EAST	LEA

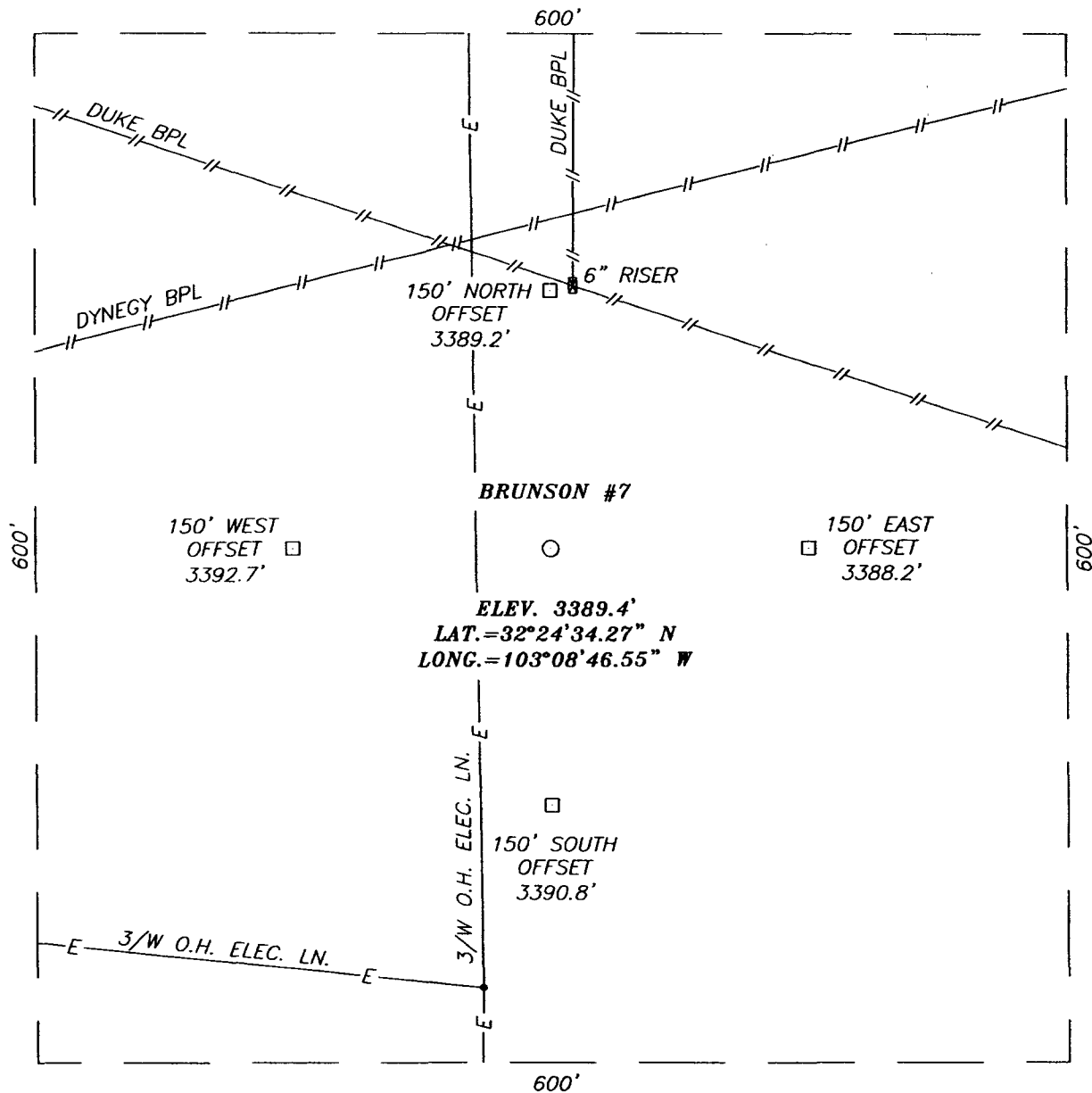
Bottom Hole Location If Different From Surface

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

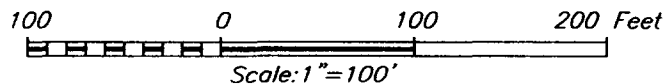
	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
	Signature _____ Date _____ Printed Name _____
	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 belief.
	FEBRUARY 17, 2006 Date Surveyed _____ DSR Signature & Seal of Professional Surveyor Certificate No. GARY EIDSON 12641

SECTION 10, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY 207 AND CO. RD. E-21 (DELAWARE BASIN RD.), GO NORTH ON ST. HWY 207 APPROX. 0.82 MILES. TURN RIGHT AND GO EAST APPROX. 0.67 MILES. TURN RIGHT AND GO SOUTH APPROX. 0.14 MILES. THIS LOCATION IS APPROX. 430 FEET EAST.



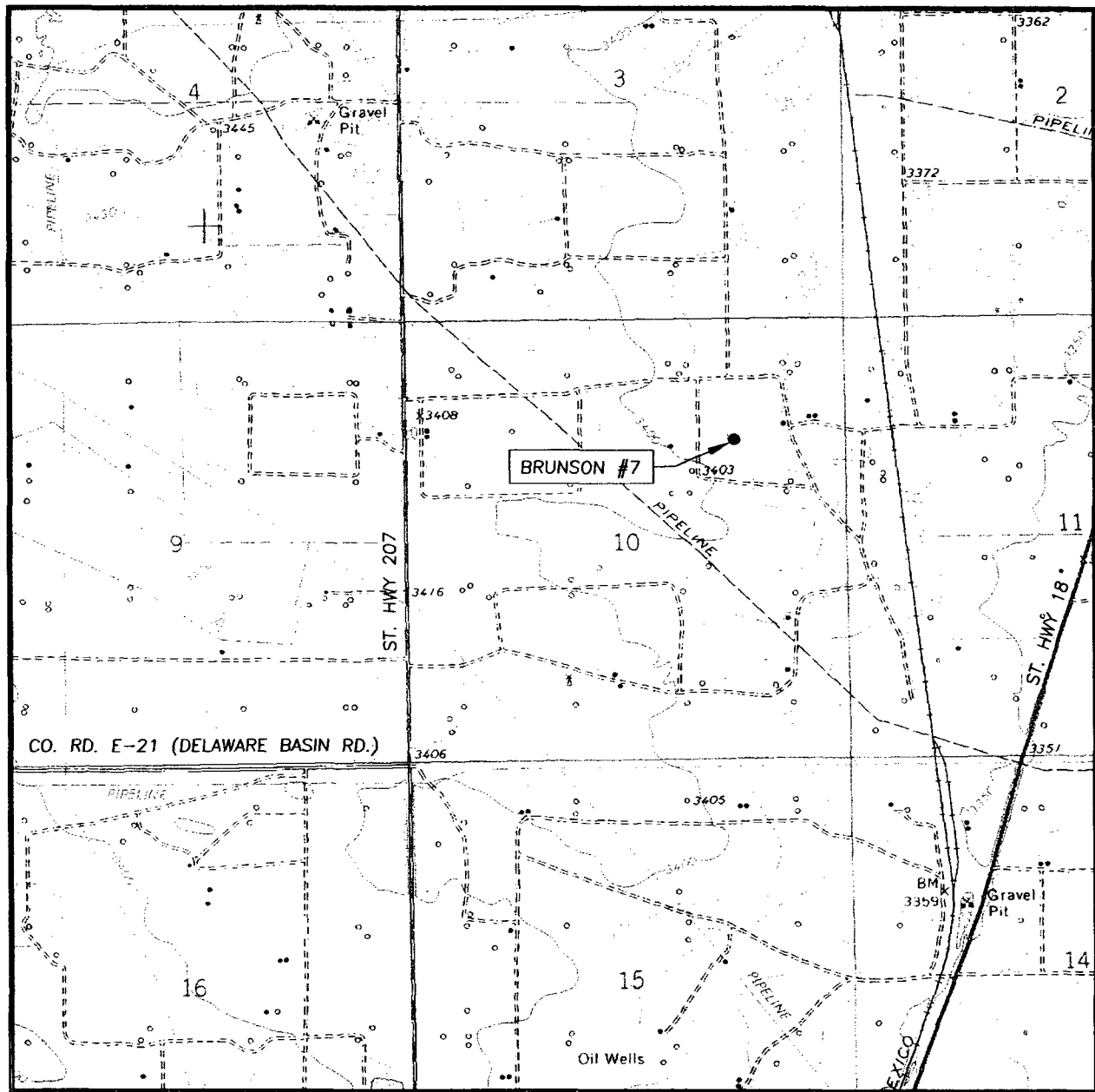
CHEVRON U.S.A. INC.

BRUNSON #7 WELL
 LOCATED 1460 FEET FROM THE NORTH LINE
 AND 1330 FEET FROM THE EAST LINE OF SECTION 10,
 TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 02/17/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.0323	Dr By: D.S.R.
Date: 03/06/06	Disk: CD#1
06110323	Scale: 1"=100'

PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 10 TWP. 22-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

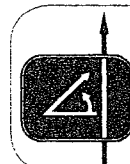
DESCRIPTION 1460' FNL & 1330' FEL

ELEVATION 3389'

OPERATOR CHEVRON U.S.A. INC.

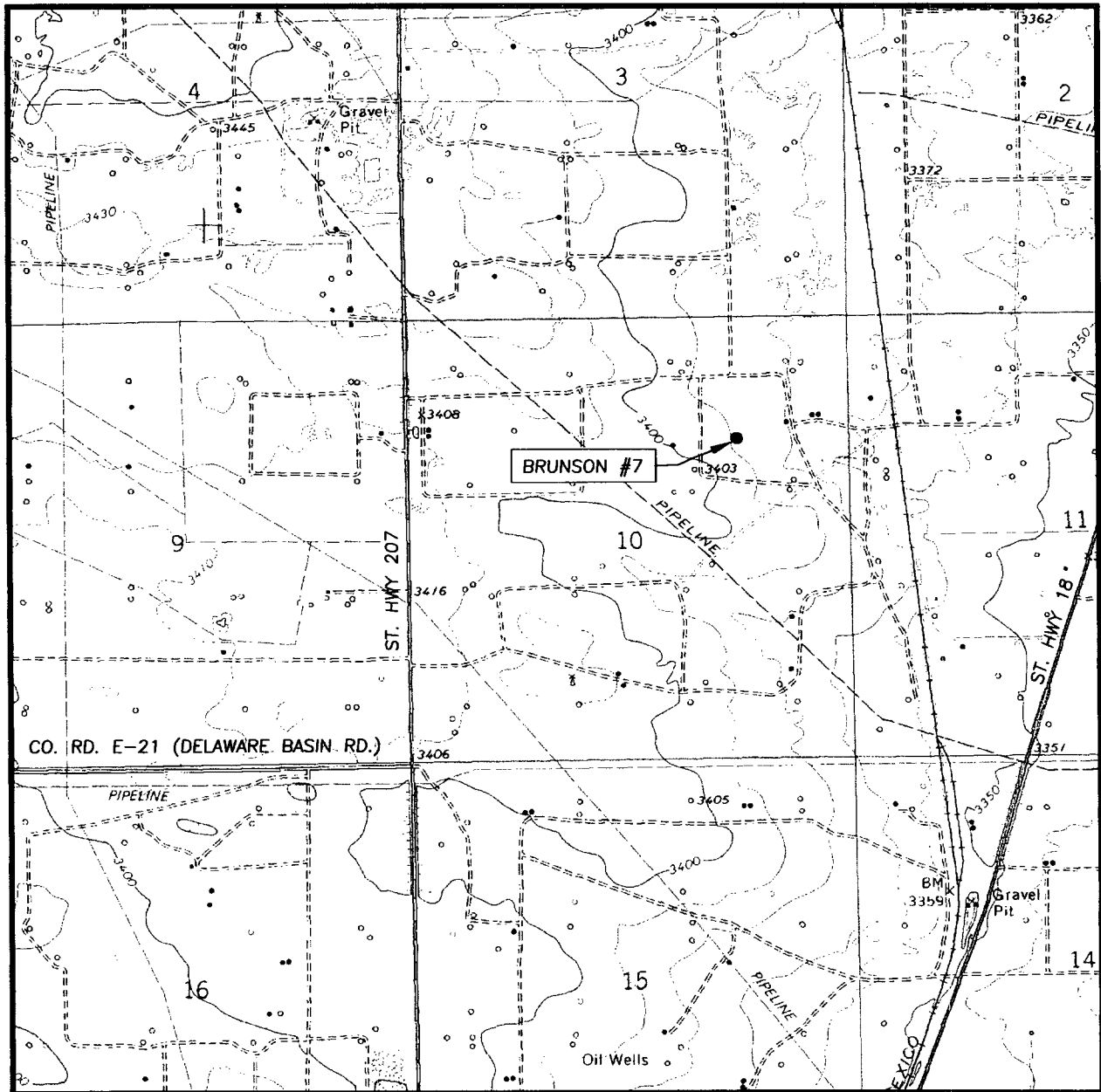
LEASE BRUNSON

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 10 TWP. 22-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

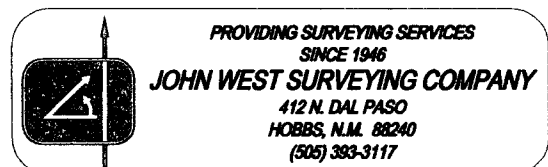
DESCRIPTION 1460' FNL & 1330' FEL

ELEVATION 3389'

OPERATOR CHEVRON U.S.A. INC.

LEASE BRUNSON

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.



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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised June 10, 2003

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

OIL CONSERVATION DIVISION

Submit to Appropriate District Office

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

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

Exhibit 3.1

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 50350	³ Pool Name Penrose Skelly; Grayburg
⁴ Property Code	⁵ Property Name Brunson-Eaves LL #1 (Formerly Brunson #9)	⁶ Well Number 1
⁷ OGRID No.	⁸ Operator Name Chevron U.S.A., Inc.	⁹ Elevation 3389

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	10	22S	37E		1460	North	1330	East	Lea

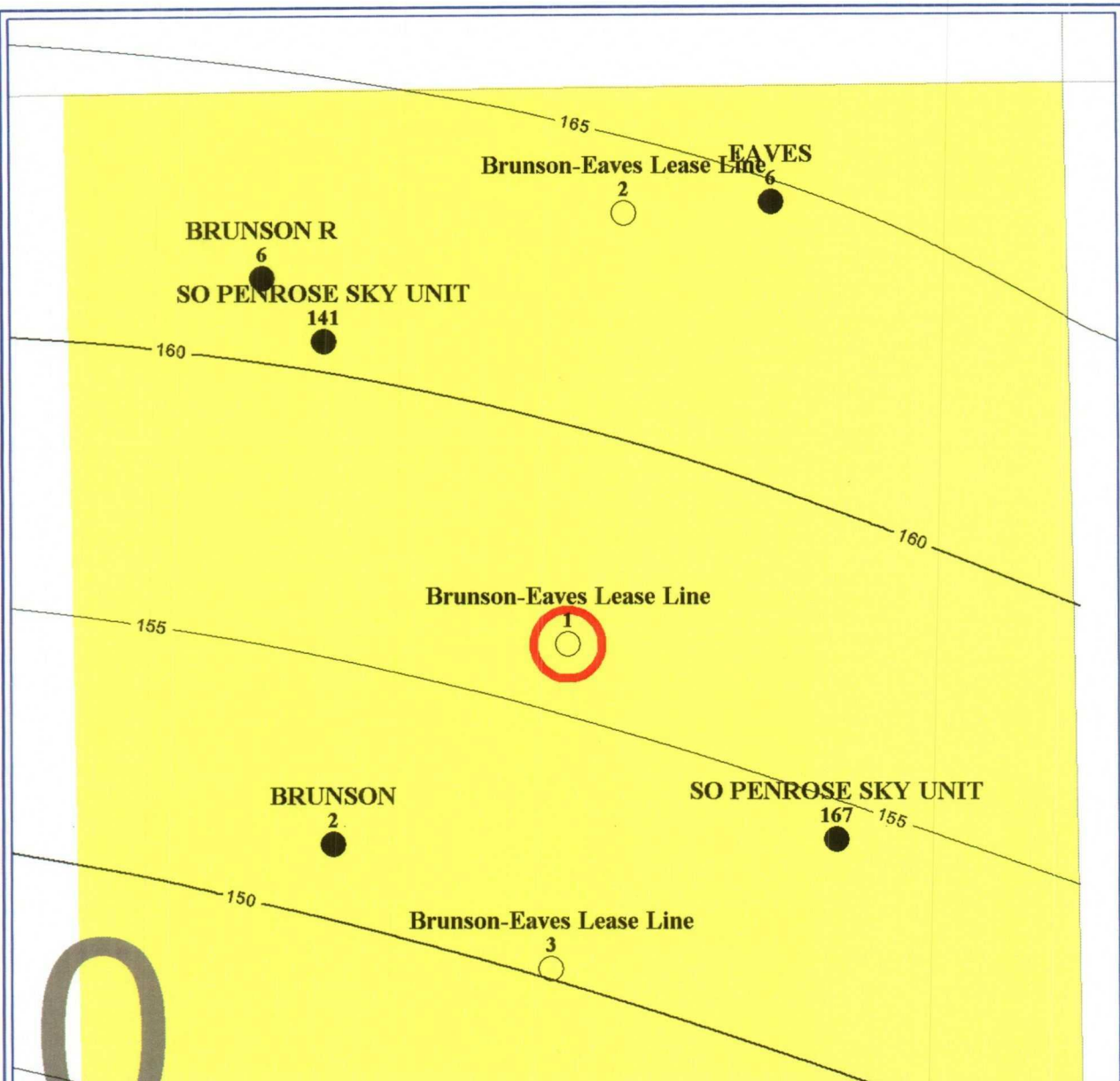
¹¹ Bottom Hole Location If Different From Surface

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.
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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

16		17	OPERATOR CERTIFICATION
			<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature _____</p> <p>Printed Name Sarah C. Rittenhouse</p> <p>Title Geologist</p> <p>November 2, 2006</p>
		18	SURVEYOR CERTIFICATION
			<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> <p>Certificate Number _____</p>



PETRA 11/6/2006 1:32:32 PM

Chevron U.S.A. Inc.

EXHIBIT 4

PENROSE-SKELLY FIELD BRUNSON-EAVES LL #1

Sec. 10, T22S-37E, Lea CO. New Mexico

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



POSTED WELL DATA

Well Name
Well Number



November 6, 2006



PETRA 11/6/2006 3:46:12 PM

Chevron U.S.A. Inc.

EXHIBIT 5

PENROSE-SKELLY FIELD BRUNSON-EAVES LL #1

Sec. 10, T22S-37E, Lea CO. New Mexico

Grayburg HCPV CI=0.5 & EUR - Drainage

POSTED WELL DATA

Well Name
Well Number

● SRLF_PENROSE_SKELLY - DRAINAGE_ZONE[SE

SRLF_PENROSE_SKELLY - GRAYBURG_CUM_OIL[SRLF] (MBO)
 SRLF_PENROSE_SKELLY - GRAYBURG_CUM_GAS[SRLF] (MMCF)
 SRLF_PENROSE_SKELLY - GRAYBURG_CUM_WATER[SRLF] (MBO)



November 6, 2006

Brooks, David K., EMNRD

From: Brooks, David K., EMNRD
Sent: Wednesday, December 06, 2006 11:19 AM
To: 'sarah.rittenhouse@chevron.com'
Subject: Chevron NSL Application: Brunson Eaves Lease Line #1

Dear Ms. Rittenhouse

I am somewhat confused by the title information furnished in the referenced application.

Your application states that:

The W/2 NE/4 of Section 10 is covered by a single fee lease and has common royalty and working interest ownerships. For that reason ... there are no adversely affected interest owners. . . .

It would seem that the common ownership of W/2 NE/4 does not preclude the possibility of adversely affected interests, unless ownership is also common as between the W/2 NE/4 and E/2 NE/4. This is because the proposed location is only 10 feet from the line separating the E/2 and W/2 of the NE/4.

Item No. 4 of your Engineering and Geological Justification states that:

The NE/4 of Section 10 is covered by a single fee lease which has common royalty and working interest ownerships.

However that statement seems at variance with the attached plat (Exhibit 3.1) which shows two leases, the Brunson lease and the Eaves lease.

Please furnish explanation of the ownership of the NE/4 of Section 10; so that we can proceed with review of this application.

Thanks

David K. Brooks
Assistant General Counsel
505-476-3450

12/6/2006

Brooks, David K., EMNRD

From: Rittenhouse, Sarah C [Sarah.Rittenhouse@chevron.com]
Sent: Tuesday, December 12, 2006 6:25 AM
To: Brooks, David K., EMNRD
Subject: RE: Chevron NSL Application: Brunson Eaves Lease Line #1

Mr. Brooks,

In regards to our conversation on Monday, December 11th about the Brunson Eaves Lease Line wells...we have a verbal agreement with both of the land owners. We are waiting for the signed agreement to be sent back this week. When I receive it, I will forward it on to you. If you have any further questions on any of the applications, please don't hesitate to e-mail me or call at (281) 661-3773.

Thank you,
Sarah Rittenhouse

From: Brooks, David K., EMNRD [mailto:david.brooks@state.nm.us]
Sent: Wednesday, December 06, 2006 12:19 PM
To: Rittenhouse, Sarah C
Subject: Chevron NSL Application: Brunson Eaves Lease Line #1

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Your application states that:

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Please furnish explanation of the ownership of the NE/4 of Section 10; so that we can proceed with review of this application.

Thanks

David K. Brooks
Assistant General Counsel
505-476-3450

12/12/2006

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient (s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.