

ABOVE THIS LINE FOR DIVISION USE ONLY

**RECEIVED**  
**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 2009 JAN 14 PM 1:27  
 1220 South St. Francis Drive, Santa Fe, NM 87505



C.P. Falby Fed. A #8  
 Chevron USA  
 4323

**ADMINISTRATIVE APPLICATION CHECKLIST** 5989

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.**

Casey R. Mobley Print or Type Name	 Signature	Project Manager / Geologist Title	1/12/2009 Date
		Casey.Mobley@chevron.com e-mail Address	



Casey R. Mobley  
Project Manager / Geologist

North America Upstream  
Midcontinent Business Unit  
11111 S. Wilcrest, Rm S1037  
Houston, Texas 77099  
Tel (281) 561-4830  
Fax (281) 561-3576  
[Casey.Mobley@chevron.com](mailto:Casey.Mobley@chevron.com)

January 12, 2009

Request for Administrative Approval of  
Unorthodox Oil Well Location

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:

**C.P. Falby Federal A #8**  
2310' FNL & 1200' FWL, SW/4 NW/4 of  
Section 8, T22S, R37E, Unit Letter E  
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 7 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 NW/4 of Section 8 will be dedicated in the Penrose Skelly, Grayburg Pool to the proposed well. One other Grayburg producer is located in the SW/4 NW/4. The South Penrose Skelly Unit A #156 well was drilled in 1961 under the name C.P. Falby Federal A #4 by Texaco E&P Inc. as a Eumont, Penrose/Penrose-Skelly, Grayburg/Drinkard, Drinkard triple completion well. In 1965, the Penrose-Skelly, Grayburg completion was unitized in the South Penrose Skelly Unit A which was operated by Skelly Oil Company (later Getty Oil Company), and was re-named South Penrose Skelly Unit A #156; Grayburg production ceased in 1981. This well was recompleted in 1999 by Texaco E&P Inc. as a Eunice San Andres Southwest producer under the name C.P. Falby Federal A #4. The well is currently producing from the San Andres formation. As the focus of this application is Grayburg production, we refer to this well as the South Penrose Skelly Unit A #156.

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 NW/4 of Section 8. The proposed well will be located in the approximate southern center point of these wells, approximately 650' southeast of South Penrose Skelly Unit A #156. Based on drainage calculations, Chevron believes that drilling the infill well will recover reserves that would not be recovered by existing Grayburg producers.

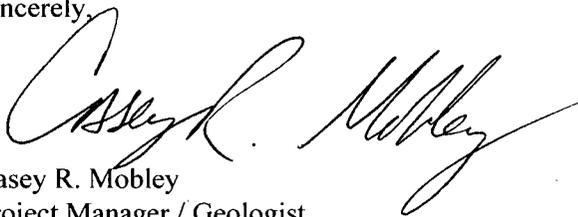
January 12, 2009

Page 2

A land plat highlighting the proposed well's location is attached as Exhibit 2. The NW/4 of Section 8 is covered by a single Chevron U.S.A. Inc. federal lease and has common royalty and working interest ownership (Chevron U.S.A. Inc. 100% working interest as to all depths). The proposed location encroaches upon Unit Letter K of Section 8. The SW/4 of Section 8 is covered by a single Chevron U.S.A. Inc. federal lease and has common royalty and working interest ownership (Chevron U.S.A. Inc. 100% working interest as to all depths). 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.

If you have any questions concerning this application or need additional information, please contact me by phone at (281) 561-4830 or by email at [Casey.Mobley@chevron.com](mailto:Casey.Mobley@chevron.com). If I am not available, you can also reach Meilin Du by phone at (281) 561-3564 or by email at [meilin.du@chevron.com](mailto:meilin.du@chevron.com). Thank you for consideration of this matter.

Sincerely,



Casey R. Mobley  
Project Manager / Geologist

#### Attachments

cc: NMOCD District 1 – Hobbs, NM  
Casey Mobley  
Meilin Du  
Ed Van Reet  
Well File

**NOTIFICATION LIST**

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

**C.P. Falby Federal A #8**  
2310' FNL & 1200' FWL  
Section 8, T22S, R37E, Unit Letter E  
Lea County, New Mexico

**Offset Operators, Working Interest Owners, W/2 Section 8:**

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

## 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:

**C.P. Falby Federal A #8**

2310' FNL & 1200' FWL

Section 8, T22S, R37E, Unit Letter E

Lea County, New Mexico

**PRIMARY OBJECTIVE: GRAYBURG**

**SUPPORTING DATA:**

1. Chevron U.S.A. Inc. (Chevron) is the operator of the proposed C.P. Falby Fed A #8 well (Exhibit 3). The proposed total depth is 4300' in 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	API #	Location	Formation	Cum Prod		Current Prod		Status
					MBO	MMCF	BOPD	MCFPD	
Chevron	C P Falby A Federal #1	30025101170004	8C 22S 37E	Grayburg	9	260	9	161	Active
Chevron	C P Falby A Federal #1	30025101170000	8C 22S 37E	Grayburg	32	0	-	-	Inactive
Chevron	C P Falby A Federal #2	30025101040000	8D 22S 37E	Grayburg	102	214	-	-	Inactive
Chevron	C P Falby A Federal #3	30025101180005	8F 22S 37E	Grayburg	40	47	1	0	Active
Chevron	C P Falby A Federal #6	30025383720000	8D 22S 37E	Grayburg	8	77	14	268	Active
Chevron	So. Penrose Skelly Unit A #156	30025101200000	8E 22S 37E	Grayburg	4	97	-	-	Inactive
Chevron	C P Falby B Federal #4	30025101060000	8L 22S 37E	Grayburg	3	87	3	162	Active
Chevron	C P Falby B Federal #5	30025379380000	8K 22S 37E	Grayburg	3	54	8	99	Active
Chevron	C P Falby B Federal #1	30025101030001	8K 22S 37E	Grayburg	123	0	-	-	Inactive
Chevron	So. Penrose Skelly Unit A #180	30025214980000	8M 22S 37E	Grayburg	2	26	-	-	Inactive
Chevron	So. Penrose Skelly Unit A #181	30025101190000	8N 22S 37E	Grayburg	35	63	-	-	Inactive

3. The proposed C.P. Falby Fed A #8 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.

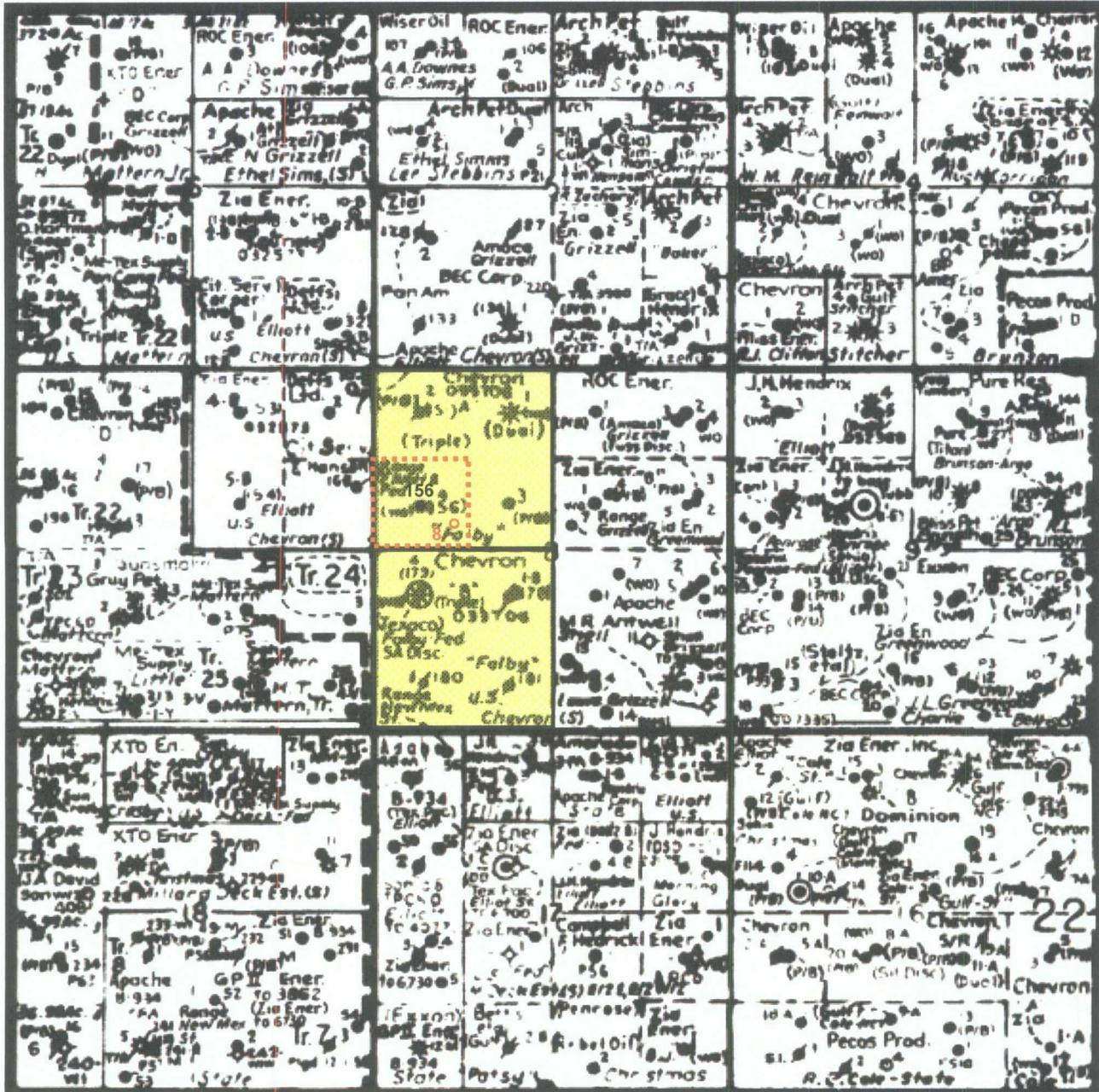
The following table provides drainage areas calculated from the HCPV map and reserves of the offsetting wells.

Operator	Well	API #	Location	Formation	Drainage Acres	EUR	
						MBO	MMCF
Chevron	C P Falby A Federal #1	30025101170004	8C 22S 37E	Grayburg	2	11	310
Chevron	C P Falby A Federal #1	30025101170000	8C 22S 37E	Grayburg	5	32	0
Chevron	C P Falby A Federal #2	30025101040000	8D 22S 37E	Grayburg	18	102	214
Chevron	C P Falby A Federal #3	30025101180005	8F 22S 37E	Grayburg	5	41	68
Chevron	C P Falby A Federal #6	30025383720000	8D 22S 37E	Grayburg	4	22	376
Chevron	So. Penrose Skelly Unit A #156	30025101200000	8E 22S 37E	Grayburg	1	4	97
Chevron	C P Falby B Federal #4	30025101060000	8L 22S 37E	Grayburg	0	3	103
Chevron	C P Falby B Federal #5	30025379380000	8K 22S 37E	Grayburg	1	13	266
Chevron	C P Falby B Federal #1	30025101030001	8K 22S 37E	Grayburg	12	123	0
Chevron	So. Penrose Skelly Unit A #180	30025214980000	8M 22S 37E	Grayburg	0	2	26
Chevron	So. Penrose Skelly Unit A #181	30025101190000	8N 22S 37E	Grayburg	4	35	63

As seen above, the average drainage area of the offsetting locations is only 5 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 5 acre drainage area, and a 15% recovery factor. The results are as follows:

Operator	Well	Location	HCPV	Drainage Acres	EUR	
					MBO	MMCF
Chevron	C P Falby Fed A #8	8E 22S 37E	9.1	5	35	138

4. The NW/4 of Section 8 is covered by a single Chevron U.S.A. Inc. federal lease and has common royalty and working interest ownership (Chevron U.S.A. Inc. 100% working interest as to all depths). The proposed location encroaches upon Unit Letter K of Section 8. The SW/4 of Section 8 is covered by a single Chevron U.S.A. Inc. federal lease and has common royalty and working interest ownership (Chevron U.S.A. Inc 100% working interest as to all depths). 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.
5. The proposed C.P. Falby Fed A #8 will share a 40-acre proration unit and will be simultaneously dedicated with the So. Penrose Skelly Unit #156 well, pursuant to statewide Rule 104.B(1), as a Penrose Skelly, Grayburg producer in Section 8, Unit Letter E.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.



**Chevron USA Inc.**

C.P. Falby Fed A #8 (proposed)  
 2310' FNL & 1200' FWL  
 So. Penrose Skelly Unit A #156  
 1980' FNL & 660' FWL

Section 8, T22S-R37E  
 Lea County, New Mexico

C.P. Falby A & B Leases

40 Acre Proration Unit

Scale: 1"=2000' Approx.

State of New Mexico

Energy, Minerals and Natural Resources Department

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

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

DISTRICT III  
1900 Rio Brazos Rd., Aztec, NM 87410

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

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 C.P. FALBY FEDERAL A	
OGRID No.	Operator Name CHEVRON USA INC.	Well Number 8 Elevation 3423'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	8	22-S	37-E		2310	NORTH	1200	WEST	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

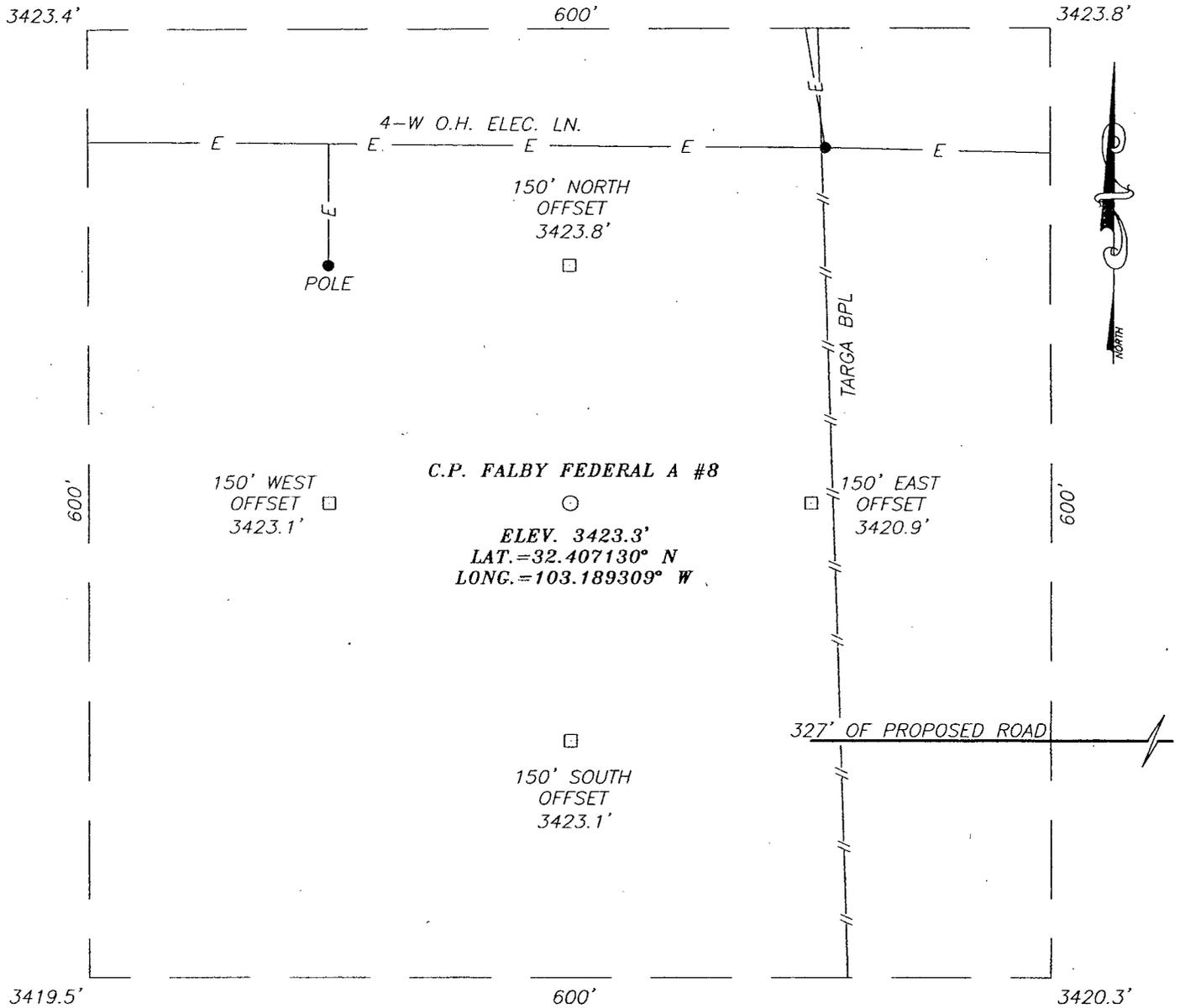
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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><b>OPERATOR CERTIFICATION</b></p> <p><i>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.</i></p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p>
	<p><b>SURVEYOR CERTIFICATION</b></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>Date: Surveyed <b>DECEMBER 19, 2008</b> AR</p> <p>Signature &amp; Seal of Professional Surveyor <b>RONALD J. EIDSON 3239</b></p> <p><i>Ronald J. Eidson 12/24/08</i></p> <p><b>08:11:2040</b></p> <p>Certificate No. <b>GARY EIDSON 12641</b> <b>RONALD J. EIDSON 3239</b></p>

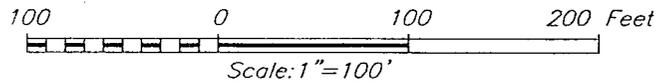
GEODETIC COORDINATES  
NAD 27 NME  
Y=513717.7 N  
X=853075.6 E  
LAT.=32.407130° N  
LONG.=103.189309° W

**SECTION 8, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,**  
 LEA COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

FROM THE INTERSECTION OF DELAWARE BASIN AND S. LEGION ROAD, GO NORTH ON S. LEGION ROAD APPROX. 0.3 MILES TO A LEASE ROAD. TURN LEFT AND GO WEST APPROX. 0.6 MILES TO A "Y" INTERSECTION. TURN LEFT AND GO NORTHWEST AT "Y" APPROX. 0.2 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY 327 FEET WEST OF LEASE ROAD.



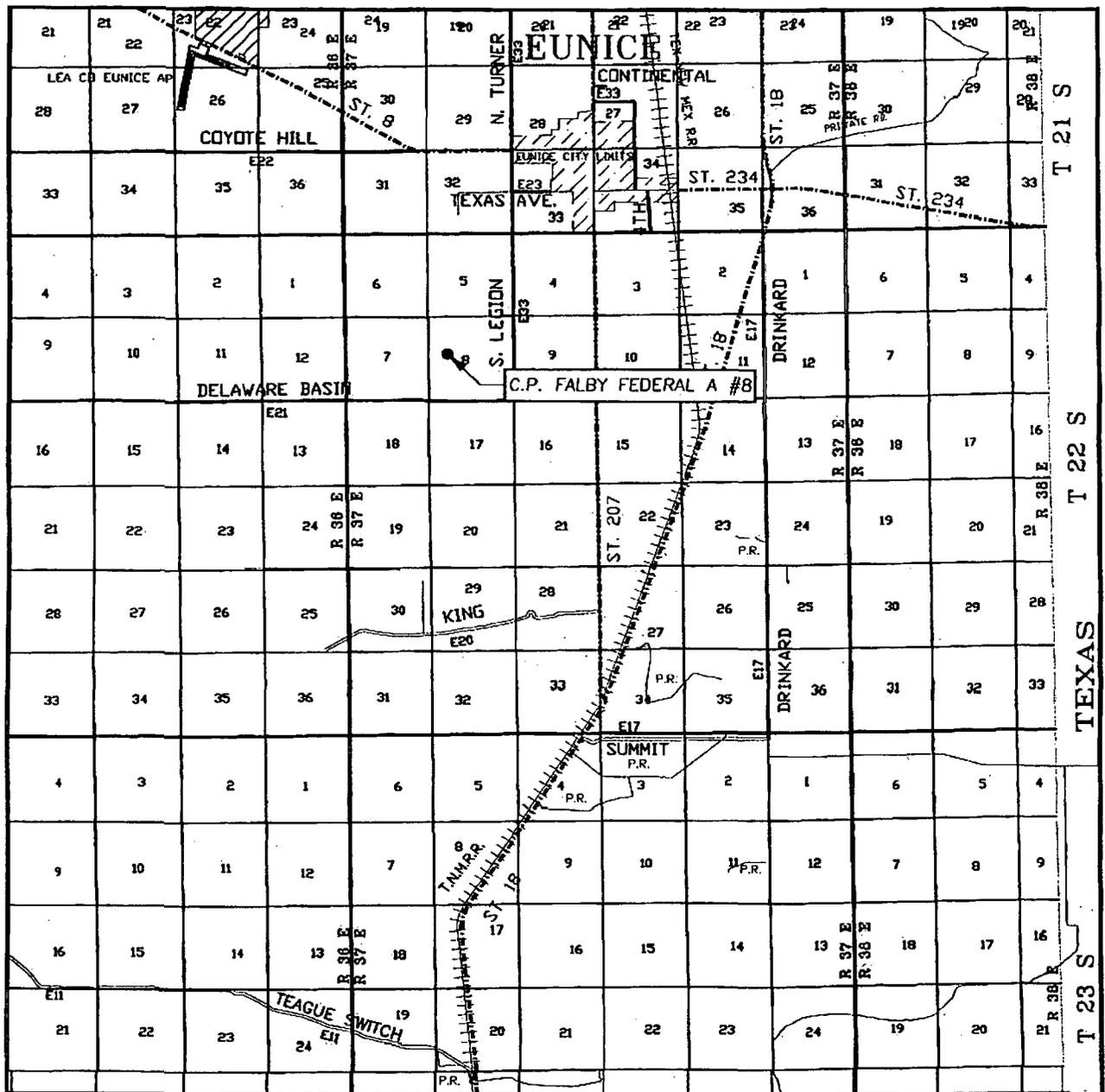
**CHEVRON USA INC.**

C.P. FALBY FEDERAL A #8 WELL  
 LOCATED 2310 FEET FROM THE NORTH LINE  
 AND 1200 FEET FROM THE WEST LINE OF SECTION 8,  
 TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,  
 LEA COUNTY, NEW MEXICO.

PROVIDING SURVEYING SERVICES  
 SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (575) 393-3117

Survey Date: 12/19/08	Sheet 1 of 1 Sheets	
W.O. Number: 08.11.2040	Dr By: AR	Rev.: N/A
Date: 12/23/08	Disk: 08112040	Scale: 1"=100'

# VICINITY MAP



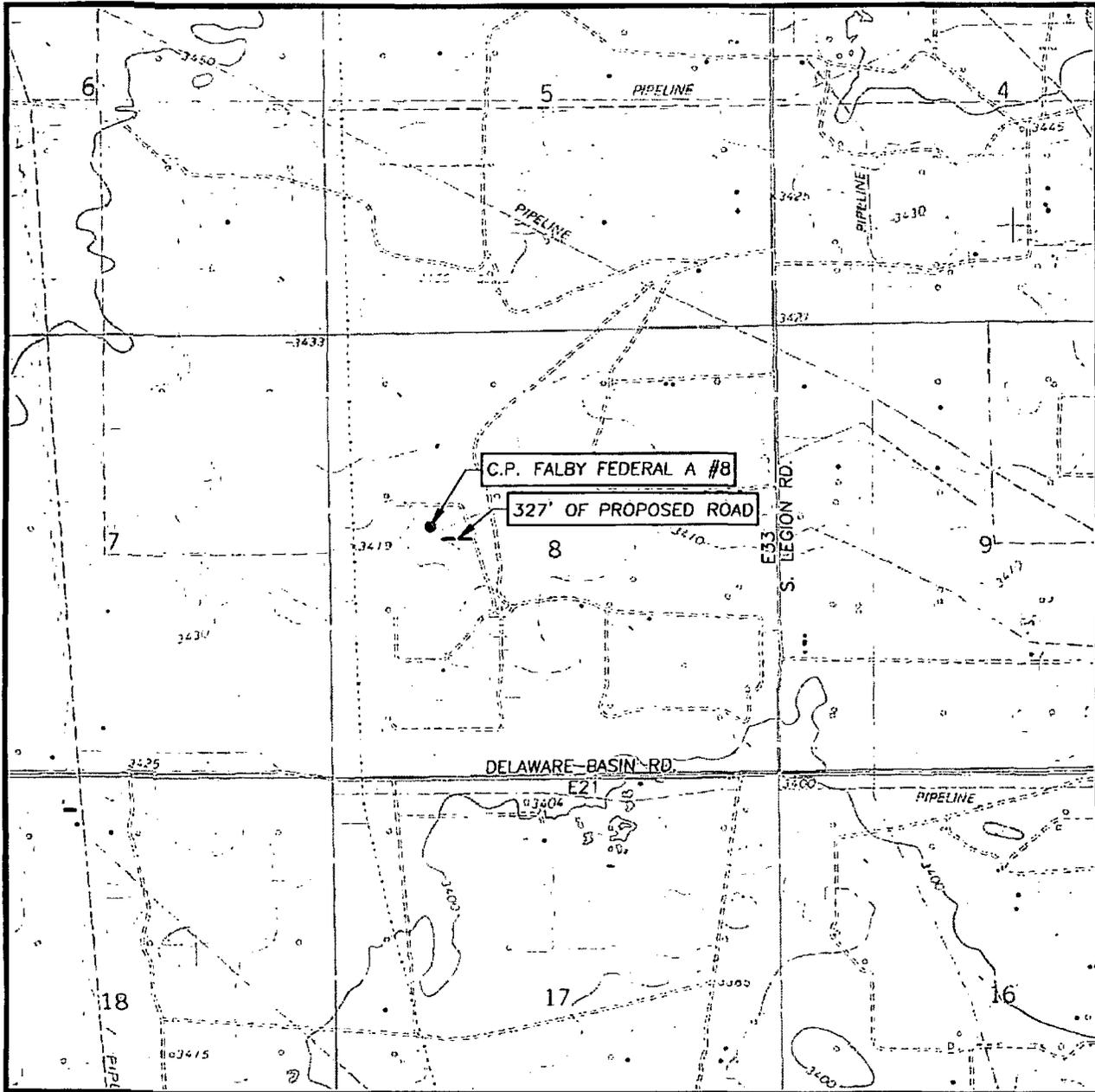
SCALE: 1" = 2 MILES

SEC. 8 TWP. 22-S RGE. 37-E  
 SURVEY \_\_\_\_\_ N.M.P.M.  
 COUNTY LEA STATE NEW MEXICO  
 DESCRIPTION 2310' FNL & 1200' FWL  
 ELEVATION 3423'  
 OPERATOR CHEVRON USA INC.  
 LEASE C.P. FALBY FEDERAL A



PROVIDING SURVEYING SERVICES  
 SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (575) 393-3117

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 8 TWP. 22-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 2310' FNL & 1200' FWL

ELEVATION 3423'

OPERATOR CHEVRON USA INC.

LEASE C.P. FALBY FEDERAL A

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  
(575) 393-3117

**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**

<sup>1</sup> API Number	<sup>2</sup> Pool Code 50350	<sup>3</sup> Pool Name Penrose Skelly; Grayburg
<sup>4</sup> Property Code	<sup>5</sup> Property Name C.P. Falby Federal A	<sup>6</sup> Well Number 8
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name Chevron U.S.A., Inc.	<sup>9</sup> Elevation 3423

<sup>10</sup> Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	8	22S	37E		2310	North	1200	West	Lea

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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**



<sup>17</sup> OPERATOR CERTIFICATION

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

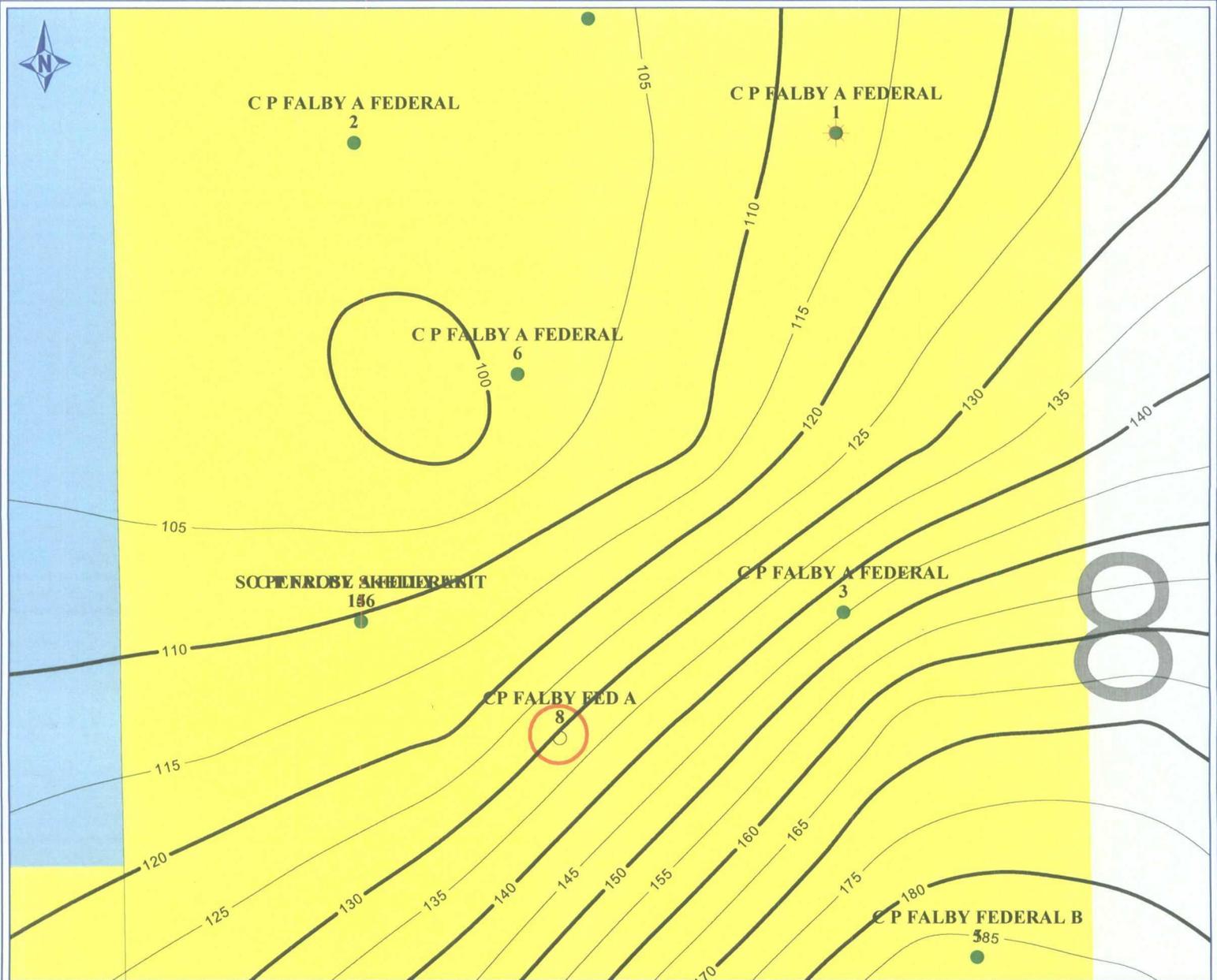
*Casey R. Mobley*  
Signature  
**Casey R. Mobley**  
Printed Name  
**Geologist**  
Title  
**January 12, 2009**

<sup>18</sup> 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.*

Signature and Seal of Professional Surveyor:

Certificate Number



PETRA 1/12/2009 8:06:34 AM



**Chevron U.S.A. Inc.**

**EXHIBIT 4**

**C.P. FALBY FEDERAL A #8**

Sec 8, T22S-R37E, Lea Co., New Mexico

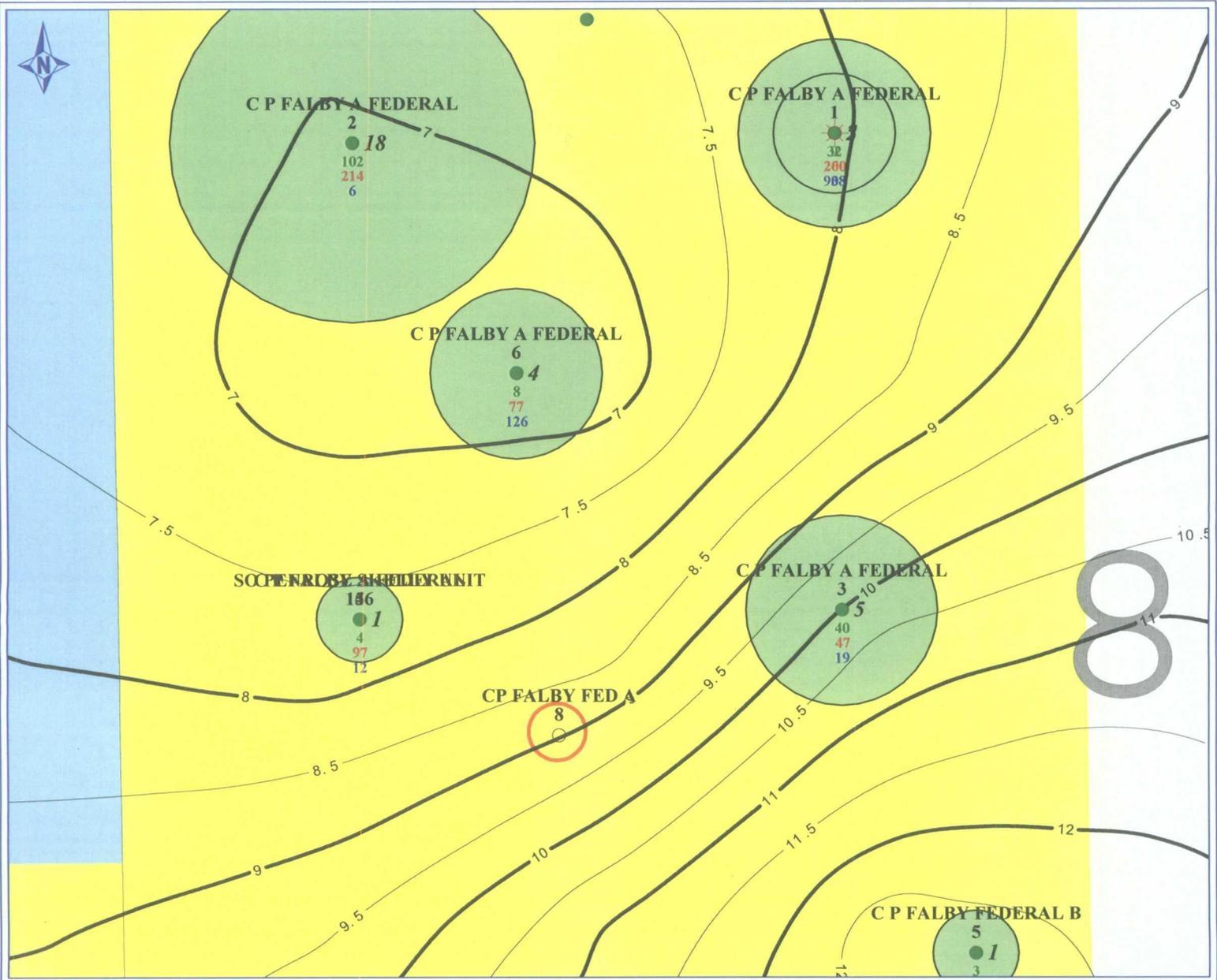
Grayburg Net Pay CI=5' [GR<40, Por>6%]

**POSTED WELL DATA**

Well Name  
Well Number



January 12, 2009



PETRA 1/12/2009 8:03:44 AM



**Chevron U.S.A. Inc.**

**EXHIBIT 5**

**C.P. FALBY FEDERAL A #8**  
 Sec 8, T22S-R37E, Lea Co., New Mexico  
 Grayburg HCPV CI=0.5 & EUR - Drainage

**POSTED WELL DATA**

Well Name  
 Well Number

● GRBG Drained Area (ACRES)

Grayburg Cum Oil Production (MBO)  
 Grayburg Cum Gas Production (MMCF)  
 Grayburg Cum Water Production (MBW)



January 12, 2009