

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.

Casey R. Mobley  
Print or Type Name

Signature

Project Manager / Geologist  
Title

8/08/2008  
Date

Casey.Mobley@chevron.com  
e-mail Address

- NSL - 5906-A  
 - Chevron USA Inc  
 4323  
 Pool  
 - Pennrose SKILLY  
 Grayburg  
 50350  
 Wei  
 C.L. Handy #10  
 30-025-35240

## **NOTIFICATION LIST**

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

**C.L. Hardy #10**  
1310' FSL & 330' FWL  
Section 20, T21S, R37E, Unit Letter M  
Lea County, New Mexico

### **Offset Operators, Working Interest Owners, SW/4 Section 20:**

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



Katherine Tomberlin  
Reservoir Engineer

North America Upstream  
Midcontinent Business Unit  
1400 Smith Street  
Houston, Texas 77002  
Tel (281) 372-9659  
Katherine.Tomberlin@chevron.com

RECEIVED OGD  
2014 JUL 25 P 3: 19

July 21, 2014

Request for Amendment of Administrative Approval of  
Unorthodox Oil Well Location

Mr. Phillip Goetze  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Dear Mr. Goetze:

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

**C.L. Hardy #10**  
1270' FSL & 482' FWL, SW/4 SW/4 of  
Section 20, T21S, R37E, Unit Letter M  
Lea County, New Mexico

Chevron's previous non-standard location submittal on October 22, 2008 (NSL-5906) was approved, and now needs amending due to an unforeseen pipeline in the area. 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 6 year infill drilling in the same Pool. Upon inspection, a pipeline was found causing the well location to be moved 130 feet to the South and 53 feet to the East.

If you have any questions concerning this application or need additional information, please contact me by phone at (281) 372-9659 or by email at Katherine.Tomberlin@chevron.com. Thank you for consideration of this matter.

Sincerely,

Katherine Tomberlin  
Reservoir Engineer

**DISTRICT I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

**DISTRICT II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

**DISTRICT III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

**DISTRICT IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

**State of New Mexico**  
**Energy, Minerals & Natural Resources Department**  
**OIL CONSERVATION DIVISION**  
**1220 South St. Francis Dr.**  
**Santa Fe, New Mexico 87505**

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

□ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number	Pool Code <b>50350</b>	Pool Name <b>Penrose Skelly; Grayburg</b>
Property Code <b>2634</b>	Property Name <b>C.L. HARDY</b>	Well Number <b>10</b>
OGRID No. <b>4323</b>	Operator Name <b>CHEVRON USA INC.</b>	Elevation <b>3494'</b>

**Surface Location**

UL or lot No. <b>M</b>	Section <b>20</b>	Township <b>21-S</b>	Range <b>37-E</b>	Lot Idn	Feet from the <b>1270</b>	North/South line <b>SOUTH</b>	Feet from the <b>482</b>	East/West line <b>WEST</b>	County <b>LEA</b>
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**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 <b>40</b>	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 align="center">GEODETIC COORDINATES NAD 27 NME</p> <p align="center">SURFACE LOCATION Y=533140.8 N X=852147.9 E</p> <p align="center">LAT.=32.460539° N LONG.=103.191641° W</p>	<p align="center"><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><b>Cindy Herrera-Murillo</b> 7-29-14 Signature Date</p> <p><b>Cindy Herrera-Murillo</b> Printed Name</p> <p><b>Cherreramurillo@chevron.com</b> E-mail Address</p>
	<p align="center"><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 align="center"><b>APRIL 24, 2014</b></p> <p>Date of Survey</p> <p>Signature &amp; Seal of Professional Surveyor:</p> <p align="center"> </p> <p>Certificate Number: Gary G. Eidson 12641 Renewing: Gary G. Eidson 3239</p>
	<p>ACK REL W/O GARY G. Eidson 14110458</p>



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Reese Fullerton**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



**October 22, 2008**  
**Administrative Order NSL-5906**

Chevron U.S.A. Inc.  
11111 S. Wilcrest, Rm S-1037  
Houston, TX 77099

**Chevron's NSL Application: C.L. Hardy Well No. 10**

1310' FSL & 330' FWL, SW/4 SW/4 of S-20, T-21 S, R-37 E, Unit M, NMPM,  
Lea County, New Mexico  
Penrose Skelly; Grayburg Pool (50350)

Reference is made to the following:

- (a) Your initial application (*administrative application reference No. pKVR0822640251*) submitted to the New Mexico Oil Conservation Division ("Division") in Santa Fe, New Mexico on August 13, 2008. On August 26, 2008 OCD asked you notice offset operators and that was done on September 23, 2008 Six Aches Co. objected October 8, 2008 and on October 9, 2008 they withdrew their objection, and
- (b) the Division's records pertinent to this request.

Chevron U.S.A. Inc. (Chevron) has requested authority to drill and complete its C.L. Hardy Well No. 10 at an unorthodox Penrose Skelly; Grayburg oil well, 1310' FSL & 330' FWL, Unit M, S-20 T-21 S, R-37 E, Lea County, New Mexico. The SW/4 SW/4 of Section 20 will be simultaneously dedicated to the proposed well and to the C.L. Hardy Well No.4, pursuant to Statewide Rule 104.B(1). There are eight wells that have produced from the Grayburg formation in the SW/4 of Section 20. The Penrose Skelly; Grayburg Pool (50350) is an oil pool spaced on 40 acres and is a continuation of Chevron's 6 year infill drilling program. The proposed well is located 330 feet off the lease line.

Your application has been duly filed under the provisions of Division Rules 104.F and 1210.A (2)



Administrative Application: NSL-5906  
Chevron U.S.A. Inc.  
October 22, 2008  
Page 2 of 2

It is also our understanding that Chevron (OGRID **4323**) is seeking this non-standard location at the Bureau of Land Management's request due to sand dunes.

It is also understood that notice of this application to offsetting operators or owners is unnecessary because COG owns 100% of the working interest in the proposed unit and in the offsetting unit towards which this location encroaches.

Pursuant to the authority granted under the provisions of Division Rule 104.F(2), the above-described unorthodox oil well location is hereby approved.

This approval is subject to your being in compliance with all the other applicable Division rules, including, but not limited to Division Rule 40.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire', is written over a horizontal line.

Mark E. Fesmire, P.E.  
Division Director

MEF/tw

cc: New Mexico Oil Conservation Division – Hobbs



**Casey R. Mobley**  
Project Manager / Geologist

**North America Upstream**  
Midcontinent Business Unit  
11111 S. Wilcrest, Rm S-1037  
Houston, Texas 77099  
Tel (281) 561-4830  
Fax (281) 561-3576  
Casey.Mobley@chevron.com

August 8, 2008

**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.L. Hardy #10**  
1310' FSL & 330' FWL, SW/4 SW/4 of  
Section 20, T21S, R37E, Unit Letter M  
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 6 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 SW/4 of Section 20 will be simultaneously dedicated in the Penrose Skelly, Grayburg Pool to the proposed well and to the C.L. Hardy #4, pursuant to Statewide Rule 104.B(1). The C.L. Hardy #4 was drilled in 1959 and was re-completed as a Penrose Skelly, Grayburg producer in 2003.

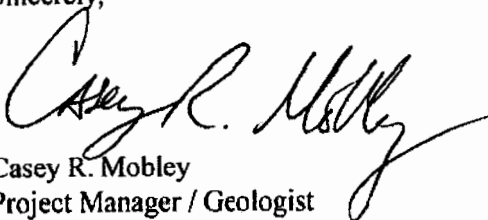
This application is based on geological and engineering analysis. The analysis and justification for this request is attached as Exhibit 1, along with other supporting documentation. There are eight wells that have produced the Grayburg formation in the SW/4 of Section 20. The proposed well will be located in the approximate western 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 SW/4 of Section 20 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.

August 8, 2008  
Page 2

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) 561-3654 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  
Ed Van Reet  
Meilin Du  
Well File



## **EXHIBIT 1**

### **ENGINEERING AND GEOLOGICAL JUSTIFICATION**

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

**C.L. Hardy #10**  
1310' FSL & 330' FWL  
Section 20, T21S, R37E, Unit Letter M  
Lea County, New Mexico

#### **PRIMARY OBJECTIVE: GRAYBURG**

##### **SUPPORTING DATA:**

1. Chevron U.S.A. Inc. (Chevron) is the operator of the proposed C.L. Hardy #10 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	API #	Location	Formation	Cum Prod		Current Prod		Status
					MBO	MMCF	BOPD	MCFPD	
Chevron	C L Hardy #1	30025066840000	20N 21S 37E	Grayburg	42	0	0	0	Inactive
Chevron	C L Hardy #2	30025066850003	20N 21S 37E	Grayburg	8	439	1	186	Oil
Chevron	C L Hardy #3	30025066860005	20K 21S 37E	Grayburg	21	487	4	156	Oil
Chevron	C L Hardy #5	30025067050004	20L 21S 37E	Grayburg	16	421	4	151	Oil
Chevron	C L Hardy #4	30025066870002	20M 21S 37E	Grayburg	8	358	5	154	Oil
Chevron	C L Hardy #6	30025367400000	20K 21S 37E	Grayburg	16	258	7	136	Oil
Chevron	C L Hardy #7	30025378330000	20L 21S 37E	Grayburg	8	167	11	221	Oil
Chevron	C L Hardy #8	30025383380000	20N 21S 37E	Grayburg	6	95	11	269	Oil

3. The proposed C.L. Hardy #10 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.

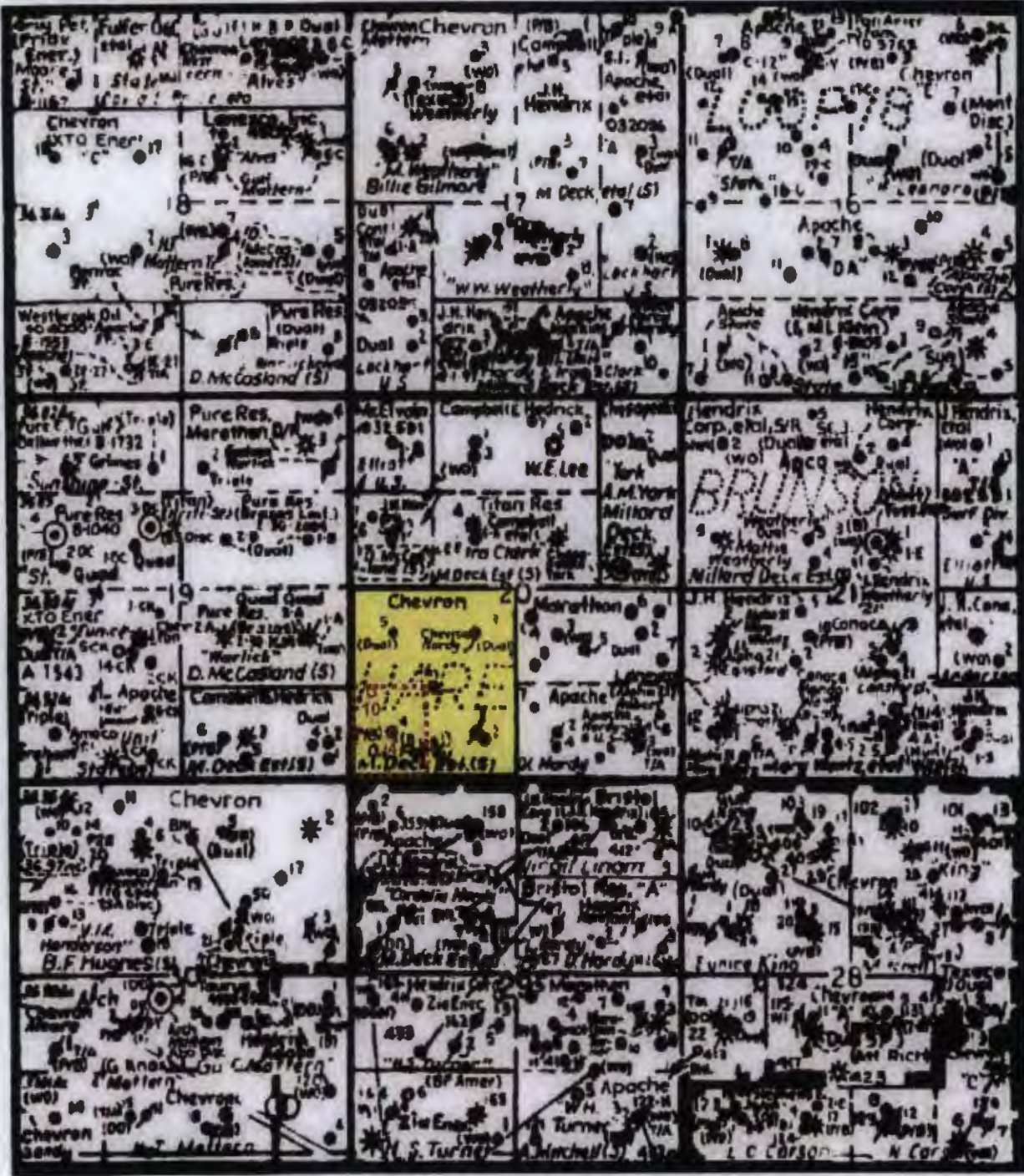
Operator	Well	API #	Location	Formation	Drainage Acres	EUR	
						MBO	MMCF
Chevron	C L Hardy #1	30025066840000	20N 21S 37E	Grayburg	6	42	0
Chevron	C L Hardy #2	30025066850003	20N 21S 37E	Grayburg	1	9	684
Chevron	C L Hardy #3	30025066860005	20K 21S 37E	Grayburg	3	23	579
Chevron	C L Hardy #4	30025067050004	20M 21S 37E	Grayburg	2	13	494
Chevron	C L Hardy #5	30025066870002	20L 21S 37E	Grayburg	3	20	847
Chevron	C L Hardy #6	30025367400000	20K 21S 37E	Grayburg	4	26	416
Chevron	C L Hardy #7	30025378330000	20L 21S 37E	Grayburg	3	18	324
Chevron	C L Hardy #8	30025383380000	20N 21S 37E	Grayburg	3	22	483

As seen above, the average drainage area of the offsetting locations is only 4 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 6 acre drainage area, and a 15% recovery factor. The results are as follows:

Operator	Well	Location	HCPV	Drainage Acres	EUR	
					MBO	MMCF
Chevron	C L Hardy #10	20-M	14.1	3	22	478



4. The SW/4 of Section 20 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 C.L. Hardy #10 will share a 40-acre proration unit and will be simultaneously dedicated with the C.L. Hardy #4, pursuant to Statewide Rule 104.B(1), as a Penrose Skelly, Grayburg producer in Section 20, Unit Letter K.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.





C. L. Hardy #4  
660 FSL & 660 FWL, Unit M  
C. L. Hardy #10 (proposed)  
1310 FSL & 330 FWL, Unit M

Section 20, T21S-R37E  
Lea County, New Mexico

 C. L. Hardy Lease  
 40 Acre Proration Unit  
Scale: 1"=2000' Approx.

# State of New Mexico

Energy, Minerals and Natural Resources Department

## DISTRICT I

1625 N. FRENCH DR., HOBBES, NM 86240

## DISTRICT II

1901 W. GRAND AVENUE, ARTESIA, NM 86210

## DISTRICT III

1000 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.L. HARDY	Well Number 10
OGRID No.	Operator Name CHEVRON USA INC.	Elevation 3495'

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	20	21-S	37-E		1310	SOUTH	330	WEST	LEA

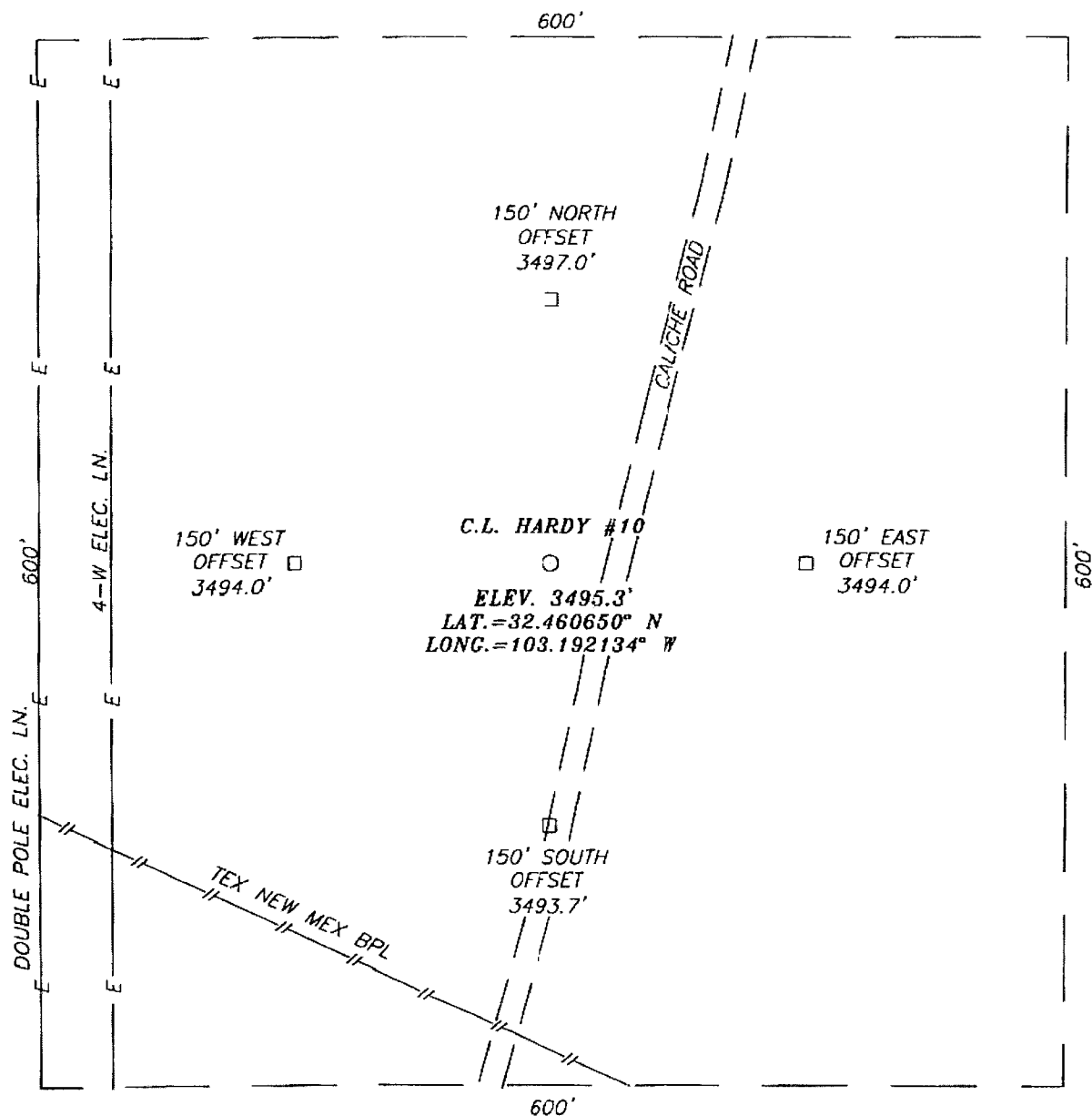
### Bottom Hole Location If Different From Surface

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

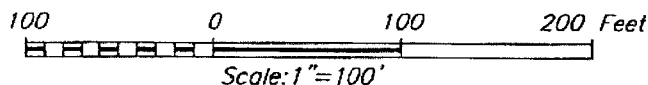
<p>330'</p> <p>1310'</p>	<p>GEODETC COORDINATES NAD 27 NME</p> <p>Y=533179.4 N X=851995.7 E</p> <p>LAT.=32.460650° N LONG.=103.192134° W</p>	<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization 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.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p>
	<h3>SURVEYOR CERTIFICATION</h3> <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>Date Surveyed: 10/18/08</p> <p>Signature:  Seal of Professional Surveyor 3239</p> <p>Certificate No. RONALD EIDSON 3239</p>	

SECTION 20, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM INTERSECTION ST. HWY. #8 AND CO. RD. #E33 (TURNER), GO NORTH ON CO. RD. #E33 APPROX. 1.15 MILES. TURN LEFT AND GO WEST APPROX. 1.0 MILES. VEER RIGHT AND GO NORTH APPROX. 0.1 MILE. THIS LOCATION IS APPROX. 50 FEET LEFT.



CHEVRON USA INC.

C.L. HARDY #10 WELL  
LOCATED 1310 FEET FROM THE SOUTH LINE  
AND 330 FEET FROM THE WEST LINE OF SECTION 20,  
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

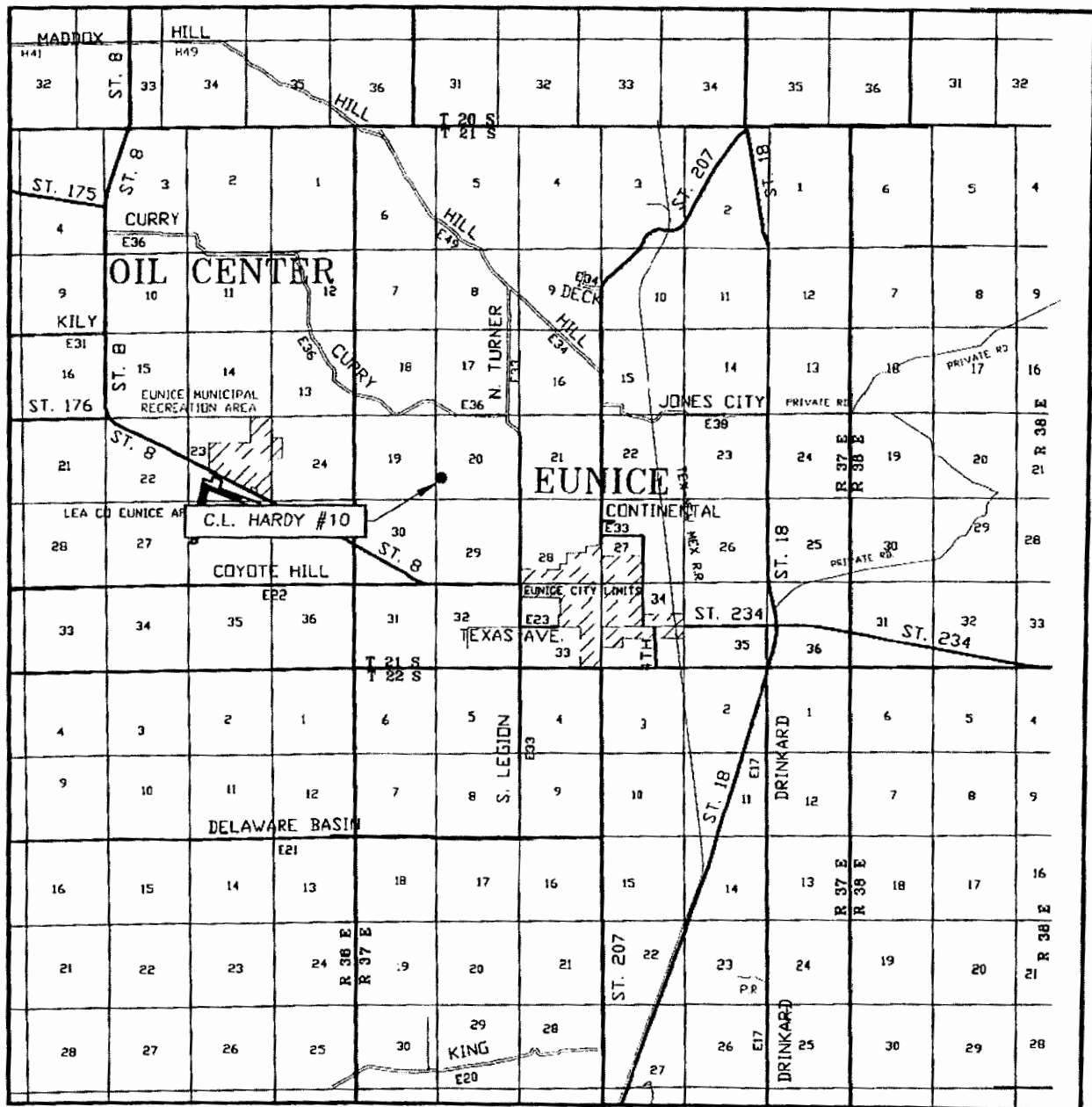
Survey Date: 7/18/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1151	Dr By: LA
Date: 7/29/08	08111151
	Scale: 1"=100'



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



# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 20 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

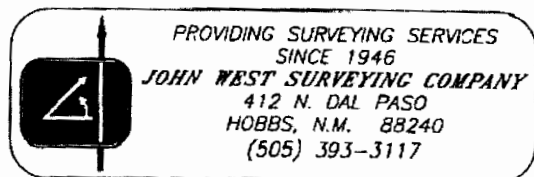
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1310' FSL & 330' FWL

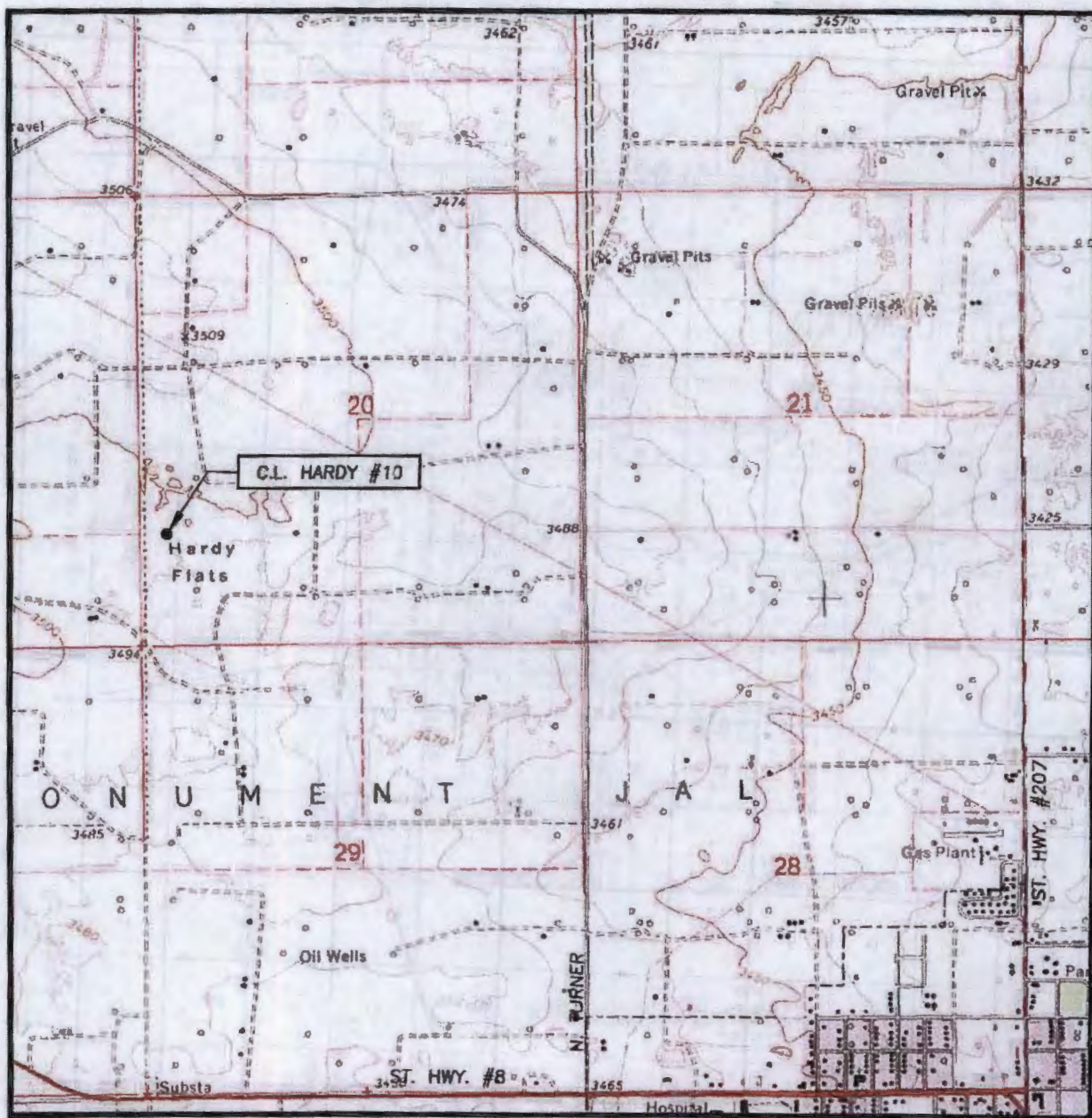
ELEVATION 3495'

OPERATOR CHEVRON U.S.A. INC.

LEASE C.L. HARDY



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 20 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1310' FSL & 330' FWL

ELEVATION 3495'

OPERATOR CHEVRON USA INC.

LEASE C.L. HARDY

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



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

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

Submit to \_\_\_\_\_ District Office

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 L Hardy	<sup>6</sup> Well Number 10
<sup>7</sup> OGRID No. 4323	<sup>8</sup> Operator Name Chevron U.S.A., Inc.	<sup>9</sup> Elevation 3495'

<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
M	20	21S	37E		1310	South	330	West	Lea

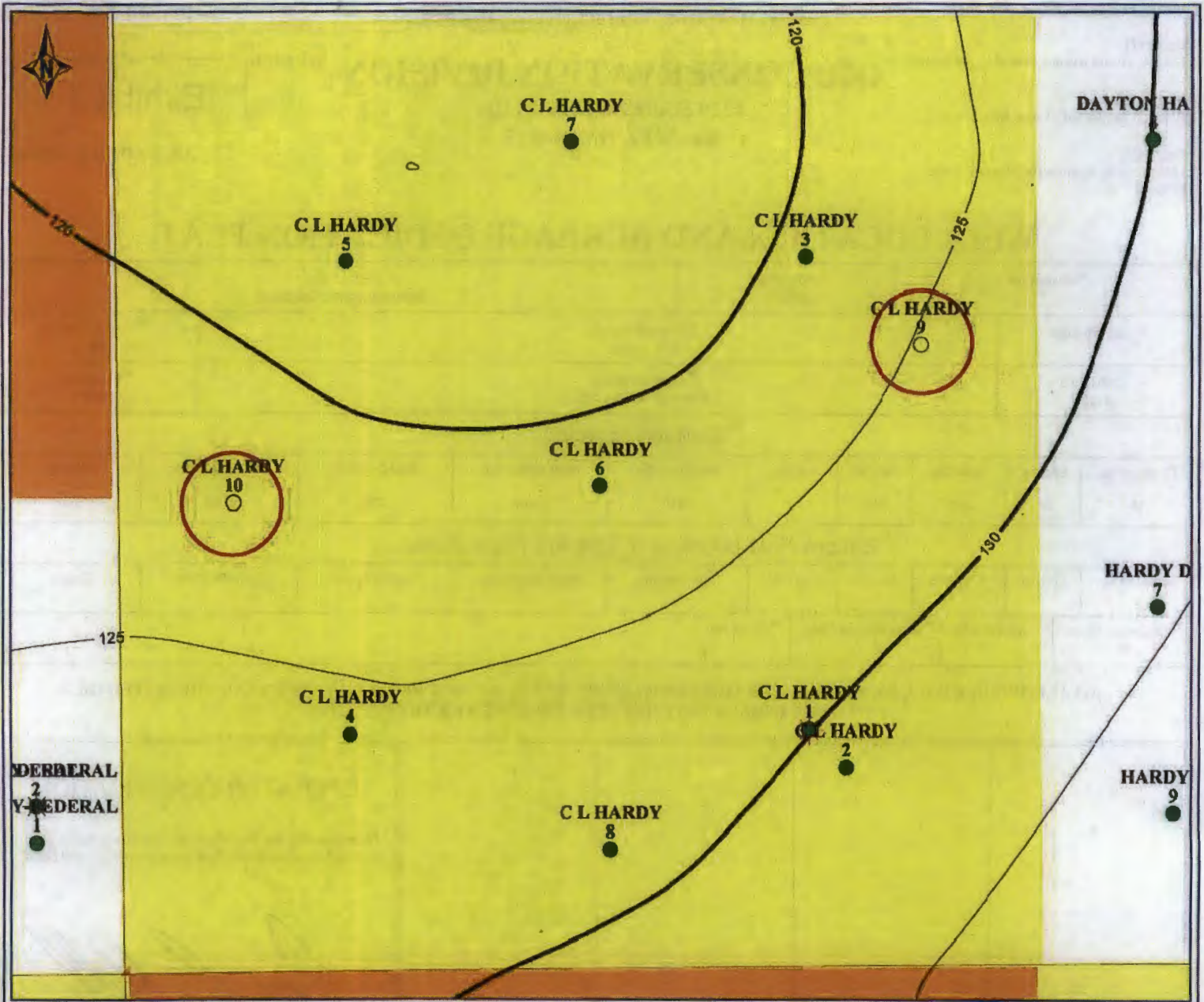
<sup>11</sup> Bottom Hole Location If Different From Surface

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

<div><p>16</p><p>C L Hardy Lease</p><p>40-acre proration unit</p><p>330'</p><p>1330'</p><p>4</p><p>20</p></div>	<div><p>17</p><p><b>OPERATOR CERTIFICATION</b></p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p><p>Signature _____</p><p>Printed Name <b>Casey R. Mobley</b></p><p>Title <b>Geologist</b></p><p><b>August 8, 2008</b></p></div> <div><p>18</p><p><b>SURVEYOR CERTIFICATION</b></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><p>Certificate Number _____</p></div>
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**Chevron U.S.A. Inc.**

### EXHIBIT 4

**PENROSE-SKELLY FIELD C.L. HARDY #10**

**Sec. 20, T21S-R37E, Lea Co., New Mexico**

Grayburg Net Pay CI=5' [GR<40, Por>8%]

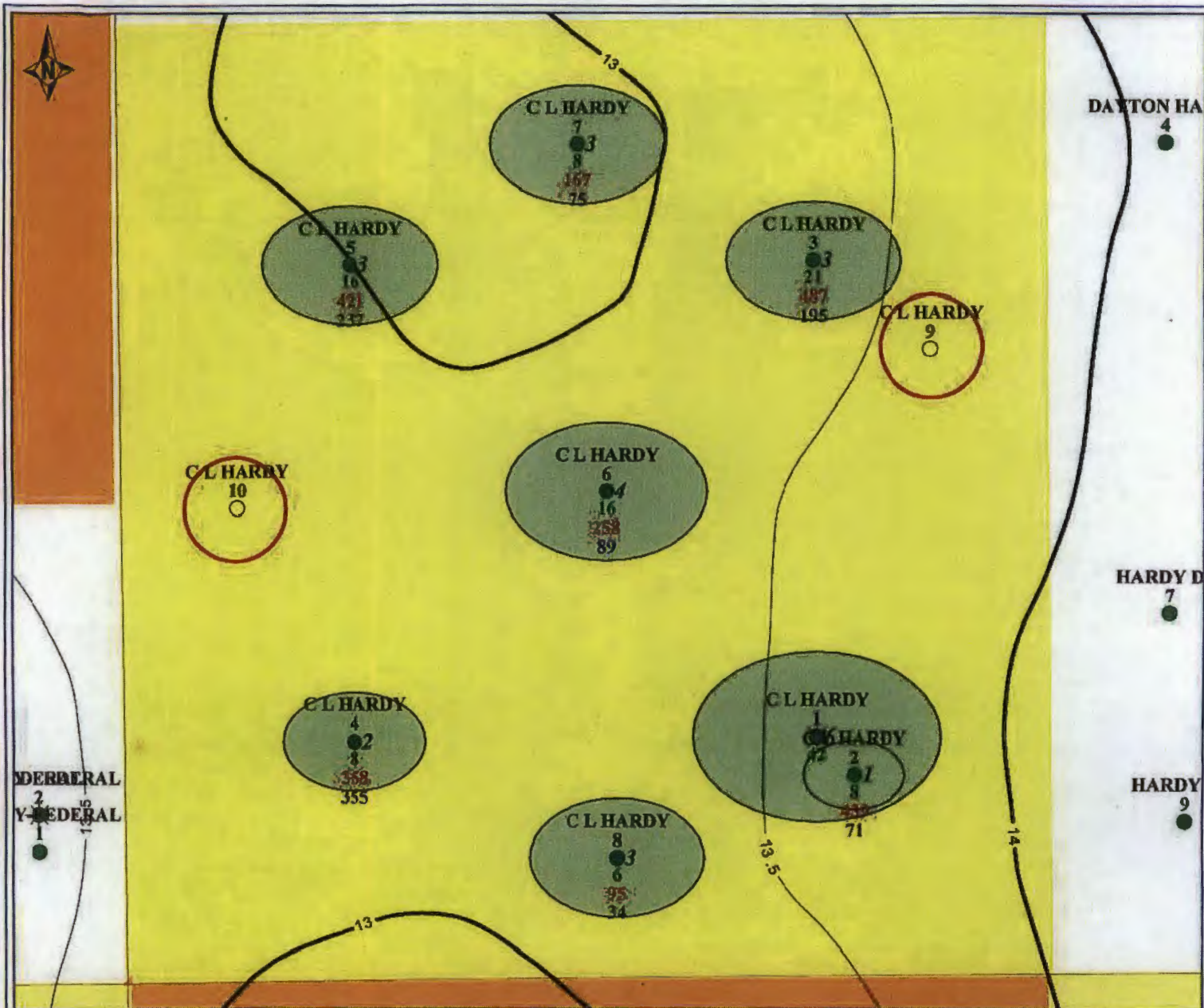
### POSTED WELL DATA

Well Name  
Well Number



August 7, 2008





PETRA 8/7/2008 11:31:40 AM



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

## EXHIBIT 5

**PENROSE-SKELLY FIELD C.L. HARDY #10**

**Sec 20, T21S-R37E, Lea Co., New Mexico**

Grayburg HCPV CI=0.5 & EUR - Drainage

### POSTED WELL DATA

Well Name  
Well Number

● GRBG Drained Area

Grayburg Cum Oil Prod (MBO)  
Grayburg Cum Gas Prod (MMCF)  
Grayburg Cum Water Prod (MBO)



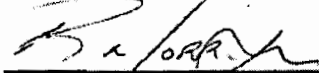
August 7, 2008

**C.L. Hardy #10 Well**  
Leasehold Information Pertaining to the Captioned NSL Well

C.L. Hardy #10  
1270' FSL & 482' FWL of Section 20-T21S-R37E  
Lea County, New Mexico

Lease Description:	Lease Date	Original Lessee	Present Lessor	Lease Royalty	Expiration Date	Gross Acres	Net Acres
<u>Township 21 South, Range 37 East, N.M.P.M.</u> Section 20: SW/4	4/28/1927	Cordelia L. Hardy	Chevron U.S.A (100%)	12.50%	HBP	160	160

I verify the above information is correct



Robert Morrison, Jr., Land Representative