

DATE IN 6/3/08	SUSPENSE	ENGINEER Brooks	LOGGED IN 6/3/08	TYPE NSL	APP NO. PKVR.0815550083
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



Chevron USA Inc

Eunice King #34

ADMINISTRATIVE APPLICATION CHECKLIST

5859

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]

RECEIVED
2008 JUN 3 AM 8 48

- [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 _____

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2008 MAY 31 AM 8 36

- [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

6/08/2008
 Date

Casey.Mobley@chevron.com
 e-mail Address



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

June 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:

Eunice King #34
2160' FNL & 2630' FWL, SE/4 NW/4 of
Section 28, T21S, R37E, Unit Letter F
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 SE/4 NW/4 of Section 28 will be simultaneously dedicated in the Penrose Skelly, Grayburg Pool to the proposed well and to the Eunice King #3, Eunice King #29, and Eunice King #33 wells, pursuant to statewide Rule 104.B(1). The Eunice King #3 was drilled in 1937 and was re-completed as a Penrose Skelly, Grayburg producer in 2003. The Eunice King #29 was drilled in 2005 and is currently completed as a Penrose Skelly, Grayburg producer. The Eunice King #33 was drilled in 2007 and is currently completed as a Penrose Skelly, Grayburg producer.

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 NW/4 of Section 28. The proposed well will be located in the approximate southeastern 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.

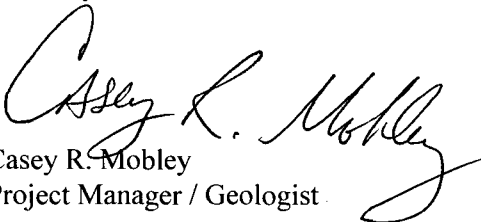
A land plat highlighting the proposed well's location is attached as Exhibit 2. The N/2 of Section 28 is covered by a single fee lease and has common royalty and working interest ownerships. For that reason and the proposed location of the infill well, there are no adversely affected interest owners and no one has been notified of this application.

June 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. 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. Thank you for consideration of this matter.

Sincerely,


Casey R. Mobley
Project Manager / Geologist

Attachments

cc: NMOCD District 1 – Hobbs, NM
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:

Eunice King #34

2160' FNL & 2630' FWL

Section 28, T21S, R37E, Unit Letter F

Lea County, New Mexico

Offset Operators, Working Interest Owners, N/2 Section 28:

- | | | |
|----|---------------------|------------------|
| 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:

Eunice King #34

2160' FNL & 2630' FWL

Section 28, T21S, R37E, Unit Letter F

Lea County, New Mexico

PRIMARY OBJECTIVE: GRAYBURG

SUPPORTING DATA:

1. Chevron U.S.A. Inc. (Chevron) is the operator of the proposed Eunice King #34 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	Eunice King #1	30025068370000	28E 21S 37E	Grayburg	191	1,270	1	160	Oil
Chevron	Eunice King #2	30025068380000	28D 21S 37E	Grayburg	61	220	4	257	Oil
Chevron	Eunice King #3	30025068390000	28F 21S 37E	Grayburg	121	1,040	2	172	Oil
Gulf	Eunice King #6	30025068420002	28D 21S 37E	Grayburg	32	284	-	-	Inactive Oil
Chevron	Eunice King #7	30025068430000	28G 21S 37E	Grayburg	44	496	2	229	Oil
Chevron	Eunice King #8	30025068440005	28H 21S 37E	Grayburg	11	263	2	235	Oil
Chevron	Eunice King #11	30025068470001	28B 21S 37E	Grayburg	78	596	12	133	Oil
Chevron	Eunice King #12	30025068480000	28A 21S 37E	Grayburg	24	365	11	167	Oil
Gulf	Eunice King #16	30025068530002	28A 21S 37E	Grayburg	190	94	-	-	Inactive Oil
Chevron	Eunice King #19	30025068560005	28C 21S 37E	Grayburg	13	396	5	162	Oil
Gulf	Eunice King #26	30025068660001	28H 21S 37E	Grayburg	12	72	-	-	Inactive Oil
Chevron	Eunice King #27	30025367380000	28C 21S 37E	Grayburg	12	470	6	191	Oil
Chevron	Eunice King #28	30025367390000	28B 21S 37E	Grayburg	19	269	10	233	Oil
Chevron	Eunice King #29	30025371870000	28F 21S 37E	Grayburg	12	173	6	243	Oil
Chevron	Eunice King #30	30025378310000	28D 21S 37E	Grayburg	8	125	9	257	Oil
Chevron	Eunice King #31	30025378320000	28B 21S 37E	Grayburg	7	158	1	99	Oil
Chevron	Eunice King #32	30025383360000	28A 21S 37E	Grayburg	7	56	13	153	Oil
Chevron	Eunice King #33	30025383370000	28F 21S 37E	Grayburg	1	114	7	389	Oil

3. The proposed Eunice King #34 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.

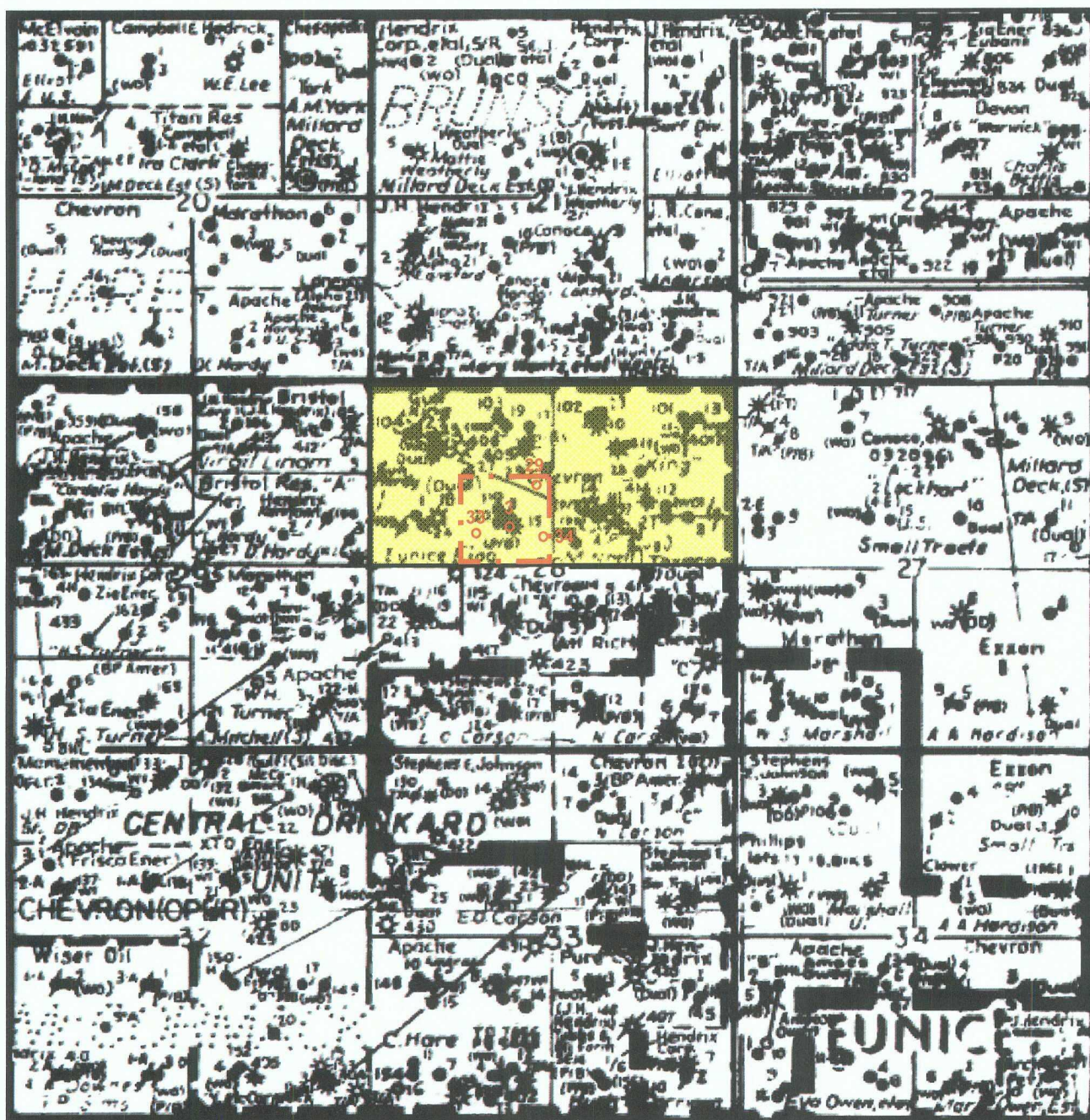
The following table provides drainage areas calculated from the HCPV map and reserves of the offsetting wells.

Operator	Well	API #	Location	Formation	Drainage Acres	EUR	
						MBO	MMCF
Chevron	Enice King #1	30025068370000	28E 21S 37E	Grayburg	18	191	1,315
Chevron	Eunice King #2	30025068380000	28D 21S 37E	Grayburg	7	67	453
Chevron	Eunice King #3	30025068390000	28F 21S 37E	Grayburg	12	123	1,152
Gulf	Eunice King #6	30025068420002	28D 21S 37E	Grayburg	3	32	284
Chevron	Eunice King #7	30025068430000	28G 21S 37E	Grayburg	6	46	713
Chevron	Eunice King #8	30025068440005	28H 21S 37E	Grayburg	2	14	436
Chevron	Eunice King #11	30025068470001	28B 21S 37E	Grayburg	14	101	800
Chevron	Eunice King #12	30025068480000	28A 21S 37E	Grayburg	7	48	706
Gulf	Eunice King #16	30025068530002	28A 21S 37E	Grayburg	26	190	94
Chevron	Eunice King #19	30025068560005	28C 21S 37E	Grayburg	2	15	501
Gulf	Eunice King #26	30025068660001	28H 21S 37E	Grayburg	2	12	72
Chevron	Eunice King #27	30025367380000	28C 21S 37E	Grayburg	3	27	703
Chevron	Eunice King #28	30025367390000	28B 21S 37E	Grayburg	5	39	570
Chevron	Eunice King #29	30025371870000	28F 21S 37E	Grayburg	3	23	332
Chevron	Eunice King #30	30025378310000	28D 21S 37E	Grayburg	1	14	260
Chevron	Eunice King #31	30025378320000	28B 21S 37E	Grayburg	2	12	351
Chevron	Eunice King #32	30025383360000	28A 21S 37E	Grayburg	4	33	283
Chevron	Eunice King #33	30025383370000	28F 21S 37E	Grayburg	1	6	544

As seen above, the average drainage area of the offsetting locations is only 12 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	Eunice King #34	28-F	9.1	7	47	201

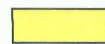

4. The N/2 of Section 28 is covered by a single fee lease which has common royalty and working interest ownerships. Chevron is the operator and 100% working interest owner of the Grayburg wells toward which the proposed well will encroach. Therefore, there are no offset interest owners or adversely affected parties to notify of this application.
5. The proposed Eunice King #34 will share a 40-acre proration unit and will be simultaneously dedicated with the Eunice King #3, Eunice King #29, and Eunice King #33 as a Penrose Skelly, Grayburg producer in Section 28, Unit Letter F.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.



Chevron USA Inc.



Eunice King #3
 1980 FNL & 1980 FWL, Unit F
 Eunice King #29
 1340 FNL & 2620 FWL, Unit F
 Eunice King #33
 2310 FNL & 1520 FWL, Unit F
 Eunice King #34 (proposed)
 2160 FNL & 2630 FWL, Unit F
 Section 28, T21S-R37E
 Lea County, New Mexico

 Eunice King Lease
 40 Acre Proration Unit

Scale: 1"=2000' Approx.

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

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

DISTRICT III
1600 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

APE Number	Pool Code	Pool Name
Property Code	Property Name EUNICE KING	Well Number 34
GRID No.	Operator Name CHEVRON USA INC.	Elevation 3447'

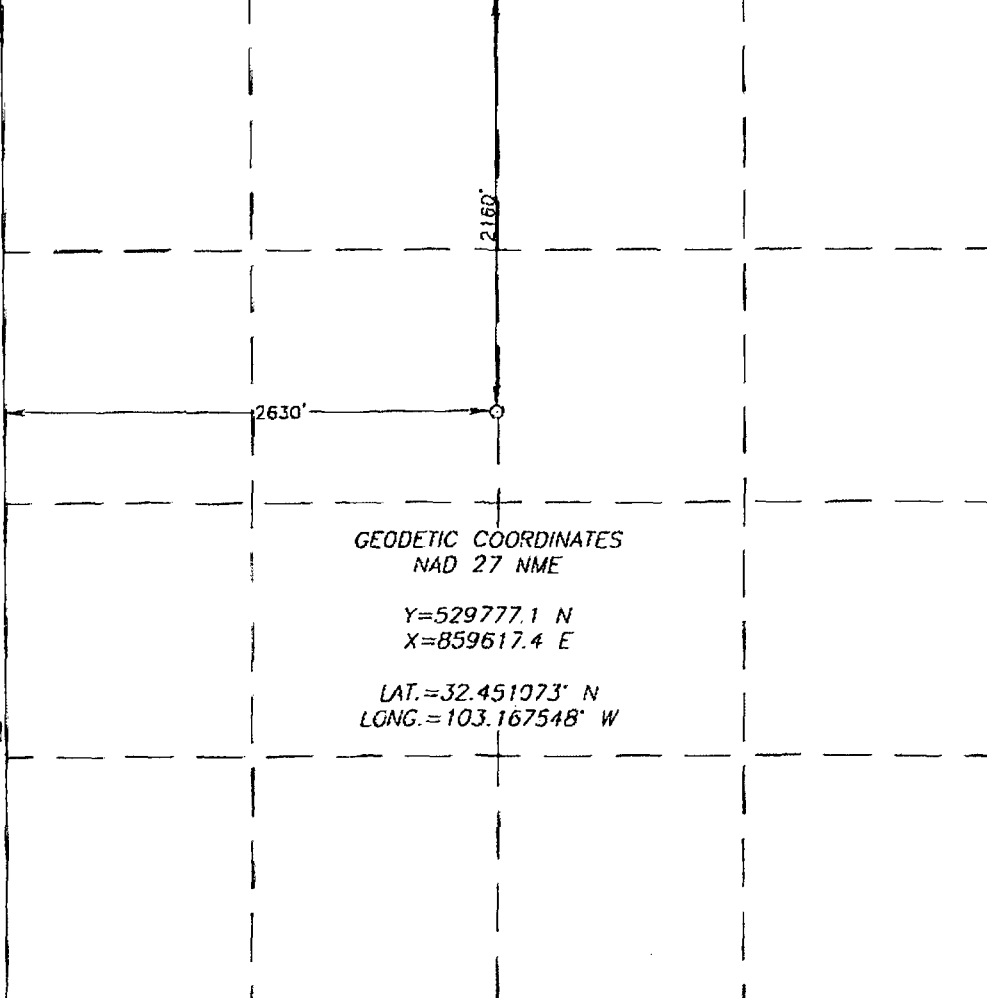
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	37-E		2160	NORTH	2630	WEST	LEA

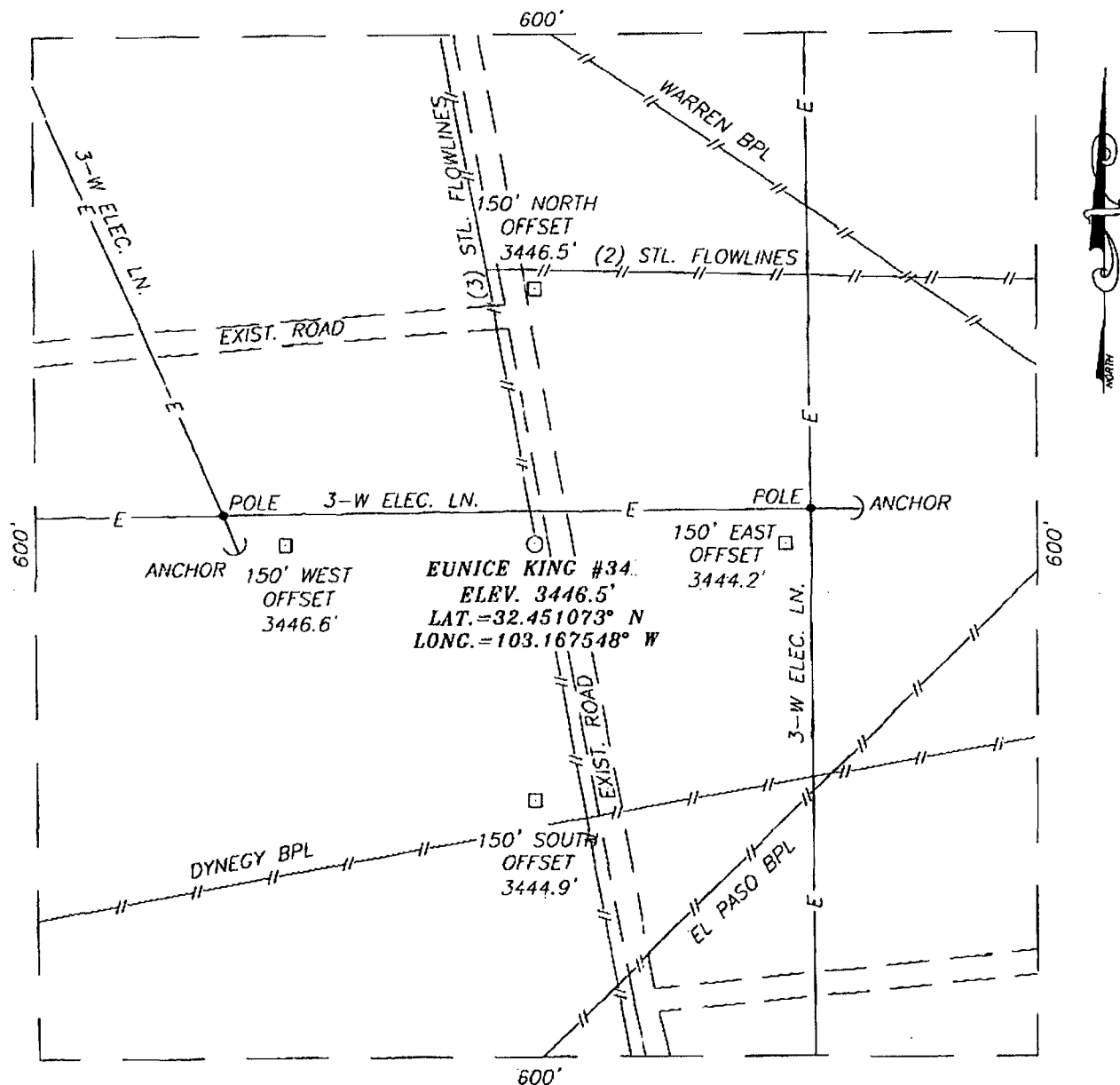
Bottom Hole Location If Different From Surface

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

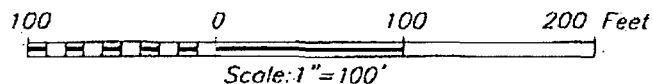
 <p>GEODETIC COORDINATES NAD 27 NME Y=529777.1 N X=859617.4 E LAT.=32.451073° N LONG.=103.167548° W</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or 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> <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>Date Surveyed JANUARY 5, 2008</p> <p>Signature & Seal of Professional Surveyor [Signature] 3235</p> <p>Certificate No. GARY EIDSON 12841</p>
---	---

SECTION 28, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #207 AND ST. HWY. #176 GO NORTH ON ST. HWY. #207 APPROX. 0.8 MILES, TURN LEFT AND GO NORTHWEST APPROX. 0.5 MILES. TURN LEFT AND GO SOUTH APPROX. 0.1 MILE. THIS LOCATION IS APPROX. 18 FEET WEST.



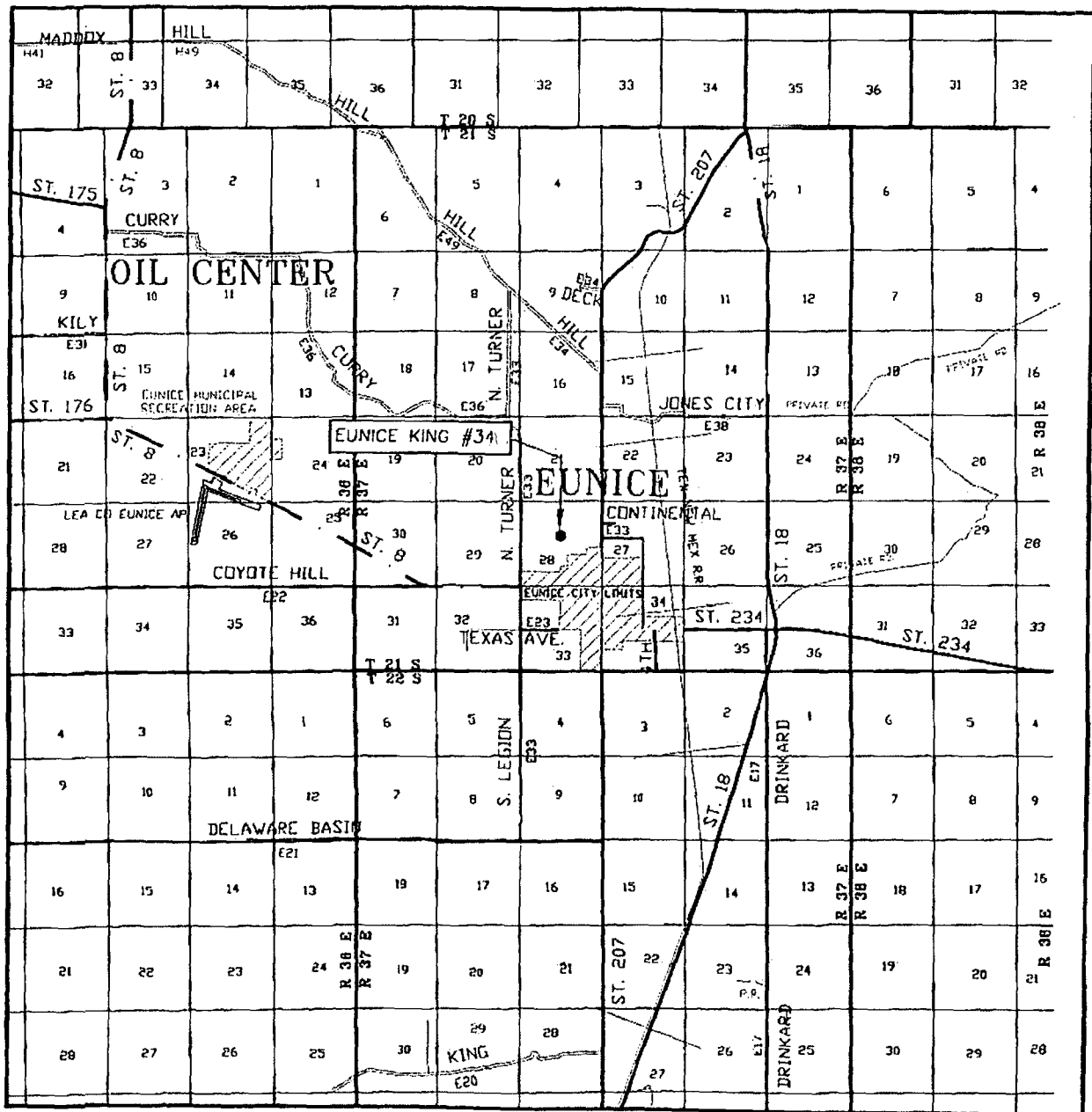
CHEVRON USA INC.

EUNICE KING #34H WELL
 LOCATED 2160 FEET FROM THE NORTH LINE
 AND 2630 FEET FROM THE WEST LINE OF SECTION 28,
 TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 1/5/08	Sheet 1 of 1 Sheets
W.O. Number: 07.11.1777	Dr. By: LA
Date: 1/8/07	07111777
	Scale: 1"=100'

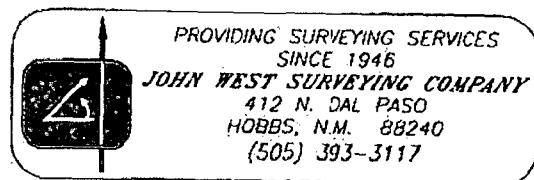
PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

VICINITY MAP

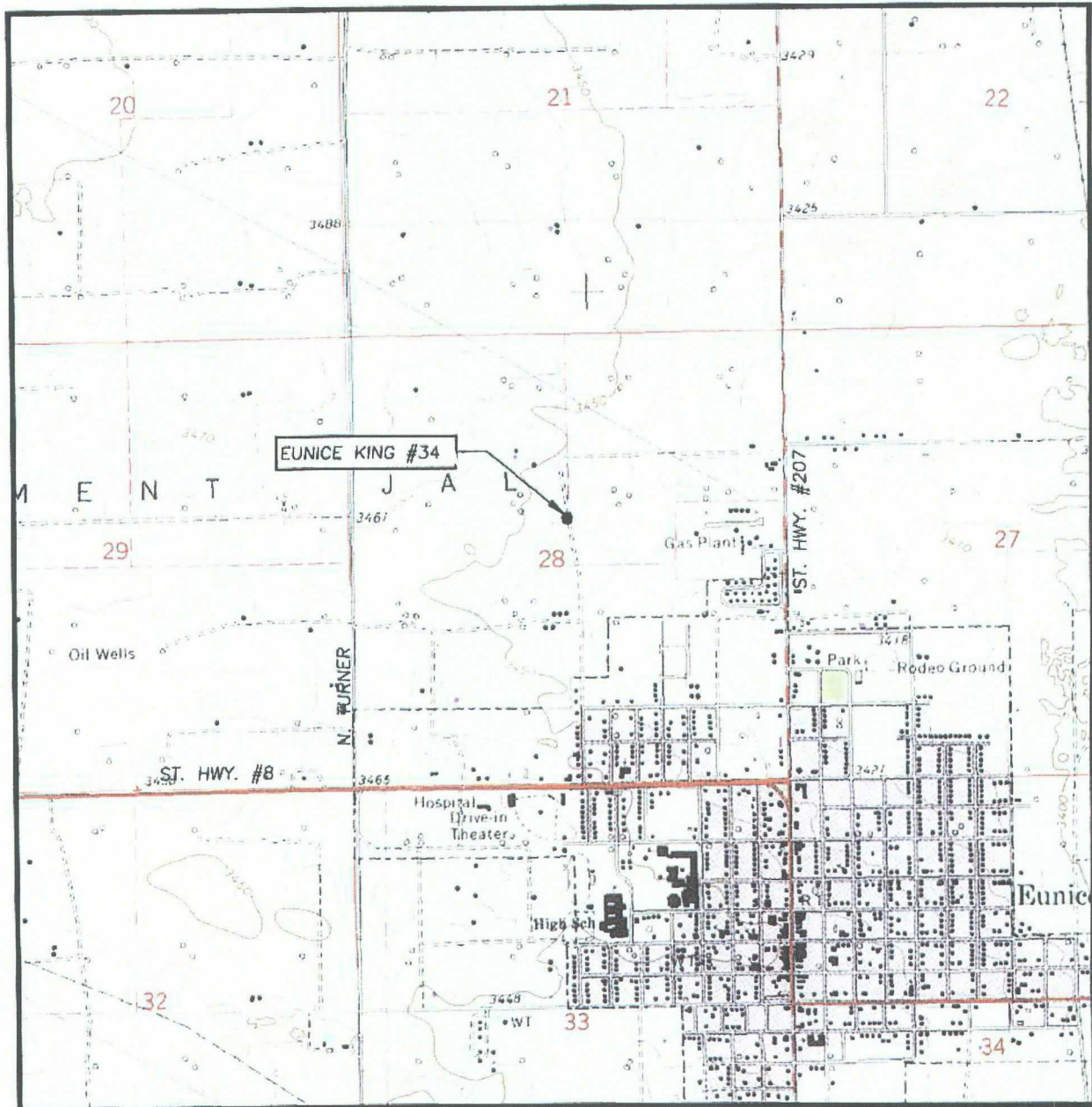


SCALE: 1" = 2 MILES

SEC. 28 TWP. 21-S RGE. 37-E
 SURVEY N.M.P.M.
 COUNTY LEA STATE NEW MEXICO
 DESCRIPTION 2160' FNL & 2630' FWL
 ELEVATION 3447'
 OPERATOR CHEVRON U.S.A. INC.
 LEASE EUNICE KING



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 28 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

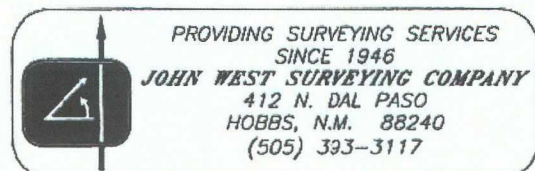
DESCRIPTION 2160' FNL & 2630' FWL

ELEVATION 3447'

OPERATOR CHEVRON USA INC.

LEASE EUNICE KING

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 Eunice King	⁶ Well Number 34
⁷ OGRID No.	⁸ Operator Name Chevron U.S.A., Inc.	⁹ Elevation 3447'

¹⁰ Surface Location

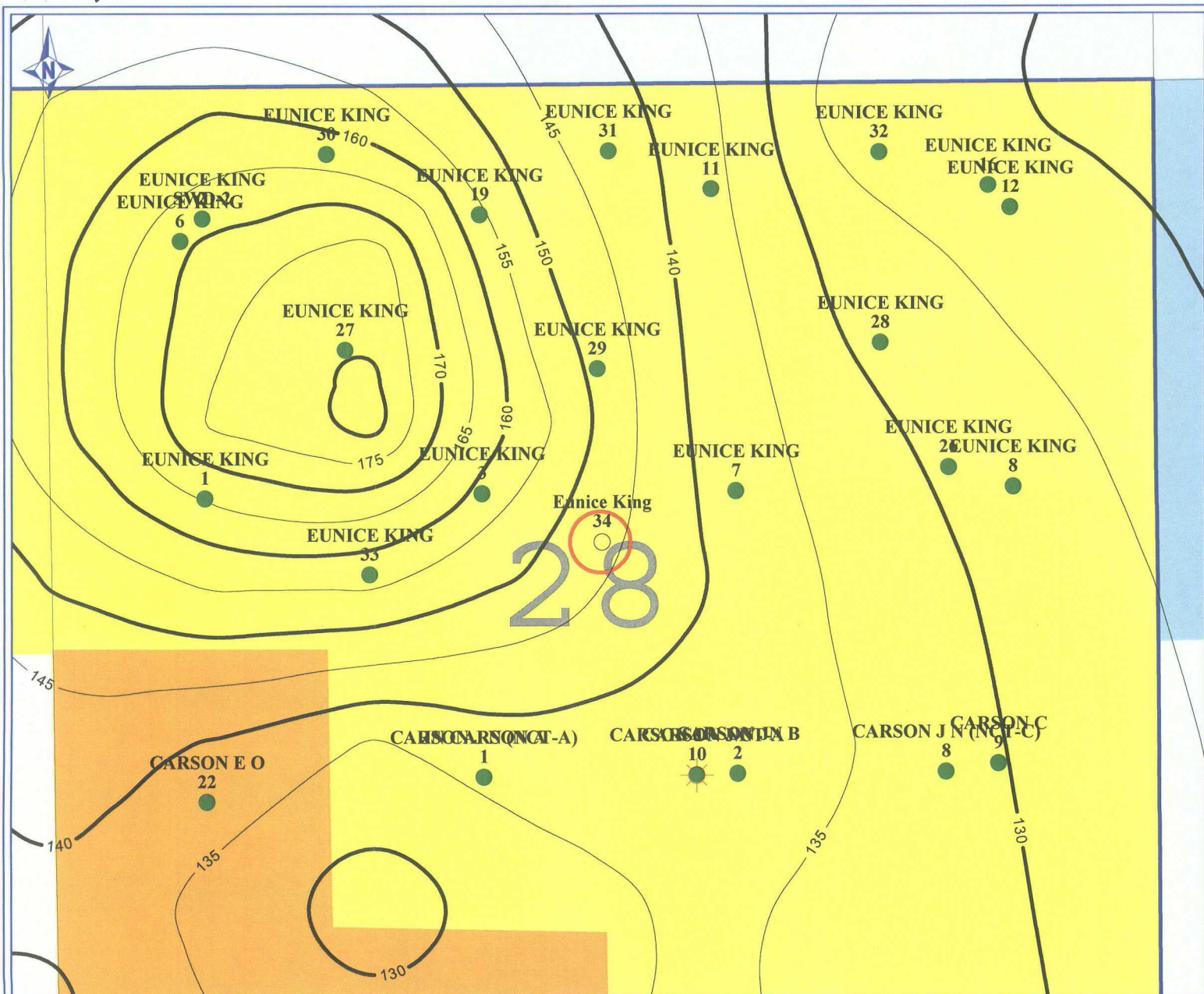
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21S	37E		2160	North	2630	West	Lea

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><p>16</p><p>2160'</p><p>2630'</p><p>40-acre proration unit</p><p>29</p><p>3</p><p>33</p><p>34</p></div>	<div><p>17</p><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></p><p>Signature Casey R. Mobley</p><p>Printed Name Geologist</p><p>Title June 9, 2008</p></div>
	<div><p>18</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>Signature and Seal of Professional Surveyor:</p><p>Certificate Number</p></div>



PETRA 5/28/2008 8:38:02 AM



Chevron U.S.A. Inc.

EXHIBIT 4

PENROSE-SKELLY FIELD EUNICE KING #34

Sec 28, T21S-R37E, Lea Co., New Mexico

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

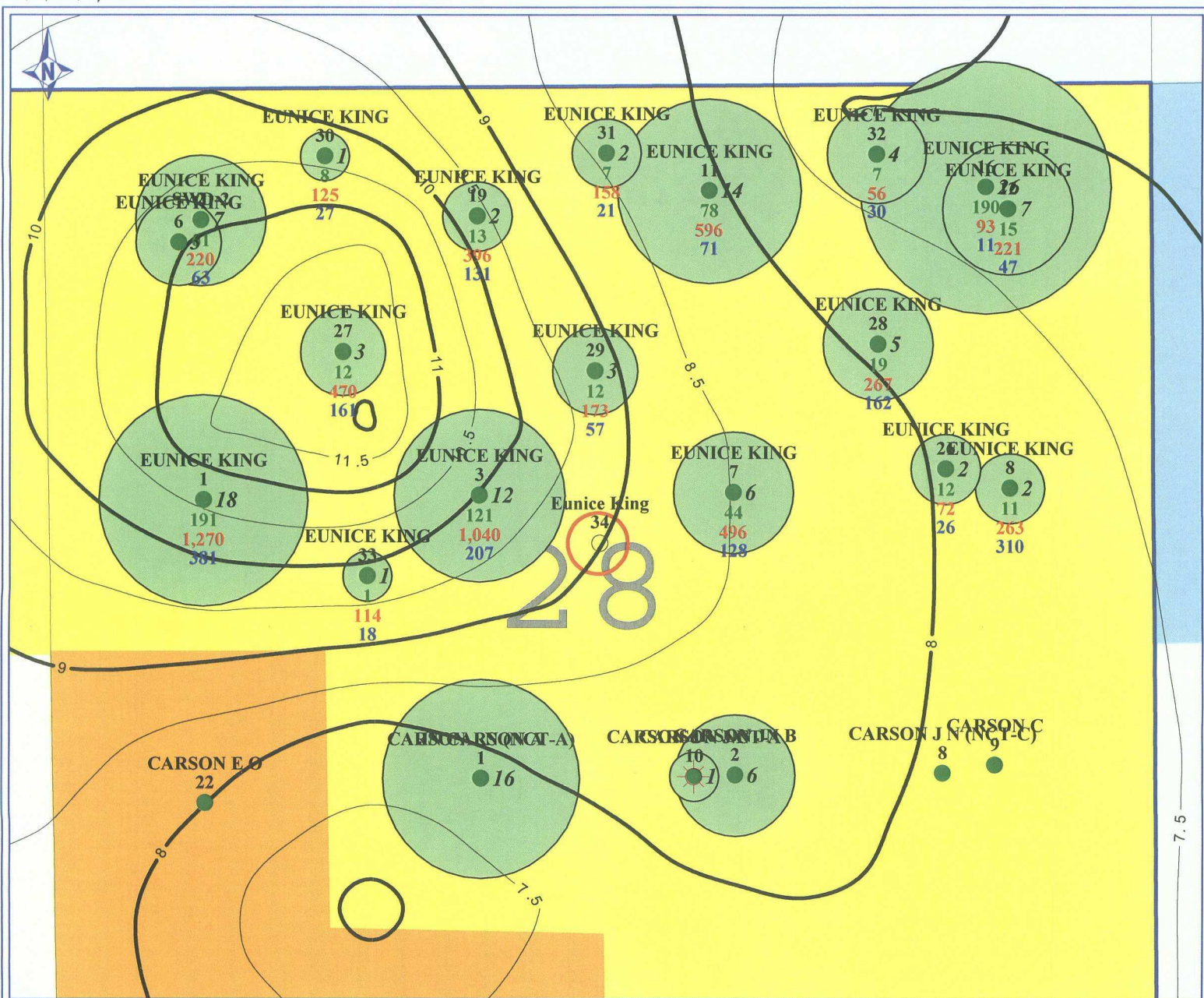
POSTED WELL DATA

Well Name
Well Number



0 1,000
FEET

May 28, 2008



PETRA 5/28/2008 8:29:49 AM



Chevron U.S.A. Inc.

EXHIBIT 5

PENROSE-SKELLY FIELD EUNICE KING #34

Sec 28, 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)



May 28, 2008

Well File Search - Select API Number to View

Please select the API Number you wish to view from the list below by clicking the radio button next to the API Number. Then click the "Continue" button to see the thumbnails for the API you selected. The search results are broken out by groups of 25 on each page. Switching pages can be done by clicking the "Next 25" or "Previous 25" links.

6 Records Found

Displaying Screen 1 of 1

API Number	ULSTR	Footages
<input checked="" type="radio"/> 3002506839	F -28-21S-37E	1980 FNL & 1980 FWL
Well Name & Number: EUNICE KING No. 003		
Operator: CHEVRON U S A INC		
<input type="radio"/> 3002506841	F -28-21S-37E	1874 FNL & 1874 FWL
Well Name & Number: CENTRAL DRINKARD UNIT No. 110		
Operator: CHEVRON U S A INC		
<input type="radio"/> 3002506852	F -28-21S-37E	2086 FNL & 2086 FWL
Well Name & Number: EUNICE KING No. 015		
Operator: CHEVRON U S A INC		
<input type="radio"/> 3002506857	F -28-21S-37E	1880 FNL & 2080 FWL
Well Name & Number: EUNICE KING No. 020		
Operator: CHEVRON U S A INC		
<input type="radio"/> 3002537187	F -28-21S-37E	1340 FNL & 2620 FWL
Well Name & Number: EUNICE KING No. 029		
Operator: CHEVRON U S A INC		
<input checked="" type="radio"/> 3002538337	F -28-21S-37E	2310 FNL & 1520 FWL
Well Name & Number: EUNICE KING No. 033		
Operator: CHEVRON U S A INC		

Hare Simpson
Paddock

6 Records Found

Displaying Screen 1 of 1

[Continue](#)[Go Back](#)