

DATE IN 11/13/06	SUSPENSE	ENGINEER R. Ezanyim	LOGGED IN 11/15/06	TYPE NSL	APP NO. pTDS0631937741
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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



SD *pTDS0631937844*
Cherion
Eunice King #32
5519

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

2006 NOV 13 PM 1:13

November 6, 2006

**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:

Eunice King #32

330' FNL & 1310' FEL, NE/4 NE/4 of
Section 28, T21S, R37E, Unit Letter A
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 NE/4 NE/4 of Section 28 will be simultaneously dedicated in the Penrose Skelly, Grayburg Pool to the proposed well and to the Eunice King #12 and Eunice King #28. The Eunice King #12 was drilled in 1948 and was re-completed as a Penrose Skelly, Grayburg producer in 2004. The Eunice King #28 was drilled in 2004 and is currently completed 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 six wells that have produced the Grayburg formation in the NE/4 of Section 28. The proposed well will be located in the approximate northern 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.

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, reading "Sarah Rittenhouse". The signature is fluid and cursive, with the first name "Sarah" and last name "Rittenhouse" clearly legible.

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:

Eunice King #32

330' FNL & 1310' FEL

Section 28, T21S, R37E, Unit Letter A

Lea County, New Mexico

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

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

Eunice King #32

330' FNL & 1310' FEL

Section 28, T21S, R37E, Unit Letter A

Lea County, New Mexico

PRIMARY OBJECTIVE: GRAYBURG

SUPPORTING DATA:

1. Chevron U.S.A. Inc. (Chevron) is the operator of the proposed Eunice King #32 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 #3	30025068390000	28-F	Grayburg	120	992	0	44	Active
Chevron	Eunice King #7	30025068430000	28-G	Grayburg	42	346	0.06	253	Inactive
Chevron	Eunice King #11	30025068470000	28-B	Grayburg	65	463	33	244	Active
Chevron	Eunice King #19	30025068560002	28-C	Grayburg	10	282	5	243	Active
Chevron	Eunice King #1	30025068370000	28-E	Grayburg	190	1187	4	211	Active
Chevron	Eunice King #12	30025068480000	28-A	Grayburg	15	221	19	272	Active
Chevron	Eunice King #2	30025068380000	28-D	Grayburg	58	91	2	248	Active
Chevron	Eunice King #27	30025367380000	28-C	Grayburg	7	236	3	457	Active
Chevron	Eunice King #28	30025367390000	28-B	Grayburg	10	172	20.8	244	Active
Chevron	Eunice King #29	30025371870000	28-F	Grayburg	5	54	14	193	Active
Chevron	Eunice King #30	30025378310000	28-D	Grayburg	2	9	10	300	Active
Chevron	Eunice King #8	30025068440000	28-H	Grayburg	10	167	0	195	Active
Chevron	Eunice King #16	30025068530000	28-A	Grayburg	190	94	-	-	Inactive
Chevron	Eunice King #26	30025068660000	28-H	Grayburg	12	72	-	-	Inactive
Chevron	Eunice King #6	30025068420000	28-D	Grayburg	32	284	-	-	Inactive

Chevron	Eunice King #31	30025378320000	28-B	Grayburg	0	0	30	353	Active 2006
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3. The proposed Eunice King #32 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	Eunice King #3	30025068390000	28-F	Grayburg	31	126	996
Chevron	Eunice King #7	30025068430000	28-G	Grayburg	8	38	257
Chevron	Eunice King #11	30025068470000	28-B	Grayburg	12	60	441
Chevron	Eunice King #19	30025068560002	28-C	Grayburg	6	28	429
Chevron	Eunice King #12	30025068480000	28-A	Grayburg	10	74	1138
Chevron	Eunice King #28	30025367390000	28-B	Grayburg	4	36	808
Chevron	Eunice King #8	30025068440000	28-H	Grayburg	3	24	763
Chevron	Eunice King #1	30025068370000	28-E	Grayburg	42	196	1659

Chevron	Eunice King #2	30025068380000	28-D	Grayburg	17	85	449
Chevron	Eunice King #27	30025367380000	28-C	Grayburg	10	46	1338
Chevron	Eunice King #29	30025371870000	28-F	Grayburg	3	30	842
Chevron	Eunice King #31	30025378320000	28-B	Grayburg	5	47	201
Chevron	Eunice King #30	30025378310000	28-D	Grayburg	9	47	201

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 6 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 #32	28-A	10.2	6	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 #32 will share a 40-acre proration unit and will be simultaneously dedicated with the Eunice King #12 and Eunice King #28 as a Penrose Skelly, Grayburg producer in Section 28, Unit Letter A.
6. Approval of this application will allow for the recovery of oil and gas reserves which would not otherwise be recovered.

1-7

Scale: 1"=2000' Approx.

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT I

1625 N. FRENCH DR., ROSBS, 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

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 EUNICE KING		Well Number 32
OGRID No.	Operator Name CHEVRON U.S.A. INC.		Elevation 3440'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	21-S	37-E		330	NORTH	1310	EAST	LEA

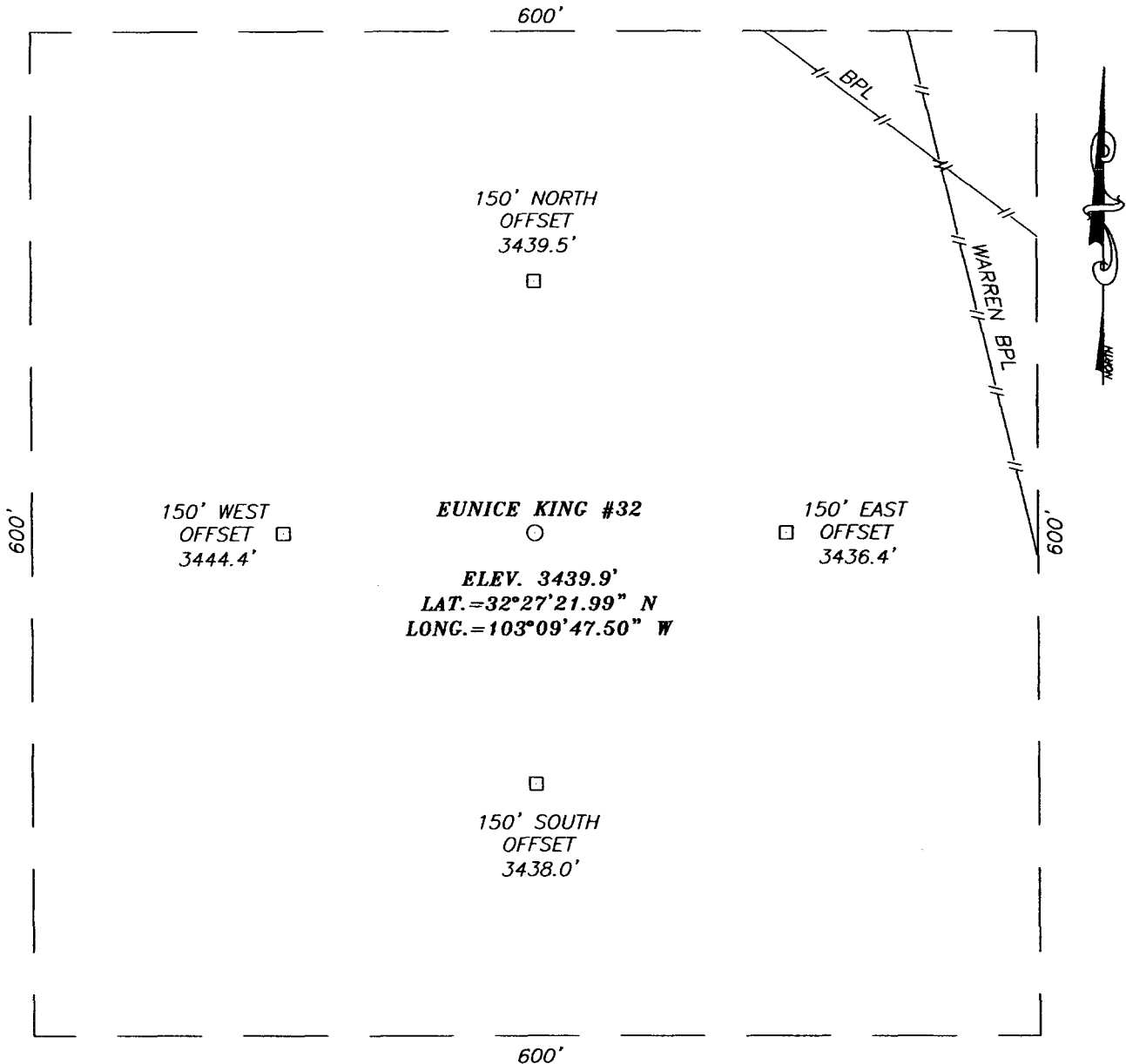
Bottom Hole Location If Different From Surface

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

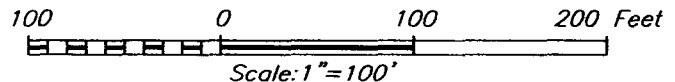
	OPERATOR CERTIFICATION <i>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this 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> Signature _____ Date _____ Printed Name _____
	SURVEYOR CERTIFICATION <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> FEBRUARY 16, 2006 Date Surveyed _____ DSR Signature & Seal of Professional Surveyor _____
	Certificate No. GARY EDSON 12641

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



DIRECTIONS TO LOCATION

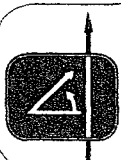
FROM THE INTERSECTION OF ST. HWY 8-176 AND CO. RD. E-33 (N. TURNER), (APPROX. 1.0 MILE WEST OF EUNICE, N.M.), GO NORTH ON CO. RD. E-33 APPROX. 0.86 MILES, TURN RIGHT AND GO EAST APPROX. 0.75 MILES. THIS LOCATION IS APPROX. 450 FEET NORTH.



CHEVRON U.S.A. INC.

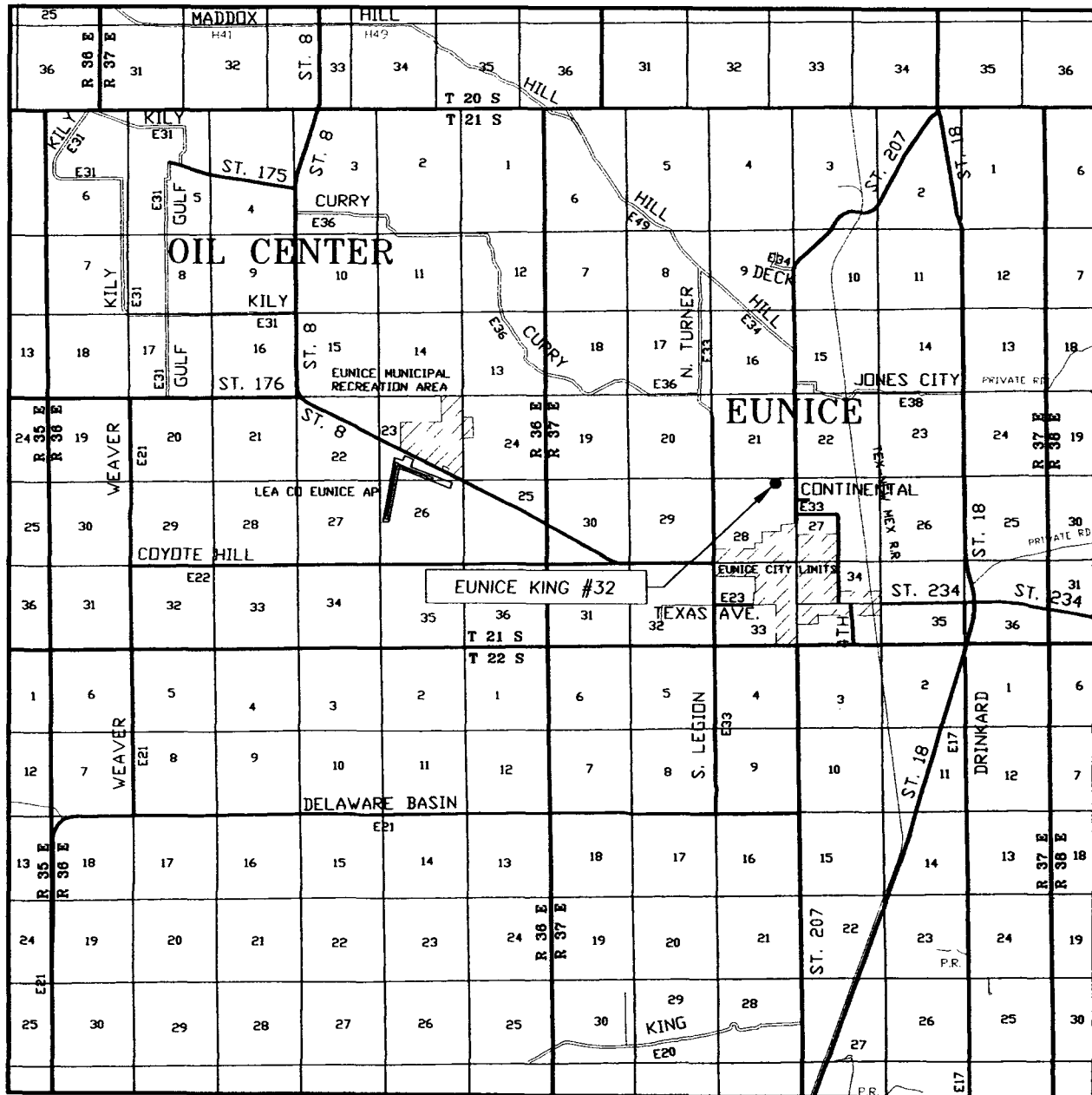
EUNICE KING #32 WELL
 LOCATED 330 FEET FROM THE NORTH LINE
 AND 1310 FEET FROM THE EAST LINE OF SECTION 28,
 TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 02/16/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.0315	Dr By: D.S.R. Rev 1:N/A
Date: 03/04/06	Disk: CD#1 06110315 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.

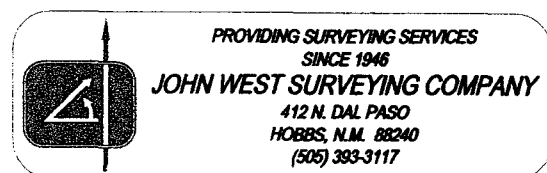
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 330' FNL & 1310' FEL

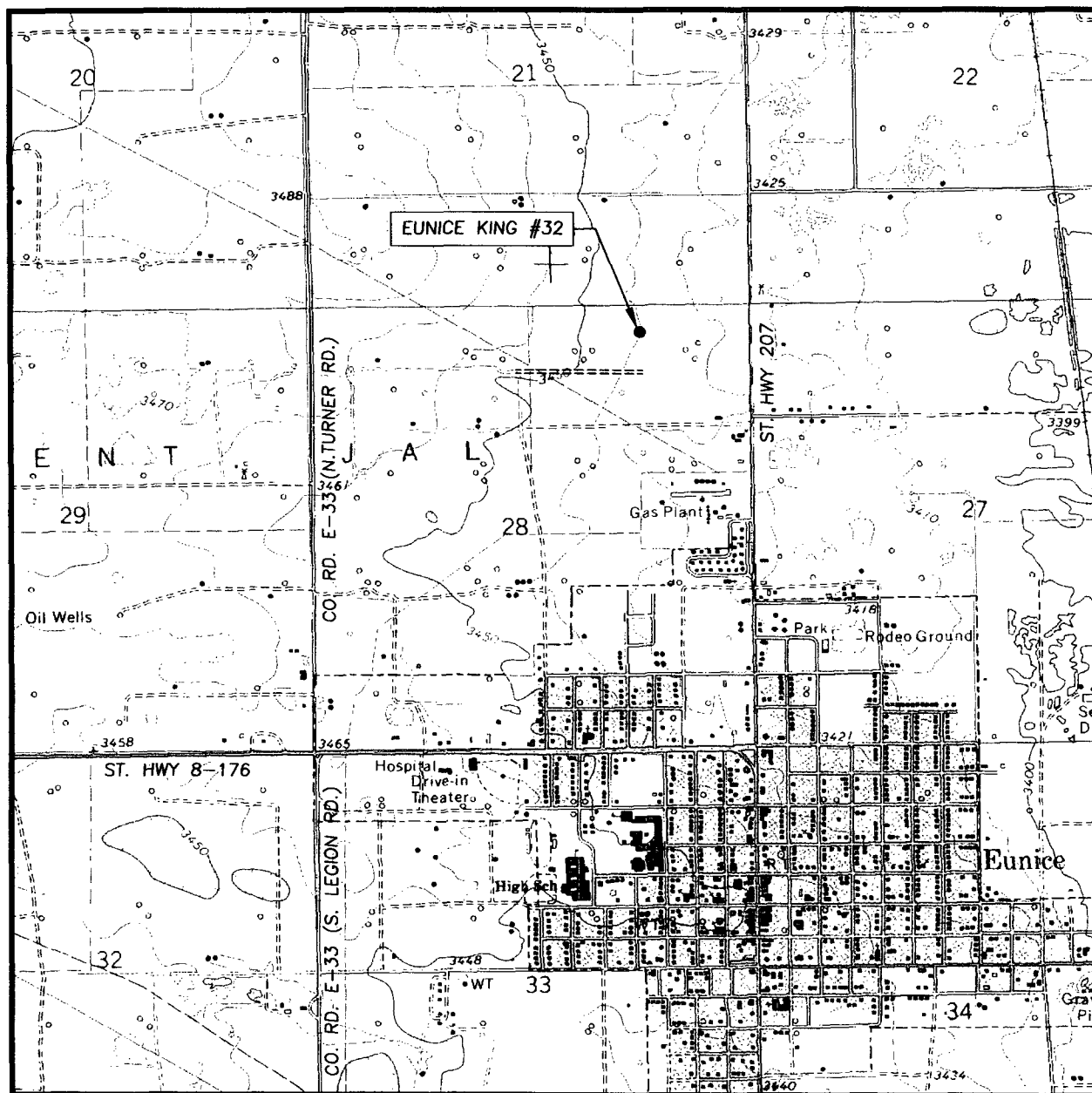
ELEVATION 3440'

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

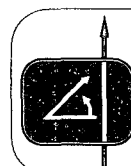
DESCRIPTION 330' FNL & 1310' FEL

ELEVATION 3440'

OPERATOR CHEVRON U.S.A. INC.

LEASE EUNICE KING

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

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

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

Submit to Appropriate District Office

Exhibit 3.1

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

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 32
⁷ OGRID No.	⁸ Operator Name Chevron U.S.A., Inc.	⁹ Elevation 3440

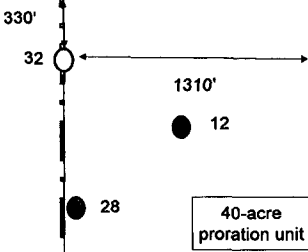
¹⁰ Surface Location

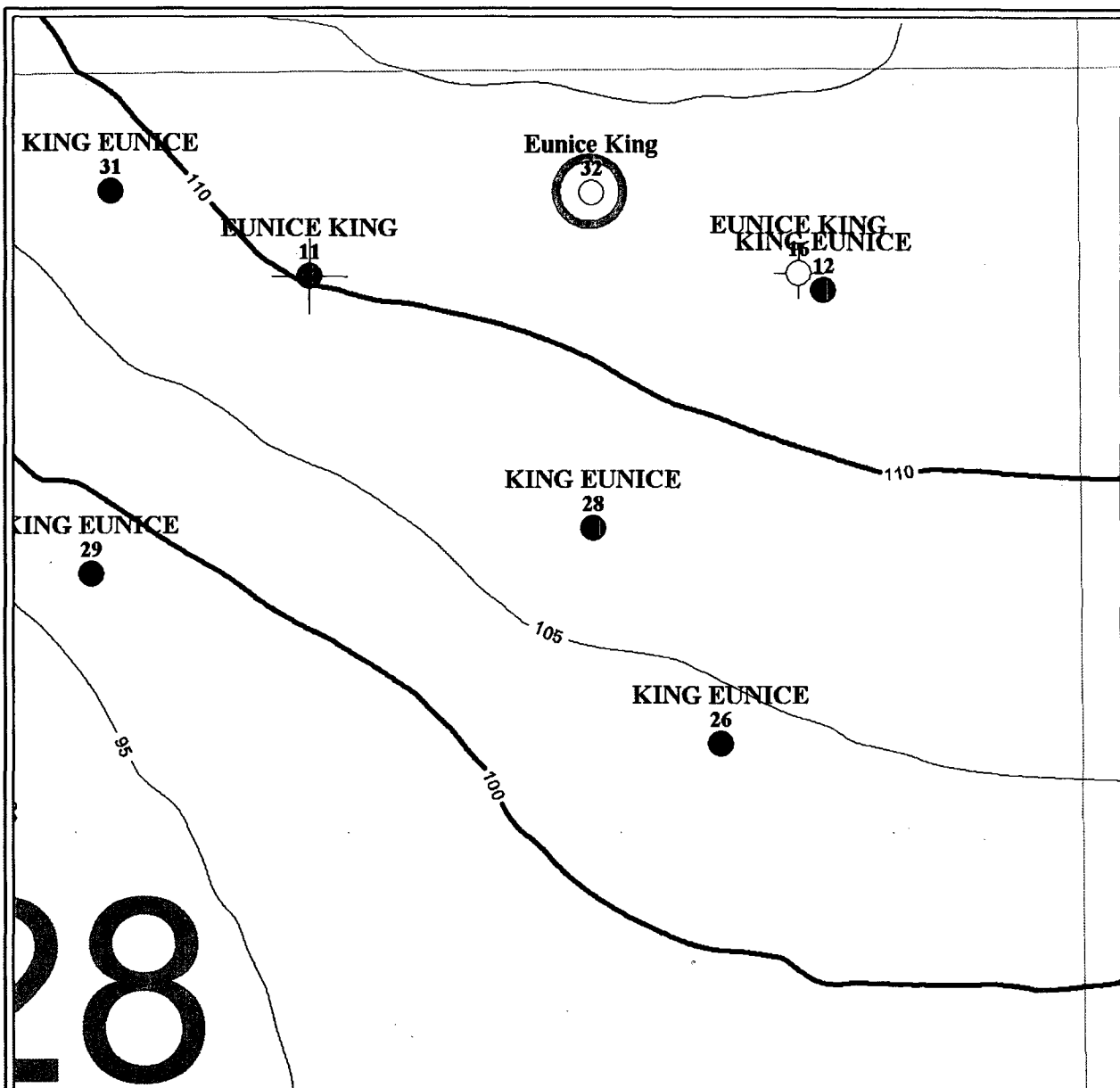
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	21S	37E		330	North	1310	East	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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



PETRA 11/6/2006 10:26:21 AM

Chevron U.S.A. Inc.

EXHIBIT 4

PENROSE-SKELLY FIELD EUNICE KING #32

Sec. 28, T21S-37E, Lea CO. New Mexico

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

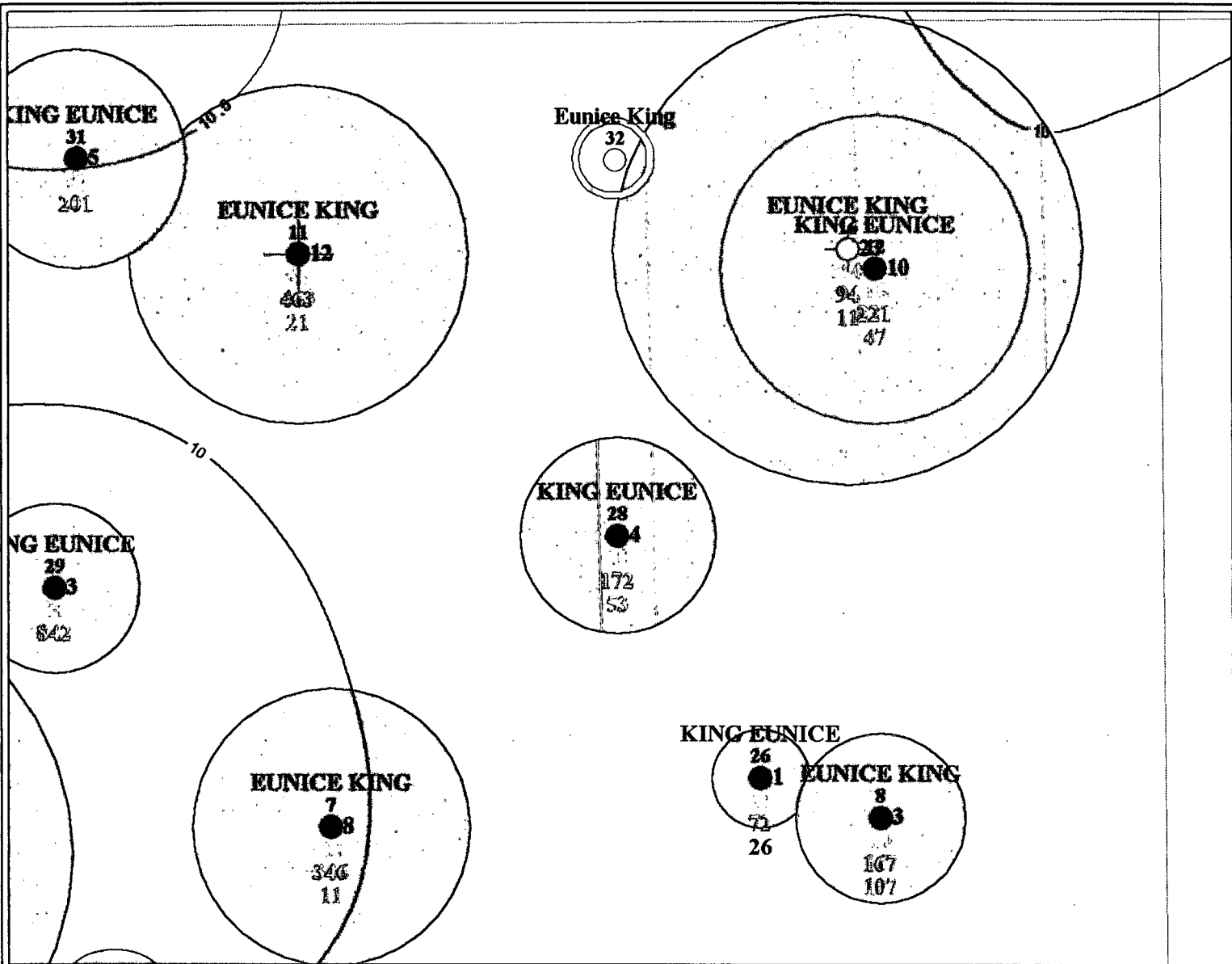


POSTED WELL DATA

Well Name
Well Number



November 6, 2006



PETRA 11/6/2006 2:53:09 PM

Chevron U.S.A. Inc.

EXHIBIT 5

PENROSE-SKELLY FIELD EUNICE KING #32

Sec. 28, T21S-37E, Lea CO. New Mexico

Grayburg HCPV CI=0.5 & EUR - Drainage

POSTED WELL DATA

Well Name
Well Number

© SRLF PENROSE SKELLY - DRAINAGE

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