

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address ConocoPhillips Company 3300 N. "A" Street, Bldg. 6 #247 Midland, TX 79705		² OGRID Number 217817
³ Property Code 31257	⁵ Property Name Vacuum Glorieta East Unit	⁴ API Number 30-025-38223
⁹ Proposed Pool 1 Vacuum; Glorieta		⁶ Well No. 023
⁹ Proposed Pool 1		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no. F	Section 32	Township 17S	Range 35E	Lot Idn	Feet from the 1370	North/South line North	Feet from the 1750	East/Westline West	County Lea
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8 Proposed 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/Westline	County
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Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3967'
¹⁶ Multiple No	¹⁷ Proposed Depth 6400'	¹⁸ Formation Paddock	¹⁹ Contractor Sledge Drilling	²⁰ Spud Date 05/16/07
Depth to Groundwater 75'		Distance from nearest fresh water well None in S. 32		Distance from nearest surface water N.A.
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mil thick Clay <input type="checkbox"/> Pit Volume: 20910 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	1600'	840	Surf.
7-7/8"	5-1/2"	15.5#	6400'	1200	Surf.

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

New Drill location, proposed schematic attached.

Fresh water mud will be used for drilling the surface section, brine will be used for drilling the production section.

Proposed BOP Program:

Type	Working Pressure	Test Pressure
Annular	5000	2000
Blind Ram	5000	3000
Pipe Ram	5000	3000

**Permit Expires 1 Year From Approval
Date Unless Drilling Underway**

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Printed name: Celeste G. Dale

Title: Regulatory Specialist

E-mail Address: celeste.g.dale@conocophillips.com

Date: 12/20/06

Phone: (432)688-6884

OIL CONSERVATION DIVISION

Approved by:

Chris Williams

Title:

DEC 26 2006 OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date:

Expiration Date:

Conditions of Approval Attached ☐

CASING & CEMENTING PROGRAM PROPOSAL
Vacuum Glorieta East Unit Ph 4 25-023

Datum: RKB (12' above ground level)

Conductor

13-3/8" conductor set at 40' to 80' with rat hole machine

Surface Casing

Size 8 5/8 in
 Wt. 24 ppf
 Grade: J-55 ppf
 Conn: STC ppf

☒ New
☐ Used

Hole Size 12 1/4 in
 Excess Cmt 120 - 150 %
 T.O.C. SURFACE

Surface Casing Shoe set at 1600' to 1650' MD RKB
 TD of 12-1/4" hole at 1610' to 1660' MD RKB

Propose Variance to allow us to test the surface casing to 1000 psi instead of 1500 psi.

Production Casing:

Size 5 1/2 in
 Wt. 15.5 ppf
 Grade: J-55 ppf
 Conn: LTC ppf

☒ New
☐ Used

Hole Size 7 7/8 in
 Lead Slurry 190 % Excess Cmt on Open Hole Ann Vol
 Tail Slurry 90 % Excess Cmt on Open Hole Ann Vol
 T.O.C. SURFACE

Production Casing Shoe set at 6340' to 6390' MD RKB
 TD of 7-7/8" hole at 6350' to 6400' MD RKB

Production casing cement volumes will be adjusted based on open hole caliper log data if available.

Schematic prepared by:
 Steven O. Moore, Drilling Engineer
 20-December-2006

11" 5M x 7 1/16" 5M Tubing Head
 8-5/8" SOW x 11" 5M Casing Head

Surface Cement

Spacer: 20 bbls fresh water

Lead Slurry:
 610 - 700 sx 35/65 POZ:Class C
 + 5% bwow D44 salt
 + 6% D20 bentonite
 + 2% S1 Calcium Chloride
 + 0.25 pps D29 celloflake
 + CemNet if needed.
 Mix Weight = 12.8 ppg,
 Yield = 1.97 cuft/sx yield,
 Mix Water = 10.54 gal/sx
 Top of Lead Slurry at Surface

Tail Slurry:
 230 - 260 sx Class C Cement
 + 2% S1 calcium chloride
 + 0.25 pps D29 celloflake
 + CemNet if needed.
 Mix Weight = 14.8 ppg,
 Yield = 1.34 cuft/sx yield,
 Mix Water = 6.29 gal/sx
 Length of Tail Slurry: 330'
 Top of Tail Slurry at 1270' - 1320' MD RKB

Production Cement

Spacer: 20 bbls fresh water

Lead Slurry:
 620 sx 50/50 POZ:Class C
 + 5% bwow D44 salt
 + 10% D20 bentonite
 + 0.2% D167 Fluid Loss Additive
 + 0.2% D65 Dispersant
 + 0.25 pps D29 celloflake
 + CemNet if needed
 Mix Weight = 11.8 ppg,
 Yield = 2.54 cuft/sx yield,
 Mix Water = 14.71 gal/sx
 Top of Lead Slurry at Surface

Tail Slurry:
 580 sx 50:50 POZ:Class H
 + 5% D44 Salt (bwow)
 + 2% D20 Bentonite
 + 0.4% D167 Fluid Loss Additive
 + 0.4% D65 dispersant
 + CemNet if needed
 Mix Weight = 14.2 ppg,
 Yield = 1.36 cuft/sx yield,
 Mix Water = 6.32 gal/sx
 Top of Tail Slurry at 4000' MD RKB

Displacement: 2% KCL
or Fresh Water

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

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

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 38223	Pool Code 62160	Pool Name Vacuum; Glorieta
Property Code 31257	Property Name VACUUM GLORIETA EAST UNIT PH 4	Well Number 25-023
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY	Elevation 3967'

Surface Location

UL or lot No. F	Section 32	Township 17 S	Range 35 E	Lot Idn	Feet from the 1370	North/South line NORTH	Feet from the 1750	East/West line WEST	County LEA
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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 40	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>Plane Coordinate X = 761,518.7 Y = 653,919.7</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Celeste G. Dale</i> 12/20/06 Signature Date</p> <p>Celeste G. Dale 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>December 11, 2006</p> <p>Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>W. O. Munn</i> 12/11/06 Certificate</p>	<p>KMT 12185</p>

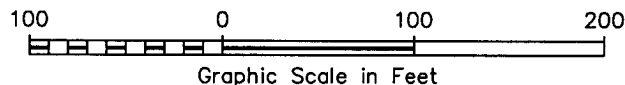
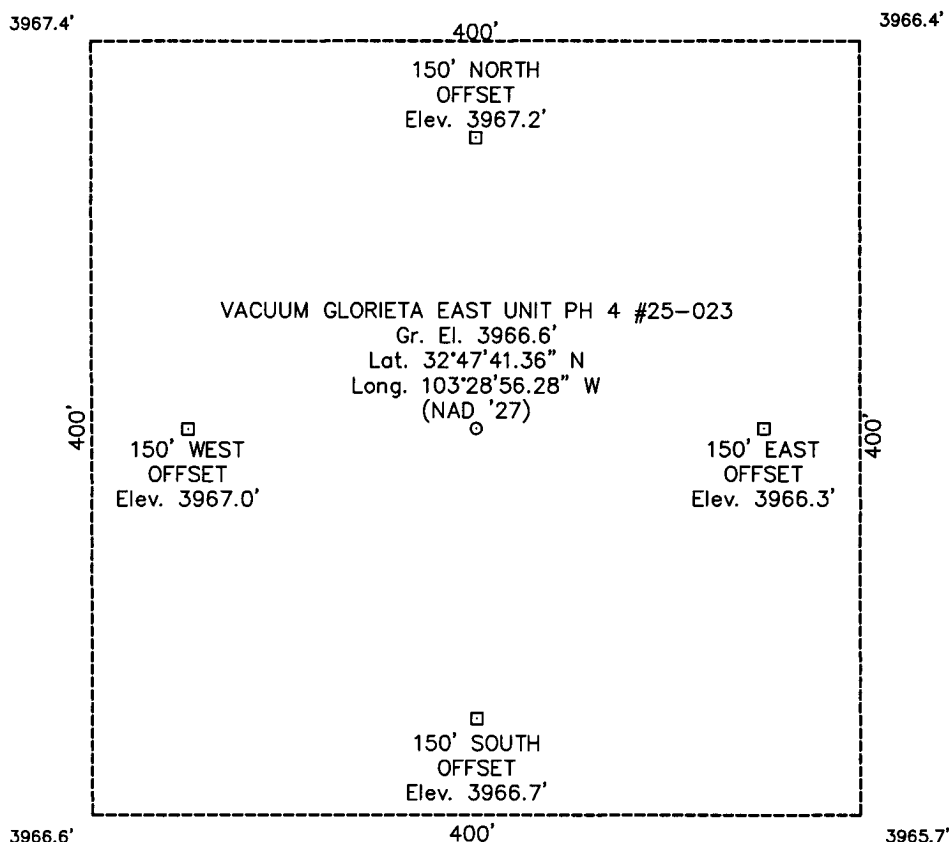
NOTE:
1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

SECTION 32, TOWNSHIP 17 SOUTH, RANGE 35 EAST, N.M.P.M.

LEA COUNTY

NEW MEXICO

L-2006-1177-A

DRIVING DIRECTIONS

FROM THE INTERSECTION OF STATE HIGHWAY 8 AND COUNTY ROAD 50 IN BUCKEYE, NM GO EAST ON SAID COUNTY ROAD 50 1.2 MILES TO A LEASE ROAD ON SOUTH (RIGHT) SIDE OF SAID ROAD, THEN GO SOUTH ON SAID LEASE ROAD 0.2 MILE TO A POINT, THEN GO EAST 0.2 MILE TO A POINT APPROXIMATELY 200 FEET SOUTHWEST OF PROPOSED LOCATION.

CONOCOPHILLIPS**VACUUM GLORIETA EAST UNIT PH 4 #25-023**

Located 1370' FNL & 1750' FWL, Section 32
Township 17 South, Range 35 East, N.M.P.M.
Lea County, New Mexico

Drawn By: KMT

Date: December 13, 2006

Scale: 1"=100'

Field Book: 331 / 52-53

Revision Date:

Quadrangle: Lovington SW

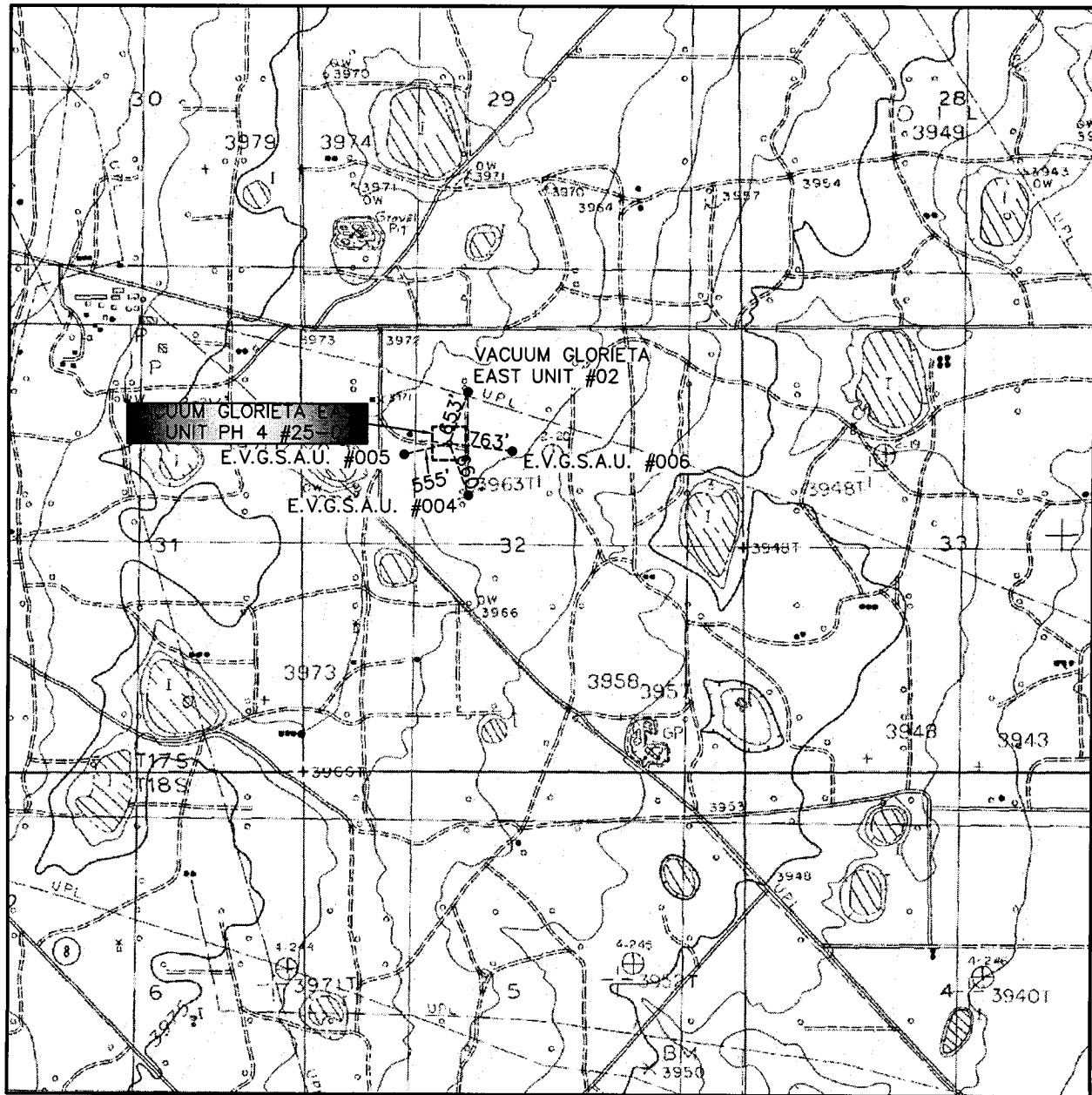
W.O. No: 2006-1177-1

Dwg. No.: L-2006-1177-A



110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOVINGTON SW - 5'

SEC. 32 TWP. 17-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1370' FNL & 1750' FWL

ELEVATION 3967'

OPERATOR CONOCOPHILLIPS

LEASE VACUUM GLORIETA EAST UNIT PH 4

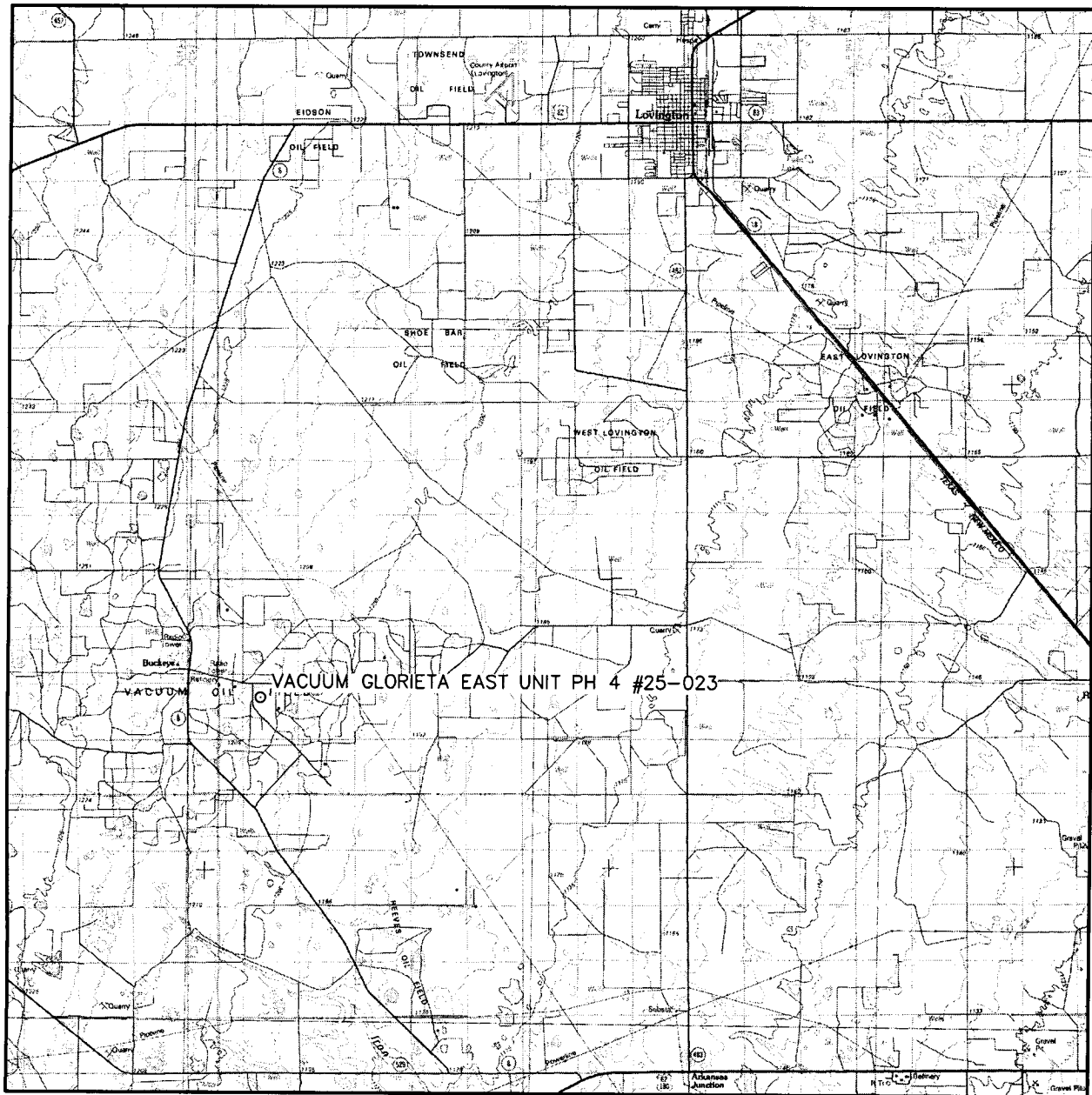
U.S.G.S. TOPOGRAPHIC MAP
LOVINGTON SW, N.M.



**WEST
COMPANY**
of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

VICINITY MAP



SCALE: 1" = 3 MILES

SEC. 32 TWP. 17-S RGE. 35-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1370' FNL & 1750' FWL

ELEVATION 3967'

OPERATOR CONOCOPHILLIPS

LEASE VACUUM GLORIETA EAST UNIT PH 4



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