

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103

May 27, 2004

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-37433
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator ConocoPhillips Co.		6. State Oil & Gas Lease No.
3. Address of Operator P.O. Box 2197, WL3-6076 Houston, Tx 77252		7. Lease Name or Unit Agreement Name Vacuum Glorieta East Unit
4. Well Location Unit Letter <u>P</u> : 457 feet from the <u>South</u> line and <u>1174</u> feet from the <u>East</u> line Section <u>29</u> Township <u>17S</u> Range <u>35E</u> NMPM County <u>Lea</u>		8. Well Number 15
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3960		9. OGRID Number 217817
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		10. Pool name or Wildcat Vacuum Glorieta
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Verbal Approval of Survey Calculations ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Permission was given verbally on 8/22/06 from Paul Kautz, NMOCD to Steve Moore, ConocoPhillips to accept the calculations on the attached surveys as-is. The C-104 and Completion report on this well should now be approved by the OCD. Please see attachments.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Christina Gustartis

TITLE Regulatory Specialist

DATE 08/24/2006

Type or print name Christina Gustartis

E-mail address: christina.gustartis@conocophillips.com Telephone No. (832)486-2463

For State Use Only

OC DISTRICT SUPERVISOR/GENERAL MANAGER

APPROVED BY: Chris Williams

TITLE _____

DATE

SEP 12 2006

Conditions of Approval (if any):

Confirmation of Verbal Permission

Reference:

Well: Vacuum Glorieta East Unit # 05-15

API # 30-025-37433

Location: UL-Lot P, Section 29, Township 17S, Range 35E, 457' FSL, 1174' FEL, Lea County, New Mexico.

On Vacuum Glorieta East Unit # 05-15, angle built to 8 degrees inclination while drilling the 12-1/4" surface hole from surface to 1555' MD RKB. Inclination surveys were taken in this hole interval.

Surface casing (8-5/8", 24#, J-55, STC) was set at 1543' MD RKB and cemented to surface.

We picked up a 7-7/8" bit, directional drilling tools and MWD tools and drilled out of the surface casing and drilled from 1555' MD RKB to 2295' MD RKB as a directional correction run steering the well back to vertical. Then we pulled the directional drilling tools and MWD tools out of the hole, layed them down, and sent them in.

The remainder of the 7-7/8" production hole from 2295' to TD at 6350' was drilled with a 7-7/8" bit and rotary drilling assembly. Inclination surveys were taken in this hole interval except that no survey was taken at TD on this well. The last (deepest) survey taken was an inclination survey at 5828' MD RKB.

Calculations for the Maximum Possible Horizontal Displacement of the wellbore toward the nearest line (which is to the South) were prepared with the following assumptions:

- An azimuth of 180 degrees was assumed as the direction for each of the inclination surveys over the portions of the hole in which inclination surveys were run (and for which no directional surveys were obtained).
- The actual directional survey data was used for the interval for which directional drilling tools and MWD tools were used to correct the deviation back to vertical.
- Because no survey was obtained at TD for this well, it was assumed for the purposes of these calculations that the angle held at 2.5 degrees (which was the inclination of the last / deepest survey at 5828' MD RKB) at an assumed azimuth of 180 degrees.

Based on these assumptions, the calculation of **Maximum Possible Horizontal Displacement** toward the nearest line indicates that the bottom hole location of this well should be no more than approximately 287 ft South and 46 ft East of the surface location. The surface location for this well is 457' from the South Line and 1174' from the East Line. The nearest line is the line to the South - which is a Section Line. The section to the South of this well is Section 32, which is entirely within the Unit Boundary.

Paul Kautz, NMOCD, gave verbal permission on 22-Aug-2006 at 4:26 PM CDT (3:26 PM MDT) to Steven O. Moore, ConocoPhillips Company to leave the surveys for this well as-is.



Job Number:
 Company: ConocoPhillips
 Lease/Well: Vacuum Glorietta East Unit #15
 Location: Lea County
 Rig Name:
 RKB:
 G.L. or M.S.L.:

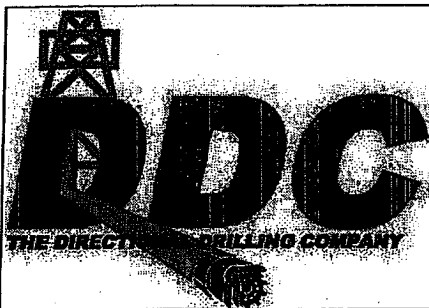
State/Country: New Mexico
 Declination:
 Grid:
 File name: C:\PROPOS~1\CONOCO~1\VGEU#1~1\SURVEY.SVY
 Date/Time: 21-Aug-06 / 10:12
 Curve Name: Totco Surveys w/Assumed Azimuth

THE DIRECTIONAL DRILLING COMPANY

WINSERVE SURVEY CALCULATIONS
 Tangential Method
 Vertical Section Plane 180.00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00
Totco Surveys w/Assumed Azimuth							
226.00	.50	180.00	225.99	1.97	-1.97	.00	.22
720.00	.30	180.00	719.98	4.56	-4.56	.00	.04
1223.00	6.00	180.00	1220.23	57.14	-57.14	.00	1.13
1318.00	7.30	180.00	1314.46	69.21	-69.21	.00	1.37
1543.00	8.00	180.00	1537.27	100.52	-100.52	.00	.31

Note: These calculations are for **Maximum Possible Horizontal Displacement** toward the nearest line. The actual surveys over this hole interval are inclination surveys with no azimuth data obtained. However for the purposes of these calculations, it is assumed that the azimuth of each of the inclination surveys is 180 degrees.



Job Number:
 Company: ConocoPhillips
 Lease/Well: Vacuum Glorietta East Unit #15
 Location: Lea County
 Rig Name:
 RKB:
 G.L. or M.S.L.:

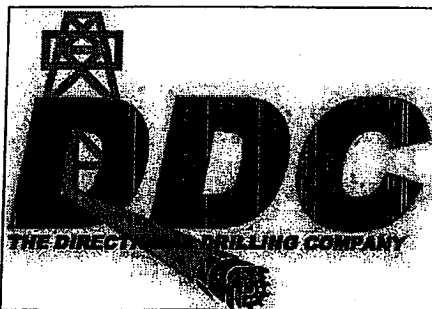
State/Country: New Mexico
 Declination:
 Grid:
 File name: C:\PROPOS~1\CONOCO~1\VGEU#1~1\SURVEY.SVY
 Date/Time: 21-Aug-06 / 10:14
 Curve Name: MWD Surveys

THE DIRECTIONAL DRILLING COMPANY

WINSERVE PROPOSAL REPORT Minimum Curvature Method Vertical Section Plane 180.00 Vertical Section Referenced to Wellhead Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	Dogleg Severity Deg/100
Tie-in to Totcos w/ Assumed Azimuth							
1543.00	8.00	180.00	1537.27	100.52	-100.52	.00	.00
MWD Surveys							
1610.00	8.60	106.70	1603.73	106.64	-106.64	4.81	14.77
1705.00	6.90	107.70	1697.86	110.41	-110.41	17.05	1.80
1769.00	6.20	108.80	1761.44	112.70	-112.70	23.98	1.11
1866.00	4.60	106.00	1858.01	115.46	-115.46	32.68	1.67
1962.00	3.00	110.90	1953.80	117.41	-117.41	38.73	1.70
2055.00	2.20	105.00	2046.70	118.74	-118.74	42.73	.91
2151.00	1.10	116.20	2142.66	119.63	-119.63	45.34	1.19
Last MWD Survey							
2214.00	.30	127.40	2205.65	119.99	-119.99	46.01	1.28

Note: These calculations are for **Maximum Possible Horizontal Displacement** toward the nearest line. The tie in point is calculated based on assumed azimuth of 180 degrees for the inclination surveys in the preceeding hole section. The actual MWD survey data from the directional correction run is used in the calculations from the survey point at 1610' MD RKB to the survey point at 2214' MD RKB.



Job Number:
 Company: ConocoPhillips
 Lease/Well: Vacuum Glorietta East Unit #15
 Location: Lea County
 Rig Name:
 RKB:
 G.L. or M.S.L.:

State/Country: New Mexico
 Declination:
 Grid:
 File name: C:\PROPOS~1\CONOCO~1\VGEU#1~1\SURVEY.SVY
 Date/Time: 21-Aug-06 / 10:20
 Curve Name: Totcos w/Assumed Azimuth

THE DIRECTIONAL DRILLING COMPANY

WINSERVE SURVEY CALCULATIONS

Tangential Method

Vertical Section Plane 180.00

Vertical Section Referenced to Wellhead

Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	Dogleg Severity Deg/100
Tie-in to MWD Surveys							
2214.00	.30	127.40	2205.65	119.99	-119.99	46.01	.00
Totcos w/Assumed Azimuth							
2290.00	.00	180.00	2281.65	119.99	-119.99	46.01	.39
2540.00	1.00	180.00	2531.61	124.35	-124.35	46.01	.40
3017.00	2.00	180.00	3008.32	141.00	-141.00	46.01	.21
3558.00	4.00	180.00	3548.00	178.74	-178.74	46.01	.37
3640.00	3.50	180.00	3629.85	183.74	-183.74	46.01	.61
3735.00	3.00	180.00	3724.72	188.72	-188.72	46.01	.53
3830.00	2.00	180.00	3819.66	192.03	-192.03	46.01	1.05
4342.00	1.30	180.00	4331.53	203.65	-203.65	46.01	.14
4819.00	2.00	180.00	4808.24	220.29	-220.29	46.01	.15
5343.00	2.50	180.00	5331.74	243.15	-243.15	46.01	.10
Last Totco Surveys							
5828.00	2.50	180.00	5816.28	264.31	-264.31	46.01	.00
Projection to TD							
6350.00	2.50	180.00	6337.78	287.08	-287.08	46.01	.00

Note: These calculations are for **Maximum Possible Horizontal Displacement** toward the nearest line. The actual surveys from 2290' to 5828' MD RKB are Inclination surveys with no azimuth data obtained. For the purposes of these calculations, it is assumed that the azimuth of each of the inclination surveys is 180 degrees. The deepest survey obtained was at 5828' MD RKB, 522' above TD of 6350' MD RKB for this well. It is assumed for these calculations that the inclination of the wellbore from 5828' MD RKB to TD at 6350' MD RKB held at 2.5 degrees at an azimuth of 180 degrees. The tie-in point is calculated with an assumption of 180 degrees for inclination surveys from surface to 1543' MD RKB and actual MWD directional survey data from 1610' to 2214' MD RKB from the directional correction run to steer the well back to vertical.