

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" St., Bldg. 6 Midland, TX 79705-5490		² OGRID Number 217817
³ Property Code 31257		⁴ API Number 30-025-20864
⁵ Property Name Vacuum Glorieta East Unit (Tract 17)		⁶ Well No. 2
⁹ Proposed Pool 1 Vacuum; Glorieta		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Westline	County
I	31	17S	35E		2080	South	660	East	Lea

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
K	32	17S	35E		1330	South	1380	West	Lea

Additional Well Information

¹¹ Work Type Code P	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 5978' GRZ
¹⁶ Multiple	¹⁷ Proposed Depth 6105TVD', MD8372'	¹⁸ Formation Glorieta	¹⁹ Contractor TBD	²⁰ Spud Date
Depth to Groundwater 75'		Distance from nearest fresh water well >1000'		Distance from nearest surface water >1000'
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 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#	1550'	900sx	
7-7/8"	4-1/2"	9.5#	6500'	1600sx	

 Permit Expires 1 Year From Approval
 Date Unless Drilling Underway
 Horizontal

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

Per the following Procedure, ConocoPhillips plans to drill a sidetrack of 1200' length within existing cased hole. KOP @ 5938' penetration (formation entry) point location - 1938' FSL & 589' FEL Sec. 31, schematic attached.

-Set Cast Iron Bridge Plug in Vertical Wellbore

-Set Whipstock above Cast Iron Bridge Plug

-Mill a window in the 5-1/2" casing (window mill off the whipstock)

-Directionally drill 4-3/4" horizontal lateral hole using 10 ppg brine or alternatively a 9 ppg brine or Calcium Carbonate Drill-In Fluid

-Leave the horizontal lateral as an open hole - no casing to be run in it and no cementing in the horizontal lateral.

-Recover the Whipstock

-Drill out the Cast Iron Bridge Plug in the vertical wellbore and clean out the vertical wellbore as needed

-Complete the well with the pump (either beam pump or Electrical Submersible Pump) in the vertical wellbore. Commingle the production from the perforations in the vertical wellbore with the production from the horizontal lateral or abandon the perforations in the vertical wellbore and produce the horizontal lateral by itself as an option.

**Form filed to amend originally applied for location, dated 04/13/07.

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: 04/13/2007

Phone: (432)688-6884

OIL CONSERVATION DIVISION

Approved by:

Chris Williams

Title:

OC DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date:

Expiration Date:

MAY 23 2007

Conditions of Approval Attached ☒

Amended location

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis 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 30-025-20864		'Pool Code 62160		'Pool Name Vacuum; Glorieta	
'Property Code 31257		'Property Name Vacuum Glorieta East Unit (Tract 17)			'Well Number 2
'OGRID No. 217817		'Operator Name ConocoPhillips Company			'Elevation 3978' GR

¹⁰ Surface Location

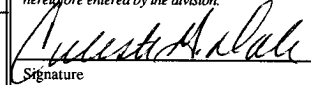
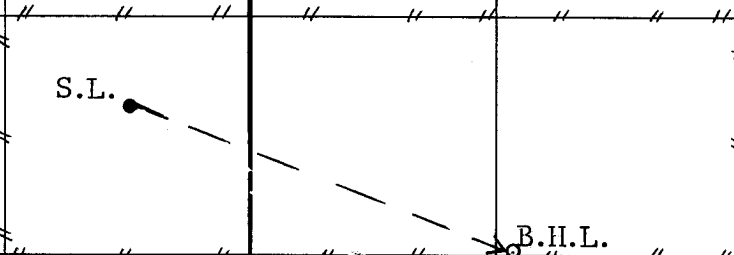
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¹¹ Bottom Hole Location If Different From Surface

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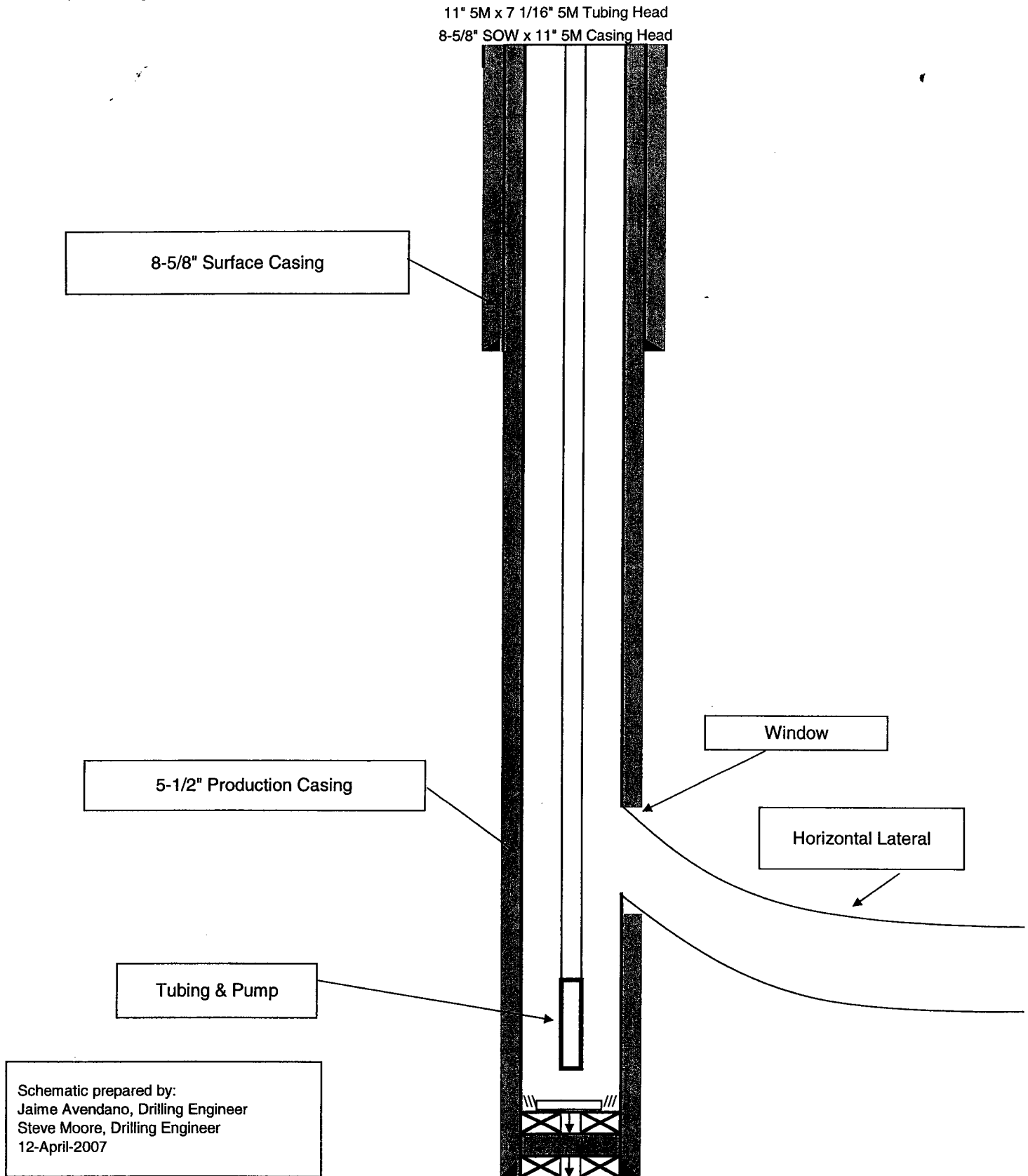
'Dedicated Acres 120	'Joint or Infill	'Consolidation Code	'Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16	S. 31	S. 32		¹⁷ OPERATOR CERTIFICATION I hereby certify that 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.  05/07/2007 Signature Date Celeste G. Dale Printed Name
				

Proposed Drilling Wellbore Schematic
Vacuum Glorieta East Unit Horizontal Sidetrack Wells

Datum: RKB (12' above ground level)



**ConocoPhillips' General Plan for
Pit Construction & Closure in Southeast New Mexico
October 2005**

In accordance with Rule 19.15.2.50(B)(2), the following information describes the construction and closure of drilling pits on COPC Southeast New Mexico (SENM) locations. This will become COPC's standard procedure on all SENM locations. If pits are constructed or closed out of the norm, a separate permit application will be submitted.

Drill Pit Construction:

General:

- Depth to Ground Water, Wellhead Protection Area & Distance to Nearest Surface Water Body ranking criteria will be site specific and information will be provided on APD or Sundry form C-103.
 - In the case where groundwater is encountered during the construction of a drilling pit, the NMOCD will be contacted and COPC will either try to find an alternative well location or use a closed steel tank system.
- The pit size and design is specific to well depth and location conditions.
- Topsoil will be stockpiled in the construction zone for later use in restoration.
- Pits will not be located in natural drainages.
- Diversion ditches will be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit.
- Under no circumstance will pits be cut and drained during the drilling operations.
- A well sign will be on location identifying ConocoPhillips as the operator.
- Waste material at construction sites shall be disposed of promptly at an appropriate waste disposal site. No trash shall be disposed of in the drilling pit.
- Immediately after cessation of drilling and completion pits shall have any visible or measurable layer of oil removed from the surface.
- Prior to any pit construction the OCD will be notified at least 48 hours in advance.

Reserve Pit

- Pits will be constructed so as not to leak, break or allow discharge of liquids or produced solids during the drilling operations.
- Pits will be lined with impervious material at least 12 mils thick, which meets long-term standards as referenced in the guidelines. Padding (hay or pad dirt) is used underneath the synthetic liner in rocky areas.
- The pit will have adequate capacity to maintain 2 feet of free board.
- The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out.

Blow Pit

- Pits will be constructed to allow gravity flow to discharge into lined drill pit.
- The lower half of the pit, which is toward the drain line to the fully lined reserve pit, will be lined.
- Design of pit has been changed to reduce potential for trapped fluid at tail end of pit
- Pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves off.
- Corrective actions will be taken to ensure the pit does not contain fluid.
 - This includes pumping out trapped fluid or fluid in low spots.
 - Filling in low spots in the blow pit that are below the elevation of the drain pipe to the lined pit.
 - Removing any high spots in blow pit that could trap rain water.

Pit Monitoring and Maintenance

- COPC will perform an inspection of the location including pit compliance within 72 hours of rig moving off.
- COPC will review the OCD pit requirements and the requirements included in this document with all COPC and contract personnel responsible for construction and closure of pits.

Drill Pit Closure:

- Good faith effort is made to close pits within required timeframe on Federal wells (90 days) and State/Fee wells (6 months). If pits will remain open past due dates, an extension will be requested by sundry notice to allow pits to remain open.
- The BLM is notified 24 hours prior to fluid hauling on Federal wells.
- The NMOCD will be notified 48 hours prior to closing of any pit.
- Aeration of pit fluids will be confined within pit area.
- Wells which have not penetrated a salt section and where less than 9.5# brine was used during drilling will be encapsulated below-grade.
 - Encapsulation will be accomplished by mixing earthen materials with the pit contents to stiffen the pit contents, as necessary, folding the edges of the liner over the stiffened mud and cuttings and covering the encapsulated wastes and liner with a minimum of 3 feet of clean soil or like material that is capable of supporting native plant growth.
- Wells which have penetrated a salt section or 9.5# brine or greater was used during drilling may be capped and encapsulated insitu or deep trench buried and capped below-grade.
 - Capping and encapsulation insitu will be accomplished by mixing earthen materials with the pit contents, as necessary to stiffen the pit contents sufficiently to provide physical stability and support for the pit cover, folding the edges of the liner over the stiffened mud and cuttings; capping the pit with either a 1-foot thick clay cap compacted to ASTM standards, or a 20 mil minimum liner and covering the cap with a minimum of 3 feet of clean soil or like material that is capable of supporting native plant growth.
 - Deep trench burial and capping will be accomplished by digging a trench adjacent to the drilling pit; lining the trench with a 12 mil liner; mixing earthen materials with the pit contents, as necessary to stiffen the pit contents sufficiently to provide physical stability and support for the trench cap; capping the trench with either a 1-foot clay cap compacted to ASTM standards, or a 20 mil minimum liner and covering the cap with a minimum of 3 feet of clean soil or like material that is capable of supporting native plant growth.
 - When constructing the cap, the liner or clay cap will overlap the underlying pit or trench area by at least 3 feet in all directions.
- If the depth to groundwater is less than 50 feet or if the well is located less than 200 feet from a domestic fresh water well or spring or less than 1000 feet from any other fresh water well or if the distance to surface water body is less than 200 feet; the well is considered to be in sensitive area. (Keep in mind that these are not the only scenarios of sensitive area.)
 - A special encapsulation or solidification process prior to covering the pit contents will be accomplished by mixing the pit contents with cement or some other solidifying product at approximately a 3 to 1 ratio with samples taken and approved by the OCD prior to closure and then contents buried as described above.
 - OCD must give written approval on any special closure or encapsulation prior to any work being done.
- The reserve pit will then be backfilled, leveled and contoured so as to prevent run-off to surface water.
- The area will be reseeded with the appropriate seed mixture.
- The final grade of reserve pit (after reclamation) will be returned to natural contour of the land such that no pooling will occur.
- A closure report will be submitted on Form C-144 on all drilling pits.
- **Note: On Federal wells, a BLM inspector may witness pit closures and may mandate specific modifications to that which is mentioned above. If this happens, OCD will be contacted for concurrence and modifications will be noted in the closure report.**