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

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

Form C-101
May 27, 2004

Submit to appropriate District Office

RECEIVED
MAR 23 2006
OCD-ARTESIA

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
Gruy Petroleum Management Co. PO Box 140907 Irving, TX 75014-0907	162683
	[3] API Number 30 – 015- 21151

[3] Property Code	[5] Property Name	[6] Well No.
	Crow Flats 16 State Com	001

[9] Proposed Pool 1	[10] Proposed Pool 2
; Atoka (Gas) Wildcat	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	16	16S	28E		1980	North	1980	East	Eddy

[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/West line	County

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
P	G	R	State	3579' GR
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	9575'	Atoka	Unknown	When Approved

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
Less than 50' per USGS information	Greater than 1000' per State Engineer Records	Greater than 1000'

Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 4500 bbls Drilling Method:

Closed-Loop System ☐ Fresh Water ☐ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	334' (already set)	circ	Surface
12-1/4"	8-5/8"	24#	1901' (already set)	circ	Surface
7-7/8"	5-1/2"	17#	9400'	1620	Surface

[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.

Pavo Mesa Unit No. 1 well plugged and abandoned on 07-29-74. Propose to re-enter and clean out to 9575 TD.

Set 9400' of 5 ½" p-110 17# casing and cement to surface w 1620 sx of POZ/C + Additives.

Perforate and stimulate Atoka sand at 9100 to 9120' and complete as Crow Flats; Atoka (Gas) Wildcat.

Operator to use pressure control device - Submit plan prior to work.

[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: Zeno Farris Zeno Farris

Title: Manager Operations Administration

E-mail Address: zfarris@cimarex.com

Date: March 22, 2006 Phone: 972-443-6489

OIL CONSERVATION DIVISION

Approved by: Jim W. Gum
District II Supervisor

Title:

Approval Date: FEB 24 2006 MAR Expiration Date: MAR 24 2007

Conditions of Approval Attached ☐

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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

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-	96099	..., ..oka (Gas) Wildcat

[4] Property Code	[5] Property Name	[6] Well Number
	Crow Flats 16 State Com	001

[7] OGRID No.	[8] Operator Name	[9] Elevation
162683	Gruy Petroleum Management Co.	3579' RDB

[10] Surface Location

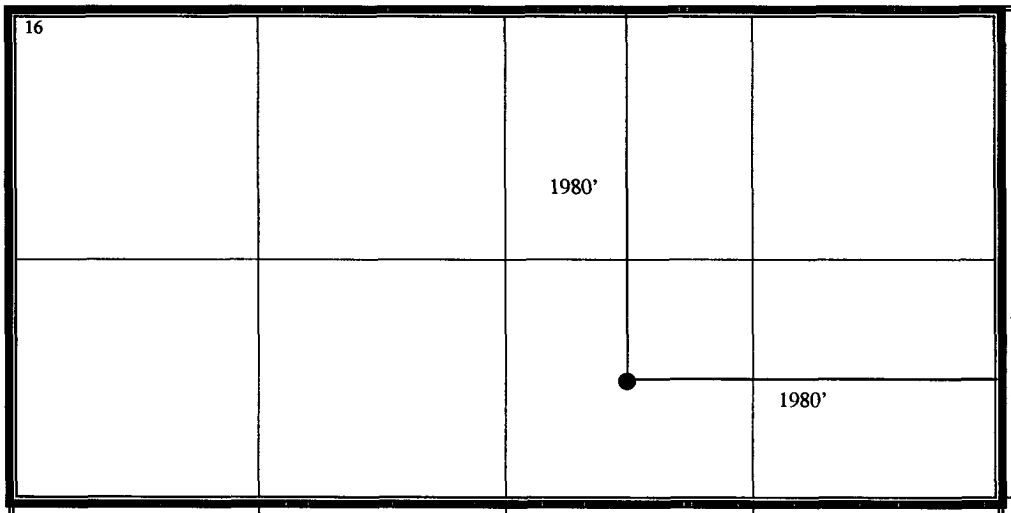
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	16	16S	28E		1980	North	1980	East	Eddy

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320	N		

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.



[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.

Zeno Farris — March 21, 2006

Signature — Date

Zeno Farris

Printed Name

[18] SURVEYOR CERTIFICATION

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.

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number

Cementing and Mud Details

Gruy Petroleum Management Co.
Crow Flats 16 State Com No. 1
G-16-16S-28E 1980' FNL & 1980' FEL
Eddy Co., NM

1. Cementing & Setting Depth:
5 1/2" Production
Set 9400' of 5 1/2" P-110 17# LT&C casing. Cement in two stages, first stage cement with 670 Sx. of Class POZ/C Cement + additives. Second stage cement with 950 Sx of Class "C". Estimated top of cement surface.

2. Pressure control Equipment:
A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventor. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nippled up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

3. Proposed Mud Circulating System:

Depth: 1901' - 8300'
Mud Weight: 8.4 - 9.9
Viscosity: 28 - 29
Fluid Loss: NC
Type: Fresh water. Paper for seepage. Lime for pH (9 - 9.5)

Depth: 8300' – 9400'
Mud Wt: 8.45 - 8.9
Viscosity: 28 - 29
Fluid Loss: NC
Type: Cut brine. Caustic for pH control.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Atoka formation. This equipment will remain in use until production casing is run and cemented.

Gruy Petroleum Management Co.
5215 North O'Connor Blvd. ♦ Suite 1500 ♦ Irving, TX 75039 ♦ (972) 401-3111 ♦ Fax (972) 443-6486
Mailing Address: P.O. Box 140907 ♦ Irving, TX 75014-0907
A subsidiary of Cimarex Energy Co. • A NYSE Listed Company • "XEC"

March 22, 2006

Oil Conservation Division
District 2 Office
1301 West Grand Avenue
Artesia, NM 88210
Attn: Mr. Bryan Arrant

Re: Statewide Rule 118
Hydrogen Sulfide Gas Contingency Plan
Proposed Crow Flats 16 State Com No. 1 Well

Dear Mr. Arrant:

In accordance with NMAC 19.15.3.118 C. (1) governing the determination of the hydrogen sulfide concentration in gaseous mixtures in each of its operations, Gruy Petroleum Management Co. does not anticipate that there will be enough H2S from the surface to the Morrow/Atoka formations to meet the OCD's minimum requirements for the submission of a contingency plan for the drilling and completion of the following test(s):

Crow Flats 16 State Com No. 1
G-16-16S-28E
1980' FNL & 1980' FEL
Eddy Co., NM

If anything further is needed regarding this issue, or if you have any questions, please feel free to contact the undersigned at 972-443-6489.

Yours truly,

Zeno Farris

Zeno Farris
Manager, Operations Administration