A Drilling Plan. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) Item 20 above). 5 Operator certification 5. Signature Name (Printed/Typed) Date 6. Such other site specific information and/or plans as mayybe/required by the BLM 7. Signature Name (Printed/Typed) Date 09/12/2007 Operator certification 09/12/2007 8. Agent for COG Operating LLC Name (Printed/Typed) Date 09/12/2007 Office Office Office 0. Assistant Field Manager, Lands And Minerals Office ROSWELL FIELD OFFICE APPROVED FOR 2 YEAR Philication approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to mature of approval, if any, are attached. he 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United tes any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	New Islanica) Oil Consi	ervalion The	viet.	** •	
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			SPEC	IAL ST	IPULATIONS AT	TACHED

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Exhibit "A"

DISTRICT I 1825 N. French Dr., Hobbs, NN 88240

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DISTRICT II 1301 W. Grand Avenue, Artezia, 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 Department

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

C AMENDED REPORT

			WELL LO	OCATION	AND ACR	EAGE DEDICATI	ON PLAT		
30-005-	Number 2791	2 Pool Codé Wildcar					Pool Name	Camp	
Property C 3674	38				Property P GEMINI FE	DERAL		Well N 1	
22913				<u>C.</u> 0.	Operator M G. OPERAT			Eleva 435	
					Surface L	ocation			
UL or lot No.	Section	Township		Lot Idn	Feet from the		Feet from the	East/West line	County
P	12	15 5			330	SOUTH	330	EAST	CHAVES
			Bottom	Hole Lo	cation If Di	fferent From Sur	face		
UL or lot No.	Section	Township		Lot Idn	Feet from the	e North/South line	Feet from the	East/West line	County
<u>M</u>	12	<u>15 S</u>	5 <u>31 E</u>		330	SOUTH	330	WEST	CHAVES
Dedicated Acres	Joint or	Infill	Consolidation	Code Or	der No.				
	WABLE W	ILL BE OR A	ASSIGNED NON-STAN	TO THIS	COMPLETION	UNTIL ALL INTER N APPROVED BY 7	ESTS HAVE BE	EN CONSOLIDA	ATED
	+						I hereby cer contained here: the best of my this organization interest or unlet land including the location pursuan or to a voluntar compulsory pool the division Signature Duspice Printed Name	R CERTIFICAT tify that the inform n is true and compl knowledge and belief, i either owns a work he proposed boltom h to a contract with muscral or working y pooling agreement ng order heretofore a Mane Aycc R CERTIFICAT that the well locativ	ation ete to and that ing in the ale an interest, or a miered by $\frac{p/12/0}{Date}$ a T For COG
Project		DTTOM HO LAT.: N LONG. W PC- N.: 7 E.: 7	20.725 <u>DLE_LOCATION</u> 33;01'26.9" 103'46'57.3(736765.26 710122.84 -83)	LONG. W1 SPC- N.: 7 E.: 7	OCATION 33"01"27,23"	4356.8' 4354.6' 3300 	actual surveys supervison, and correct to the JULY Date Surveys Signature Professional W.O. Certificate No	s plotted from field made by me or that the same is best of my belief.	under my true and

ATTACHMENT TO FORM 3160-3 COG Operating, LLC Gemini Federal # 1H SL: 330' FSL & 330' FEL, Unit P BHL: 330' FSL & 330' FWL, Unit M Sec 12, T15S, R31E Chaves County, NM

- 1. Proration Unit Spacing: 160 Acres
- 2. Ground Elevation: 4355'

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3. Proposed Depths: Pilot hole TD = 9190', Horizontal TVD = 8910', MD = 13450'

4. Estimated tops of geological markers:

Quaternary	Surface
Yates	2440'
Queen	3250'
San Andres	3980'
Tubb	6810'
Abo	7500'
Wolfcamp	8890'

5. Possible mineral bearing formations:

Water sand	150'	Fresh Water
Yates	2440'	Oil / Gas
Queen	3250'	Oil / Gas
San Andres	3980'	Oil / Gas
Tubb	6810'	Oil / Gas
Abo	7500'	Oil / Gas
Wolfcamp	8890'	Oil / Gas

6. Casing Program - Proposed

<u>Hole size</u>	Interval	OD of Casing	<u>Weight</u>	Cond.	Collar	Grade
17-1/2" Collapse sf	0' - +/-400' - 3.78, Burst sf –	10 0/0	48# - 15.72	New	STC	H40
	0' - 4000' - 1.285, Burst sf -	9-5/8" - 1.17, Tension s	40# f 3.25	New	STC	J-55
8-3/4" Collapse sf –	0' – 8500' - 1.754, Burst sf -	5-1/2" - 2.42, Tension s	17# f – 2.94	New	LTC	P-110
	8500' – 13450' - 1.68, Burst sf – :		17 # - 79.28	New	BTC	P-110

ATTACHMENT TO FORM 3160-3 COG Operating, LLC Gemini Federal # 1H Page 2 of 3

7. Cement Program

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13 3/8" Surf. Csg. Set at +/- 400', Circ to Surf with +/- 400 sx Class "C" w/ 2% CaCl2, 1.35 yd.

9 5/8" Intrmd. Csg. Set at +/- 4000'. Circ to Surf with +/- 800 sx 35/65 Poz "C", 2.05 yd. & 200 sx Class "C" w/ 2% CaCl2, 1.35 yd.

5 ½" Prod. Csg. Set at +/- 13450' MD. Cement casing with +/- 200 sx. 50/50/2 "C", 1.37 yd & +/- 900 sx Class "H", 1.18 yd. Est. TOC @ 8500'.

8. Pressure Control Equipment:

After setting 13 3/8" casing and installing 3000 psi casing head, NU 13 5/8" 3000 psi annular BOP. Test annular BOP, casing and manifold with clear fluid to 800 psi w/ rig pump. After setting 9 5/8" casing and installing 3000 psi casing spool, NU 3000 psi double ram BOP and 3000psi annular BOP. Test double ram BOP and manifold to 3000# with clear fluid and annular to 1500 psi using an independent tester and used continuously until TD is reached. Blind rams will be operationally checked on each trip out of hole. Pipe rams will be operationally checked each 24 hour period. These checks will be noted on daily tour sheets. Other accessories to the BOP equipment include a Kelly cock and floor safety valves, choke lines and choke manifold with 3000 psi WP rating.

9.	Proposed	Mud Circulating System	

Interval	Mud Wt.	Visc.	FL	Type Mud System
0' - 400'	8.5	28	NC	Fresh water native mud w/ paper for seepage and sweeps. Lime for PH.
400'- 4000'	9.1	30	NC	Cut brine mud, lime for PH and paper for seepage and sweeps.
4000'- 7500'	9.1	29	NC	Drill section with fresh water/cut brine circulating the reserve utilizing periodic sweeps of paper as needed for seepage control and solids removal.
7500' - 13450'	9.5	36	10	Drill pilot hole, curve and horizontal section with XCD polymer / cut brine / starch.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

10. Auxiliary Well Control and Monitoring Equipment

- A. Kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

ATTACHMENT TO FORM 3160-3 COG Operating, LLC Gemini Federal # 1H Page 3 of 3

11. Production Hole Drilling Summary:

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Drill 8-3/4" Pilot hole thru Wolfcamp, run open hole logs. Spot 150 sx. "H" Kick off plug from +/- 9000' to +/-8500'. Time drill and kick off 7-7/8" hole at +/- 8500', building curve over +/- 475' to horizontal at 8910' TVD. Drill horizontal section in a westerly direction for +/-4500' lateral. Run production casing and cement.

12. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. in vertical pilot hole to 9 5/8" casing shoe.
- B. The mud logging program will consist of lagged 10' samples from intermediate casing point to T.D. in vertical pilot hole and from Kick off point to TD in Horizontal hole.
- C. Drill Stem test is not anticipated.
- D. No conventional coring is anticipated.
- E. Further testing procedures will be determined after the 5 ½" production casing has been cemented at TD based on drill shows and log evaluation.

13. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 3858 psig. Low levels of Hydrogen sulfide have been monitored in producing wells in the area, so H2S may be present while drilling of the well. An H2S plan is attached to the Drilling Program. No major loss of circulation zones has been reported in offsetting wells.

14. Anticipated Starting Date

Drilling operations will commence approximately on November 30, 2007 with drilling and completion operations lasting approximately 45 days.

Exhibit "B"





Exhibit "I"

BOPE SCHEMATIC



900 SERIES