Form 3160-5 (November 1994)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM API	ROV]
OMB No. 1	004-0
Expires July	31, 19

5. Lease Serial No.

SUNDRY I Do not use this	NOTICES AND REPORTS Of form for proposals to dr Use Form 3160-3 (APD) for	N WELLS ill or reenter an	SF 078481-A 6. If Indian, Allottee or Tribe Name 7. If Unit or CA/Agreement, Name and/or No.
SUBMIT IN TRIPL	ICATE – Other instrucții	òjijs oʻji , reve jse side 3	
1. Type of Well Oil Well X Gas Well	Other	RECEIVED	8. Well Name and No.
2. Name of Operator		070 FARMINGTON N	MGRAHAM 4 #16
M & G Drilling Company Inc.	c/o Mike Pippin LLC (/		9. API Well No.
3a. Address	3b.	,	30-045-31999
c/o: Pippin, 3104 N. Sullivan,		5-327-4573	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., 7			Blanco Mesaverde
Surface: 790' FSL 680' FEL		2014	11. County or Parish, State
Total Depth: 1980' FSL 198	0' FEL (J) Sec. 4 127N R	08VV	San Juan County, New Mexico
12. CHECK APPROPRIATE BOX	,	OF NOTICE, REPORT, OR OT	HER DATA
TYPE OF SUBMISSION	TYPE OF ACTION		
Notice of Intent Subsequent Report	Acidize Alter Casing Casing Repair	Fracture Treat Reclama New Construction Recomp	lete Other
Final Abandonment Notice	Change Plans Convert to Injection	Plug and Abandon Tempora Plug Back Water D	rily Abandon isposal
If the proposal is to deepen directional Attach the Bond under which the work Following completion of the involved op Testing has been completed. Final Abdets mined that the site is ready for final inspection. M & G Drilling Company casing set at about 320', 5223' (MD). Attached is	y or recomplete horizontally, give subsur will be performed or provide the Bond erations. If the operation results in a re- andonment Notices shall be filed only section.) Inc. has decided to change 7" intermediate casing set the new 8 point drilling place	rface locations and measured and true volume. No, on file with BLM/BIA. Required multiple completion or recompletion in a after all requirements, including reclamate plans and mud drill a deviate about 1984' (MD), and 4	proposed work and approximate duration thereof. retrical depths of all pertinent markers and zones. subsequent reports shall be filed within 30 days new interval, a Form 3160-4 shall be filed once ican, have been completed, and the operator has atted Blanco Mesaverde well with 9-5/8" surface 1-1/2" production casing set at about well was formerly to be a deviated 4.
	nsion of this approved API .828% appres:	JAN 6 2006	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 I hereby certify that the foregoing Name (Printed/Typed) 	is true and correct	Title	
	Pippin		Petr. Engr. (Agent) 202 8 1
Signature MA	· Virgin	Date	ovember 24, 2004
	THIS SPACE	FOR FEDERAL OR STATE USE	
Approved by	belab	Title Petr. Tac	Date (2/6/04
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu-	utable title to those rights in the subjec		
	a crime for any person knowingly as	d willfully to make to any department on.	t or agency of the United States any false, fictitious or

(Instructions on reverse)

District I

1625 N. French Dr., Hobbs, NM 88240 District II

1301 W. Grand Avenue, Artesia, NM 88218

District III 1000 Rie Brazzos Rd., Aztec, NM 87416

District IV

UL or lot be

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

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 August 15, 2000

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

M AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 72319	BLANGO	NESAVE	RDE
16598	GRA	operty Name		*Well Number 4-16
OGRID No.	*0	perator Name		⁷ Elevation
141852	M & G DRILL	ING BOMPANY, INC.		5959
	10 0	C 7		

Surface Location Feet from the Roug North/South Ha UL er lot me. Feet from the 27 N 680 P 8 W 790 South East San Juan

11 Bottom Hole Location If Different From Surface EAST SAN JURN Feet from the North/South Bide BW 1980 SOUTH 1980

12 Dedicated Acres Joint or Infill 320 E/2

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 N. 89°3Z'N	40.04cm	N89°29'W	38.25cm. WC	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein						
3		•	, , ,	is true and complete to the hest of my knowledge and						
29.02		e e ç	* 100	belief.						
3		: · · · · · · · · · · · · · · · · · · ·	Ž.	Signature Signature						
3			, vi	MIKE PIPPIN						
V			B	AGENT-PETR. ENGR.						
(ma)			(6402)	Title 11-29-04						
	Sec.			Date						
		4 BOTTOM HOLE	·	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this						
	e per en		1980	plat was plotted from field notes of actual surveys						
		X	1790	made by me or under my supervision, and that the same is true and correct to the pest of my belief.						
7.650 24.04)		1980	2.4. (2.4.)	26 Apr 12003						
6,7		LAT. 36.59881°A	SURFACE & C80°	Date of Survey Signature and Scal of Professional Surveyor						
	15 -	Long. 107. 67994°	v 680°	13 (18400)						
			.06.	William E. Mahnke II						
N 89	°03'W	V 789	ECH. Fil	Certificate Number 23-8466						

M&G Drilling Company Inc. Graham #4-16 MV

790' FSL, 680' FEL Sec. 4 T27N R08W San Juan County, NM

Drilling Program

1. ESTIMATED FORMATION TOPS (KB) Elevation: 5959' GL or 5969' KB

Formation Name	Depth (TVD)	Depth (Subsea)	Depth (MD)
Nacimeinto	Surface		
Ojo Alamo	1327'	4642'	
Kirtland	1377'	4592'	
Intermediate TD (7")	1800'	4169'	1984'
Fruitland	1947'	4022'	
Pictured Cliffs	2172'	3797'	
Lewis	2252'	3717'	
Chacra	3139'	2830'	
Cliffhouse	3839'	2130'	
<u>Menefee</u>	3859'	2110'	
Point Lookout	4409'	1560'	
TD (4-1/2")	4750'	1219'	5223'

2. NOTABLE ZONES

Gas or Oil Zones	Water Zones	Coal Zone
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo (FLOW 9	0 BWPH)
Chacra	Kirtland	,
Cliffhouse	Fruitland	
Menefee		
Point Lookout		

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the engineer's recommendations.

PRESSURE CONTROL

Maximum expected pressure is ~2700 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 11" 3,000 psi model is on PAGE #5.

M&G Drilling Company Inc. Graham #4-16 MV

790' FSL, 680' FEL Sec. 4 T27N R08W San Juan County, NM

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 3000 psi system. A 3000 psi double ram hydraulic BOP will be used. Accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill, kill, and choke manifold lines will be 2". Accessories will include upper and lower Kelly cocks with handles, stabbing valve to fit drill pipe on floor at all times, string float at bit, 3000 psi choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge. BOPs will be tested every 24 hours. Tests will be recorded on IADC log.

4. CASING & CEMENT (See Page 15)

Hole Size	O.D. W	/eight (lb/ft)	<u>Grade</u>	Age	Connection	Setting Depth
12-1/4"	9-5/8"	36#	K-55	New	ST&C	320' (TVD&MD)
8-3/4"	7"	20#	K-55	New	ST&C	1800' (TVD) – 1984' (MD)
6-1/4"	4-1/2"	10.5#	K-55	New	ST&C	4750' (TVD) – 5223' (MD)

Surface casing will be cemented to the surface with ~200 cu. ft. (~144 sx) Cl "B" or equivalent (1.39 ft3/sx yield, 14.6 ppg) with 2% CaCl2 in mix water and 1/4#/sx celloflake. Volume based on 100% excess. We plan to run a minimum of 8 centralizers. A wooden wiper plug will be displaced within 20' of the shoe. WOC = 12 hours. Surface casing will be tested to 500 psi for 15 minutes.

Intermediate casing will be cemented to surface with a single stage. Total cement = 393 cu. ft. (214 sx). Volumes are calculated at 45% excess in lead. If cement does not circulate to surface, then a temperature survey will be run to determine the actual cement top as needed. WOC = 12 hours. Test to 1000 psi for 15 minutes.

Lead cement will be ~282 cu. ft. (~134 sx) Premium Lite w/2% CaCl2, ¼#/sx cello flake, 6-1/4#/sx gilsonite, 8% gel mixed at 11.0 gps, 12.1 ppg for a yield of 2.11 cu. ft. per sx.

Tail cement will be ~111 cu. ft. (~80 sx) Type III w/2% CaCl2, 1/4#/sx Cello flake mixed at 6.7 gps, 14.6 ppg for a yield of 1.39 cu. ft. per sx.

Cementing equipment will include a guide shoe, and autofill float collar will be run 20' off bottom. We plan on running 10 centralizers and 2 turbolators.

Production casing will be cemented to surface in a single stage. Total cement = 720 cu. ft. (~358 sx). Volumes are calculated at 45% excess. If cement does not circulate to surface, then a temperature survey will be run to determine the actual cement top as needed. Casing will be pressure tested during completion operations.

M&G Drilling Company Inc.

Graham #4-16 MV

790' FSL, 680' FEL Sec. 4 T27N R08W San Juan County, NM

Lead cement will be ~664 cu. ft. (~318sx) Class "B" or equivalent w/2%SM, 1/4#/sx cello flake, 3#/sx gilsonite mixed at 11.9 gps, 12.5 ppg for a yield of 2.09 cu. ft. per sx.

Tail cement will be ~56 cu. ft. (~40 sx) Class "B" or equivalentw/1% gel, 2% Cacl2, ½#/sx cello flake, 3#/sx gilsonite mixed at 6.8 gps, 14.5 ppg for a yield of 1.4 cu. ft. per sx.

Cementing equipment will include a guide shoe, and autofill float collar will be run 20' off bottom. We plan on running 1 centralizer inside the 7" intermediate shoe.

5. MUD PROGRAM

Depth (TVD)		Wt./ppg.	<u>Vis.</u>	Fluid Loss	PH
0'-320'	FW gel/lime spud mud	8.4-8.7	30-50	NC	10
320'-1800'	FW gel/Polymer	8.4-9.0	30-40	<20cc's	9.5
1800'-4750'	FW gel/Polymer	8.4-9.0	30-40	<20cc's	9.5

Lost circulation and absorption material will be on location.

6. CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. Open hole logs will include GR, Neutron-Density, and Induction. All logs will be run from TD on the production casing to the intermediate casing shoe.

7. <u>DOWN HOLE CONDITIONS</u>

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be ~1000 psi.

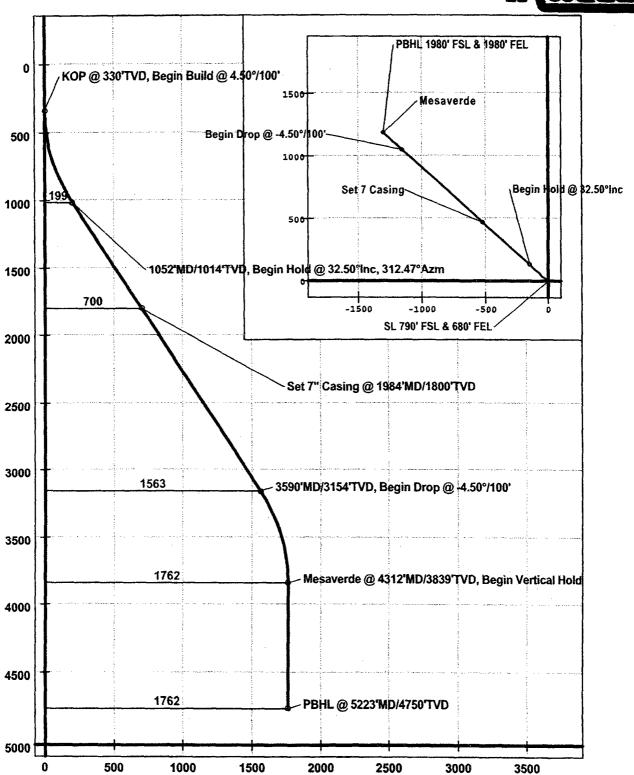
2700

8. OTHER INFORMATION

The anticipated spud date is June 1, 2005. It is expected it will take ~12 days to drill and ~12 days to complete the well. Completion will start about one month after the spud and will include hydraulic fracturing.

Company: M & G Drilling Company Lease/Well: Graham #4 16 MV/Chacra Location: San Juan County, Sec 4-27N-8W





O- Proposal 9-23-04



Job Number:

Company: M & G Drilling Company Lease/Well: Graham #4 16 MV/Chacra

Location: San Juan County, Sec 4-27N-8W

Rig Name: RKB: 5969'

G.L. or M.S.L.: 5959'

State/Country: New Mexico / USA

Declination:

Grid:

File name: C:\CUST04\SURVEYS\M&GDRI~1\GRA416.SVY

Date/Time: 18-Nov-04 / 15:07 Curve Name: Proposal 9-23-04

WINSERVE PROPOSAL REPORT Minimum Curvature Method Vertical Section Plane 312.47 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	C L O S Distance FT	URE Direction Deg	Dogleg Severity Deg/100
П	KOP @ 33	30'TVD, Be	egin Build @	4.50°/100'						
	330.00	.00	.00	330.00	.00	.00	.00	.00	.00	.00
	430.00 530.00 630.00 730.00 830.00 930.00 1030.00 1052'MD/1	4.50 9.00 13.50 18.00 22.50 27.00 31.50 1014*TVD,	312.47 312.47 312.47 312.47 312.47 312.47 Begin Hold 312.47	429.90 529.18 627.23 723.45 817.25 908.04 995.27 @ 32.50°In:	3.92 15.68 35.18 62.32 96.92 138.77 187.62 c, 312.47°A	2.65 10.58 23.75 42.08 65.44 93.70 126.69 zm	-2.90 -11.56 -25.95 -45.97 -71.49 -102.36 -138.40	3.92 15.68 35.18 62.32 96.92 138.77 187.62	312.47 312.47 312.47 312.47 312.47 312.47 312.47	4.50 4.50 4.50 4.50 4.50 4.50
[] []					199.00	134.00	-147.03	199.55	312.47	4.50
	1984.00	32.50	312.47	1800.00	699.99	472.64	-516.33	699.99	312.47	.00
U	2052.13 3052.13	32.50 32.50	312.47 312.47	1857.46 2700.89	736.59 1273.83	497.35 860.10	-543.33 -939.61	736.59 1273.83	312.47 312.47 312.47	.00
	3590'MD/3	3154'TVD,	Begin Drop	@ -4.50°/10	10'					
U	3590.49	32.50	312.47	3154.96	1563.06	1055.40	-1152.95	1563.06	312.47	.00
	3690.49 3790.49 3890.49 3990.49	28.00 23.50 19.00 14.50	312.47 312.47 312.47 312.47	3241.33 3331.38 3424.56 3520.29	1613.42 1656.85 1693.07 1721.88	1089.40 1118.72 1143.18 1162.63	-1190.10 -1222.13 -1248.85 -1270.10	1613.42 1656.85 1693.07 1721.88	312.47 312.47 312.47 312.47	4.50 4.50 4.50 4.50

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOS Distance FT	URE Direction Deg	Dogleg Severity Deg/100		
4090.49	10.00	312.47	3617.99	1743.09	1176.95	-1285.74	1743.09	312.47	4.50		
4190.49	5.50	312.47	3717.06	1756.56	1186.05	-1295.68	1756.56	312.47	4.50		
4290.49	1.00	312.47	3816.87	1762.22	1189.87	-1299.86	1762.22	312.47	4.50		
Mesaverd	Mesaverde @ 4312'MD/3839'TVD, Begin Vertical Hold										
4312.63	.00	312.47	3839.00	1762.41	1190.00	-1300.00	1762.41	312.47	4.50		
PBHL @ 5	PBHL @ 5223'MD/4750'TVD										
5223.63	.00	312.47	4750.00	1762.41	1190.00	-1300.00	1762.41	312.47	.00		