Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Designation and Serial No.: SF 078481-A
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA, Agreement, Name and No.: 33274

1a. Type of Work: ☒ DRILL ☐ REENTER
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.: GRAHAM #4,16

2. Name of Operator: M&G Drilling Company Inc. — NM OGRID # 141852

9. API Well No.: 30045-31999

3a. Address: PO Box 2406, Farmington, NM 87499
3b. Phone Number: (505) 325-5449

10. Field and Pool, or Exploratory: Blanco MV & Basin DK

11. Sec., T., R., M., or Blk. and Survey or Area: Sec 04, T-27-N, R-08-W

4. Location of Well (Footage, Sec, T. R., M, or Survey Description)
At surface: Unit Letter P, 790' FSL, 680' FEL
At proposed prod. Zone: Unit Letter J, 1980' FSL, 1980' FEL

14. Distance in miles and direction from nearest town or post office*: 13 Miles South of Blanco

12. County or Parish: San Juan
13. State: New Mexico

15. Distance from proposed* location to nearest propety or lease line, ft. (Also to nearest drlg. Unit line, if any): 790' Feet from South Line

16. No of Acres in lease: 320 Acres

17. Spacing Unit dedicated to this well: 320 99 Acres E/2

18. Distance from proposed* location to nearest propety or lease line, ft.: 675' Feet from East Line

19. Proposed Depth: 6976' MDTD, 6736' TVDTD

20. BLM/BIA Bond No. on file:

21. Elevation (Show whether DF, KDB, RT, GL, etc.): 5959' Ground Level

22. Approximate date work will start*: 2/16/2004

23. Estimated duration: 30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands,the SUPO shall be filed with the appropriate Forest Service Office.
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer

Size of Hole	Grade, Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8" K-55	36 #	280'	126 Sxs, 175 ft3 - 100% Excess
8-3/4"	7" K-55	20#	2620'	283 Sxs, 551 ft3 - 40% Excess
6-1/4"	4-1/2" N-80	11.6#	6976'	241 Sxs, 587 ft3 - 25% Excess

SEE ATTACHED APD INFORMATION

Latitude: 36 Deg, 36 Min, 33 Sec N
Longitude: 107 Deg, 41 Min, 19 Sec W

25. Signature: Mike Pippin
Name(Printed/Typed): Mike Pippin
Date: 11/10/03
Title: Petroleum Engineer

Approved by (Signature): /s/ David J. Mankiewicz
Name(Printed/Typed):
Date: JAN - 6 2004
Title:
Office:

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly and willfully to make to any department or agency of the United States any false, ficticious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NMOCD

HOLD C104 FOR Directional Survey

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 & 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-31999	MV 72319 DK 71599	BLANCO MV & BASIN DK

4 Property Code	5 Property Name	6 Well Number
16598 33274	GRAHAM 4	#16

7 OGRID No.	8 Operator Name	9 Elevation
141852	M & G DRILLING COMPANY, INC.	5959

10 Surface Location

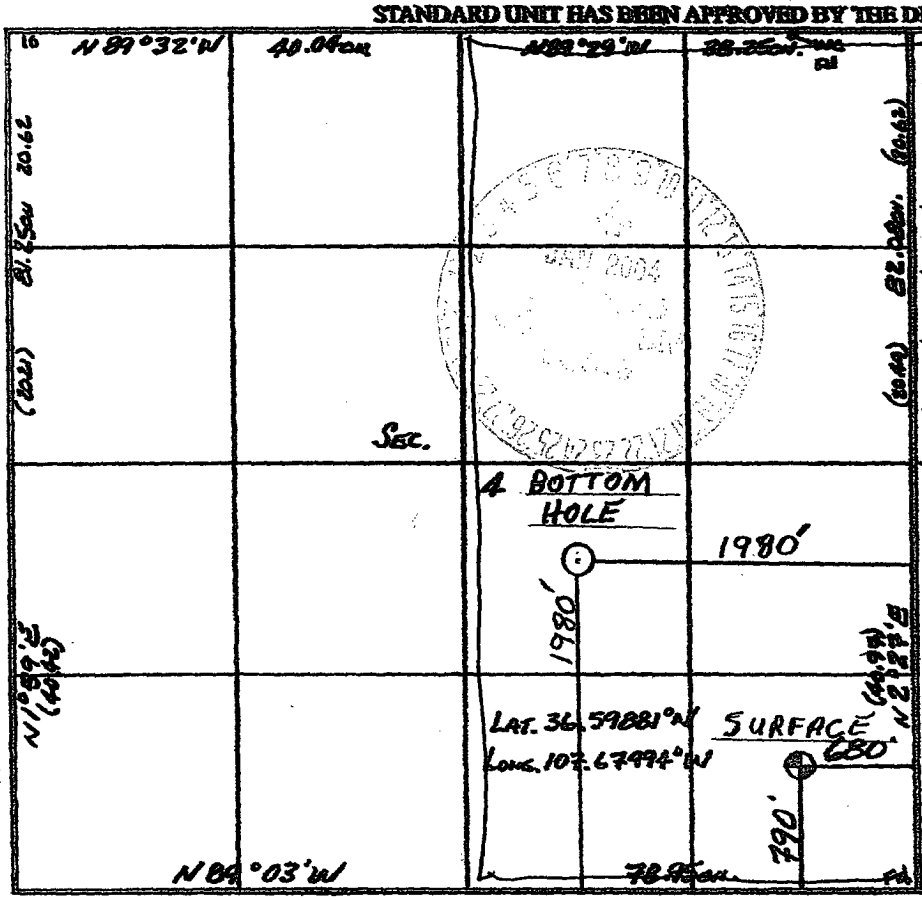
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	4	27 N	8 W		790	South	680	East	San Juan

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
J	4	27N	8W		1980'	SOUTH	1980'	EAST	SAN JUAN

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
MV E/2 DK E/2 320.79	Y		

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.

Signature: Mike Pippin

Printed Name: MIKE PIPPIN

Title: PETR. ENGR.

Date: 11/14/03

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: 26 Apr 2004

Signature & Seal of Professional Surveyor: William E. Hahnke II, New Mexico, #8466

Certificate Number: 8466

M&G Drilling Company Inc.
Graham #4-16 MV/DK
790' FSL, 680' FEL
Sec. 4 T27N R08W
San Juan County, NM

Drilling Program

1. ESTIMATED FORMATION TOPS (KB)
(Assumed 1700' deviation at TD, 14 degrees average over depth of well)

Formation Name	Depth (TVD)	Depth (Subsea)	Depth (MD)
Nacimeinto	Surface		
Ojo Alamo	1827'	4642'	1368'
Kirtland	1377'	4592'	1420'
Fruitland	1947'	4022'	2007'
Pictured Cliffs	2172'	3797'	2238'
Lewis	2252'	3717'	2320'
Chacra	3139'	2830'	3235'
Cliffhouse	3839'	2130'	3956'
Menefee	3859'	2110'	3977'
Point Lookout	4409'	1560'	4543'
Greenhorn	6351'	-382'	6545'
Dakota	6536"	-567'	6736'
TD	6736'	-767'	6976'

2. NOTABLE ZONES

Gas or Oil Zones	Water Zones	Coal Zone
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Ojo Alamo	
Chacra	Kirtland	
Cliffhouse	Fruitland	
Menefee		
Point Lookout		
Dakota		

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.

M&G Drilling Company Inc.
Graham #4-16 MV/DK
790' FSL, 680' FEL
Sec. 4 T27N R08W
San Juan County, NM

3. 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.

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.	Weight (lb/ft)	Grade	Age	Connection	GL Setting Depth
12-1/4"	9-5/8"	36#	K-55	New	ST&C	280' (MD)
8-3/4"	7"	20#	K-55	New	ST&C	2620' (MD)
6-1/4"	4-1/2"	11.6#	N-80	New	ST&C	6976' (MD)

Surface casing will be cemented to the surface with ~175 cu. ft. (~126 sx) Type III ~~Cl "B"~~ or equivalent (1.39 ft3/sx yield, 14.6 ppg) with 2% CaCl2 in mix water and ¼#/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 = 551 cu. ft.. Volumes are calculated at 40% excess. 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 ~463 cu. ft. (~220 sx) Premium Lite FM w/2% CaCl2, ¼#/sx cello flake, 4#/sx Pheno Seal, 8% gel mixed at 12.1 ppg for a yield of 2.13 cu. ft. per sx.

Tail cement will be ~88 cu. ft. (~63 sx) Type III w/2% CaCl2, ¼#/sx Cello flake mixed at 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 2400' ensuring cement coverage inside the intermediate casing with a single stage. Total cement = ~~587~~ 515 cu. ft.. Volumes are

calculated at 25% 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.

Lead cement will be ~~257~~ 244 cu. ft. (~79 sx) Premium Lite High Strength FM w/0.3% R-3, 2% KCl, ¼#/sx Cello flake, 0.3% CD-32, 4#/sx Pheno Seal, 1% FL-52 mixed at 11.0 ppg for a yield of 3.09 cu. ft. per sx.

Tail cement will be ~330 cu. ft. (~162 sx) Premium Lite High Strength FM w/0.3% R-3, 2% KCl, ¼#/sx Cello flake, 0.3% CD-032, 4#/sx Pheno Seal, 1% FL-52 mixed at 12.5 ppg for a yield of 2.04 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	Type	Wt./ppg.	Vis.	Fluid Loss	PH
0'-280'	FW gel/lime spud mud	8.4-8.7	30-50	NC	10
280'-2620'	FW gel/Polymer	8.4-9.0	30-40	<20cc's	9.5
2620'-6976'	Air &/or Air/mist	N/A	N/A	N/A	N/A

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. The Neutron-Density Log will be run from TD on the intermediate casing to 1700' and the Induction log from TD to the surface casing shoe. All logs will be run from TD on the production casing to the intermediate casing shoe.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be ~2700 psi.

8. OTHER INFORMATION

The anticipated spud date is February 17, 2004. It is expected it will take ~16 days to drill and ~10 days to complete the well. Completion will start about one month after the spud and will include hydraulic fracturing.

Scientific Drilling

Scientific Drilling
Planning Report

Company:	Synergy Operating	**Date:** 9/17/2003	**Time:** 00:04:11	**Page:**	1
Field:	San Juan County, NM	**Co-ordinate(NE) Reference:**	Site: Graham 4 #16, True North		
Site:	Graham 4 #16	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	4 #16	**Section (VS) Reference:**	Well (0.00N,0.00E,312.47Azi)		
Wellpath:	OH	**Plan:**	Plan #1		

Field: San Juan County, NM

Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Western Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Site Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2000

Site: Graham 4 #16
SHL: Sec. 4, T 27 N, R 8 W; 790' FSL, 680' FEL
PBHL: 1980' FSL, 1980' FEL

Site Position:		**Northing:**	622102.75 m	**Latitude:**	36 36 33.000 N
From:	Geographic	**Easting:**	165346.81 m	**Longitude:**	107 41 19.000 W
Position Uncertainty:	0.0 ft			**North Reference:**	True
Ground Level:	0.0 ft			**Grid Convergence:**	0.09 deg

Well: 4 #16 **Slot Name:**

Well Position:	+N/-S	0.0 ft	**Northing:**	622102.75 m	**Latitude:**	36 36 33.000 N
	+E/-W	0.0 ft	**Easting:**	165346.81 m	**Longitude:**	107 41 19.000 W
Position Uncertainty:		0.0 ft				

Wellpath: OH **Drilled From:** Surface
Tie-on Depth: 0.0 ft

Current Datum:	SITE	**Height**	0.0 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	9/16/2003			**Declination:**	10.97 deg
Field Strength:	51611 nT			**Mag Dip Angle:**	63.59 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	6736.0	0.0	0.0	312.47

Plan: Plan #1 **Date Composed:** 9/16/2003
Version: 1
Principal: Yes **Tied-to:** From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.0	0.00	312.47	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	312.47	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
723.1	15.69	312.47	716.6	48.1	-52.5	3.00	3.00	0.00	312.47	
6975.6	15.69	312.47	6736.0	1190.0	-1300.0	0.00	0.00	0.00	0.00	T1

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.0	0.00	312.47	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
200.0	0.00	312.47	200.0	0.0	0.0	0.0	0.00	0.00	0.00	312.47

Section 2 : Start Build 3.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
400.0	6.00	312.47	399.6	7.1	-7.7	10.5	3.00	3.00	0.00	0.00
500.0	9.00	312.47	498.8	15.9	-17.3	23.5	3.00	3.00	0.00	0.00
600.0	12.00	312.47	597.1	28.2	-30.8	41.7	3.00	3.00	0.00	0.00
700.0	15.00	312.47	694.3	43.9	-48.0	65.1	3.00	3.00	0.00	0.00
723.1	15.69	312.47	716.6	48.1	-52.5	71.2	3.00	3.00	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
800.0	15.69	312.47	790.6	62.1	-67.9	92.0	0.00	0.00	0.00	0.00
900.0	15.69	312.47	886.9	80.4	-87.8	119.0	0.00	0.00	0.00	0.00
1000.0	15.69	312.47	983.2	98.6	-107.8	146.1	0.00	0.00	0.00	0.00

Scientific Drilling

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Well:	4 #16	**Section (VS) Reference:**	Well (0.00N,0.00E,312.47Azi)		
Wellpath:	OH	**Plan:**	Plan #1		

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1100.0	15.69	312.47	1079.4	116.9	-127.7	173.1	0.00	0.00	0.00	0.00
1200.0	15.69	312.47	1175.7	135.2	-147.7	200.2	0.00	0.00	0.00	0.00
1300.0	15.69	312.47	1272.0	153.4	-167.6	227.2	0.00	0.00	0.00	0.00
1400.0	15.69	312.47	1368.3	171.7	-187.6	254.3	0.00	0.00	0.00	0.00
1500.0	15.69	312.47	1464.5	190.0	-207.5	281.3	0.00	0.00	0.00	0.00
1600.0	15.69	312.47	1560.8	208.2	-227.5	308.4	0.00	0.00	0.00	0.00
1700.0	15.69	312.47	1657.1	226.5	-247.4	335.4	0.00	0.00	0.00	0.00
1800.0	15.69	312.47	1753.3	244.7	-267.4	362.5	0.00	0.00	0.00	0.00
1900.0	15.69	312.47	1849.6	263.0	-287.3	389.5	0.00	0.00	0.00	0.00
2000.0	15.69	312.47	1945.9	281.3	-307.3	416.6	0.00	0.00	0.00	0.00
2100.0	15.69	312.47	2042.2	299.5	-327.2	443.6	0.00	0.00	0.00	0.00
2200.0	15.69	312.47	2138.4	317.8	-347.2	470.7	0.00	0.00	0.00	0.00
2300.0	15.69	312.47	2234.7	336.1	-367.1	497.7	0.00	0.00	0.00	0.00
2400.0	15.69	312.47	2331.0	354.3	-387.1	524.8	0.00	0.00	0.00	0.00
2500.0	15.69	312.47	2427.2	372.6	-407.0	551.8	0.00	0.00	0.00	0.00
2600.0	15.69	312.47	2523.5	390.9	-427.0	578.9	0.00	0.00	0.00	0.00
2700.0	15.69	312.47	2619.8	409.1	-446.9	605.9	0.00	0.00	0.00	0.00
2800.0	15.69	312.47	2716.1	427.4	-466.9	633.0	0.00	0.00	0.00	0.00
2900.0	15.69	312.47	2812.3	445.6	-486.8	660.0	0.00	0.00	0.00	0.00
3000.0	15.69	312.47	2908.6	463.9	-506.8	687.1	0.00	0.00	0.00	0.00
3100.0	15.69	312.47	3004.9	482.2	-526.7	714.1	0.00	0.00	0.00	0.00
3200.0	15.69	312.47	3101.2	500.4	-546.7	741.2	0.00	0.00	0.00	0.00
3300.0	15.69	312.47	3197.4	518.7	-566.7	768.2	0.00	0.00	0.00	0.00
3400.0	15.69	312.47	3293.7	537.0	-586.6	795.3	0.00	0.00	0.00	0.00
3500.0	15.69	312.47	3390.0	555.2	-606.6	822.3	0.00	0.00	0.00	0.00
3600.0	15.69	312.47	3486.2	573.5	-626.5	849.4	0.00	0.00	0.00	0.00
3700.0	15.69	312.47	3582.5	591.8	-646.5	876.4	0.00	0.00	0.00	0.00
3800.0	15.69	312.47	3678.8	610.0	-666.4	903.5	0.00	0.00	0.00	0.00
3900.0	15.69	312.47	3775.1	628.3	-686.4	930.5	0.00	0.00	0.00	0.00
4000.0	15.69	312.47	3871.3	646.5	-706.3	957.6	0.00	0.00	0.00	0.00
4100.0	15.69	312.47	3967.6	664.8	-726.3	984.6	0.00	0.00	0.00	0.00
4200.0	15.69	312.47	4063.9	683.1	-746.2	1011.7	0.00	0.00	0.00	0.00
4300.0	15.69	312.47	4160.1	701.3	-766.2	1038.7	0.00	0.00	0.00	0.00
4400.0	15.69	312.47	4256.4	719.6	-786.1	1065.7	0.00	0.00	0.00	0.00
4500.0	15.69	312.47	4352.7	737.9	-806.1	1092.8	0.00	0.00	0.00	0.00
4600.0	15.69	312.47	4449.0	756.1	-826.0	1119.8	0.00	0.00	0.00	0.00
4700.0	15.69	312.47	4545.2	774.4	-846.0	1146.9	0.00	0.00	0.00	0.00
4800.0	15.69	312.47	4641.5	792.7	-865.9	1173.9	0.00	0.00	0.00	0.00
4900.0	15.69	312.47	4737.8	810.9	-885.9	1201.0	0.00	0.00	0.00	0.00
5000.0	15.69	312.47	4834.1	829.2	-905.8	1228.0	0.00	0.00	0.00	0.00
5100.0	15.69	312.47	4930.3	847.4	-925.8	1255.1	0.00	0.00	0.00	0.00
5200.0	15.69	312.47	5026.6	865.7	-945.7	1282.1	0.00	0.00	0.00	0.00
5300.0	15.69	312.47	5122.9	884.0	-965.7	1309.2	0.00	0.00	0.00	0.00
5400.0	15.69	312.47	5219.1	902.2	-985.6	1336.2	0.00	0.00	0.00	0.00
5500.0	15.69	312.47	5315.4	920.5	-1005.6	1363.3	0.00	0.00	0.00	0.00
5600.0	15.69	312.47	5411.7	938.8	-1025.5	1390.3	0.00	0.00	0.00	0.00
5700.0	15.69	312.47	5508.0	957.0	-1045.5	1417.4	0.00	0.00	0.00	0.00
5800.0	15.69	312.47	5604.2	975.3	-1065.4	1444.4	0.00	0.00	0.00	0.00
5900.0	15.69	312.47	5700.5	993.6	-1085.4	1471.5	0.00	0.00	0.00	0.00
6000.0	15.69	312.47	5796.8	1011.8	-1105.4	1498.5	0.00	0.00	0.00	0.00
6100.0	15.69	312.47	5893.1	1030.1	-1125.3	1525.6	0.00	0.00	0.00	0.00
6200.0	15.69	312.47	5989.3	1048.3	-1145.3	1552.6	0.00	0.00	0.00	0.00
6300.0	15.69	312.47	6085.6	1066.6	-1165.2	1579.7	0.00	0.00	0.00	0.00
6400.0	15.69	312.47	6181.9	1084.9	-1185.2	1606.7	0.00	0.00	0.00	0.00
6500.0	15.69	312.47	6278.1	1103.1	-1205.1	1633.8	0.00	0.00	0.00	0.00
6600.0	15.69	312.47	6374.4	1121.4	-1225.1	1660.8	0.00	0.00	0.00	0.00
6700.0	15.69	312.47	6470.7	1139.7	-1245.0	1687.9	0.00	0.00	0.00	0.00
6800.0	15.69	312.47	6567.0	1157.9	-1265.0	1714.9	0.00	0.00	0.00	0.00
6900.0	15.69	312.47	6663.2	1176.2	-1284.9	1742.0	0.00	0.00	0.00	0.00
6975.6	15.69	312.47	6736.0	1190.0	-1300.0	1762.4	0.00	0.00	0.00	0.00

Scientific Drilling

Scientific Drilling
Planning Report

Company:	Synergy Operating	**Date:**	9/17/2003	**Time:**	00:04:11	**Page:**	3
Field:	San Juan County, NM	**Co-ordinate(NE) Reference:**	Site: Graham 4 #16, True North				
Site:	Graham 4 #16	**Vertical (TVD) Reference:**	SITE 0.0				
Well:	4 #16	**Section (VS) Reference:**	Well (0.00N,0.00E,312.47Azi)				
Wellpath:	OH	**Plan:**	Plan #1				

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing m	Map Easting m	<— Latitude —> Deg	Min	Sec		<— Longitude —> Deg	Min	Sec	
T1			6736.0	1190.0	-1300.0	622464.86	164950.02	36	36	44.768	N	107	41	34.946	W
-Plan hit target															