

M & G Drilling Company c/o Walsh Engineering 7415 E. Main St. Farmington, NM 87402

Operator
Graham #1B

Address
H Section 4, T27N, R8W

San Juan County

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 141852 Property Code 16598 API No. 30-045-32645 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Otero Chacra	Blanco Mesa Verde	Basin Dakota
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3084 - 3093	4305 - 4705	6495 - 6644
Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	675 psi Estimated	595 psi Estimated	1175 psi Estimated
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1213	1371	1250
Producing, Shut-In or New Zone	New Zone	New Zone	New Zone
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 1.8 % 10.2 %	Oil Gas 46.5 % 62.8 %	Oil Gas 51.6 % 27.0 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes ☒ No ☐
Yes ☐ No ☐

Are all produced fluids from all commingled zones compatible with each other?

Yes ☒ No ☐

Will commingling decrease the value of production?

Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?

Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: R-11363

- Attachments:
- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
 - Production curve for each zone for at least one year. (If not available, attach explanation.)
 - For zones with no production history, estimated production rates and supporting data.
 - Data to support allocation method or formula.
 - Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
 - Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools

List of all operators within the proposed Pre-Approved Pools

Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.

Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Paul C. Thompson

TITLE Agent/Engineer

DATE 5/7/08

TYPE OR PRINT NAME Paul C. Thompson, P.E. TELEPHONE NO. (505) 327-4892

E-MAIL ADDRESS paul@walsheng.net

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☐ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

PAUL C. THOMPSON
Print or Type Name

Paul C. Thompson
Signature

AGENT / ENGINEER
Title

5/7/08
Date

PAULC.WALSHENG.NET
e-mail Address

RECEIVED
2008 MAY 9 PM 2 34

**WALSH**

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

May 7, 2008

Mr. Mark Fesmire, P.E.
NM Oil and Gas Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: Downhole Commingling
M & G Drilling Company
Graham #1B
Unit H Section 4, T27N, R8W

Dear Mr. Fesmire,

M & G Drilling Company requests administrative approval to downhole commingle the production from the Otero Chacra, Blanco Mesa Verde, and Basin Dakota in the above referenced well. All working and net revenue interests are the same for each of the pools. Downhole commingling will offer an economic method of production, will improve liquids recovery, eliminate redundant surface production equipment, and maximize compressor efficiency.

The proposed allocation percentage is based on the EUR's of all of the offset wells in the surrounding nine sections. Please refer to the attached information.

If you have any questions or need additional information, please don't hesitate to call me at (505) 327-4892.

Sincerely,

Paul C. Thompson, P.E.
Agent/Engineer
M & G Drilling Company

DISTRICT 1
1625 N. French Fr., Hobbs; N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

DISTRICT II
811 South First, Artesia, N.M. 86210

OIL CONSERVATION DIVISION

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

2040 South Pacheco
Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32645	*Pool Code 82329	*Pool Name OTERO CHACRA
*Property Code 16598	*Property Name GRAHAM	*Well Number 1B
*OGRD No. 141852	*Operator Name M & G DRILLING COMPANY	*Elevation 5887'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot	Feet from the	North/South line	Feet from the	East/West line	County
H	4	27-N	8-W	14a	2615	NORTH	660	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 14n	Feet from the	North/South line	Feet from the	East/West line	County
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160 ACRES NE/4	Y		
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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

10

LOT 4	LOT 3	LOT 2	LOT 1
FD. 3 1/4" BC. 1916 GLO		N 89°42'42" W 2639.4' (C)	
		CALC'D COR	
		2615'	
		660'	
		LAT. 36°36'14" N. (NAD 83) LONG. 107°40'46" W. (NAD 83)	
		S 02°25'44" W 5413.0' (C)	

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Paul C. Thompson
Signature

PAUL C. THOMPSON, P.E.
Printed Name

AGENT - PETR. ENGR.
Title

5/7/08
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plan 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.

SEAL OF THE STATE OF TEXAS

REGISTERED PROFESSIONAL SURVEYOR

14031

Paul C. Thompson
Signature and Seal of Professional Surveyor

5/7/08
Date

Certificate Number

FD. 3 1/4" BC.
1955 B.L.M.

DISTRICT I
1625 N. French Fr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
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1000 Rio Brazos Rd., Artesia, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32645		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 16598	*Property Name GRAHAM		*Well Number 1B
*OGRD No. 141852	*Operator Name M & G DRILLING COMPANY		*Elevation 5887'

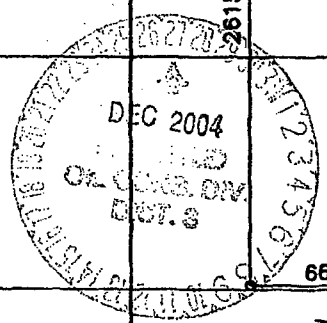
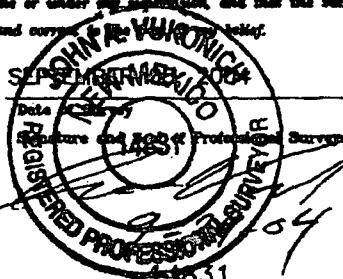
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot 1/2	Feet from the	North/South Line	Feet from the	East/West line	County
H	4	27-N	8-W		2615	NORTH	660	EAST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1/2	Feet from the	North/South Line	Feet from the	East/West line	County
*Dedicated Acres 320 E/2		*Joint or Infill Y		*Consolidation Code		*Order No.			

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

FD. 3 1/4" BC. 1916 GLO		N 89°42'42" W 2639.4' (C)		17 OPERATOR CERTIFICATION
LOT 4	LOT 3	LOT 2	LOT 1	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
				Signature <u>Mike Pippin</u>
				Printed Name <u>MIKE PIPPIN</u>
LAT. 36°36'14" N. (NAD 83) LONG. 107°40'46" W. (NAD 83)				Title <u>AGENT - PETR. ENGR.</u>
				Date <u>10-26-04</u>
S 02°25'44" W 5413.0' (C)				18 SURVEYOR CERTIFICATION
FD. 3 1/4" BC. 1955 B.L.M.				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.
				
Certificate Number <u>41631</u>				

DISTRICT I
1625 N. French Fr., Hobbs, N.M. 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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Submit to Appropriate District Office
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1000 Rio Brazos Rd., Artesia, N.M. 87410

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32645		*Pool Code 71599	*Pool Name BASIN DAKOTA
*Property Code 16598	*Property Name GRAHAM		*Well Number 1B
*OGED No. 141852	*Operator Name M & G DRILLING COMPANY		*Elevation 5887'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot ltn	Feet from the	North/South line	Feet from the	East/West line	County
H	4	27-N	8-W		2615	NORTH	660	EAST	SAN JUAN

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*Dedicated Acres 320 E/2		*Joint or Infill Y		*Consolidation Code		*Order No.			

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LOT 4	LOT 3	LOT 2	LOT 1	
		2615'		
		660'		
		4		
		LAT. 36°36'14" N. (NAD 83) LONG. 107°40'46" W. (NAD 83)		
		S 02°25'44" W 5413.0' (C)		
		FD. 3 1/4" BC. 1955 B.L.M.		

17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Paul C. Thompson
Signature

Paul C. Thompson, P.E.
Printed Name

AGENT
Title

2/21/08
Date

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 knowledge and belief.

SEAN P. VUONICICH
Date

14831
Signature

14831
Certificate Number

Graham #1B

Allocation Formula

	Ultimate Oil Bbls	Ultimate Gas Mcf	Number of Offsets	Average Ultimate Gross Oil Bbl/Well	Average Ultimate Gross Gas Mcf/Well	Average MMBtu/Mcf	Average Ultimate Gross Gas MMBtu/Well	% of Total Oil Bbl	% of Total Gas MMBtu
Chacra	3,855	5,922,978	17	227	348,410	1.2125	422,448	1.8	10.2
Mesa Verde	231,965	75,502,034	40	5,799	1,887,551	1.3705	2,586,888	46.5	62.8
Dakota	122,264	16,904,333	19	6,435	889,702	1.25	1,112,127	51.6	27.0
Totals				12,461	3,125,663		4,121,463	100.0	100.0

Graham #1B
Allocation Formula
Average MMBtu Calculations

Chacra	Mbtu/Mcf	Mesa Verde	Mbtu/Mcf	Dakota	Mbtu/Mcf
Hammond #52	1228	Marron #42	1368	Florance #66E	1231
Hammond #91	1230	Marron #46	1313	Schwertfeger A #6	1269
Marron #94	1177	Graham #53A	1430		
MarrOn #95	1215	Graham #44	1371		
Average	1212.5		1370.5		1250

Annual CashFlow Report

Project: c:\program files\ihs energy\powertools v8.0\projects\lm&g drilling.mdb

Summary Lease Report CHACRA

Date	Well Count	Gross Production		Net Production		Average Prices		Sales Total (\$)
		Oil (Bbl)	Gas (Mcf)	Oil (Bbl)	Gas (Mcf)	Oil (\$/Bbl)	Gas (\$/Mcf)	
12/2008	17	214	160,008	172	128,006	80.00	7.00	909,767
12/2009	15	288	217,012	230	173,610	80.00	7.00	1,233,682
12/2010	15	254	196,340	203	157,072	80.00	7.00	1,115,734
12/2011	14	225	177,380	180	141,904	80.00	7.00	1,007,708
12/2012	14	199	162,215	159	129,772	80.00	7.00	921,161
12/2013	13	177	146,269	142	117,015	80.00	7.00	830,433
12/2014	11	157	130,906	126	104,725	80.00	7.00	743,138
12/2015	11	140	120,893	112	96,714	80.00	7.00	685,949
12/2016	11	124	111,827	100	89,462	80.00	7.00	634,194
12/2017	11	111	103,615	89	82,892	80.00	7.00	587,330
12/2018	11	99	96,171	79	76,937	80.00	7.00	544,868
12/2019	11	88	89,419	70	71,536	80.00	7.00	506,372
12/2020	11	78	83,292	63	66,634	80.00	7.00	471,449
12/2021	11	70	77,728	56	62,182	80.00	7.00	439,747
12/2022	11	60	72,309	48	57,848	80.00	7.00	408,799
Remainder:		214	1,541,757	171	1,233,405	80.00	7.00	8,647,505
Grand Total:		2,498	3,487,142	1,998	2,789,713	80.00	7.00	19,687,835

Date	Operating Expenses (\$)	Taxes (\$)	Operating Income (\$)	Other Costs (\$)	Periodic Cash Flow (\$)	Cumulative Cash Flow (\$)	10% Cash Flow (\$)
12/2008	134,000	72,119	703,648	0	703,648	703,648	679,362
12/2009	184,000	97,798	951,884	0	951,884	1,655,531	849,456
12/2010	180,000	88,451	847,283	0	847,283	2,502,814	687,341
12/2011	170,000	79,890	757,818	0	757,818	3,260,632	558,856
12/2012	168,000	73,032	680,129	0	680,129	3,940,762	455,962
12/2013	153,000	65,840	611,593	0	611,593	4,552,355	372,733
12/2014	132,000	58,920	552,219	0	552,219	5,104,573	305,941
12/2015	132,000	54,388	499,561	0	499,561	5,604,134	251,607
12/2016	132,000	50,287	451,907	0	451,907	6,056,041	206,914
12/2017	132,000	46,574	408,756	0	408,756	6,464,797	170,143
12/2018	132,000	43,209	369,659	0	369,659	6,834,456	139,881
12/2019	132,000	40,158	334,214	0	334,214	7,168,669	114,971
12/2020	132,000	37,390	302,059	0	302,059	7,470,728	94,464
12/2021	132,000	34,878	272,869	0	272,869	7,743,597	77,578
12/2022	130,000	32,426	246,373	0	246,373	7,989,971	63,677
Remainder:	1,920,000	686,496	6,041,009	0	6,041,009	14,030,980	355,511
Grand Total:	4,095,000	1,561,855	14,030,980	0	14,030,980	14,030,980	5,384,398

Discount Present Worth:

0.00 %	14,030,980
10.00 %	5,384,398
20.00 %	3,699,314
30.00 %	2,883,609
40.00 %	2,395,031
50.00 %	2,068,083
60.00 %	1,833,255
70.00 %	1,656,016
80.00 %	1,517,230
90.00 %	1,405,422
100.00 %	1,313,286

Economic Dates:

Effective Date	05/2008
Calculated Limit	04/2108
Economic Life	1200 Months
	100 Years 0 Months

Economics Information:

Net Payout Date:	05/2008
Rate of Return:	>100 %
Return on Investment:	0.00
Disc Return on Invest:	0.00

Economics Summary:

	Bbl Oil	Mcf Gas
Ultimate Gross	3,855	5,922,978
Historic Gross	1,226	2,348,708
Gross at Eff Date	1,358	2,435,836
Remaining Gross	2,498	3,487,142
Remaining Net	1,998	2,789,713

EUR CALCULATION (MV)

Annual CashFlow Report

Project: c:\program files\lhs energy\powertools v8.0\projects\m&g drilling.mdb

Summary Lease Report *MESA VERDE*

Date	Well Count	Gross Production		Net Production		Average Prices		Sales Total (\$)
		Oil (Bbl)	Gas (Mcf)	Oil (Bbl)	Gas (Mcf)	Oil (\$/Bbl)	Gas (\$/Mcf)	
12/2008	40	1,620	654,006	1,296	523,205	80.00	7.00	3,766,083
12/2009	40	2,060	896,845	1,648	717,476	80.00	7.00	5,154,166
12/2010	40	1,750	811,213	1,400	648,971	80.00	7.00	4,654,787
12/2011	40	1,525	738,113	1,220	590,491	80.00	7.00	4,231,051
12/2012	39	1,352	673,333	1,081	538,666	80.00	7.00	3,857,161
12/2013	39	1,212	617,636	969	494,108	80.00	7.00	3,536,309
12/2014	39	1,096	568,671	877	454,937	80.00	7.00	3,254,686
12/2015	39	969	524,063	775	419,250	80.00	7.00	2,996,740
12/2016	37	847	481,165	677	384,932	80.00	7.00	2,748,709
12/2017	34	761	442,038	609	353,631	80.00	7.00	2,524,118
12/2018	33	687	409,114	550	327,291	80.00	7.00	2,335,025
12/2019	33	632	381,271	505	305,017	80.00	7.00	2,175,537
12/2020	33	588	355,599	471	284,479	80.00	7.00	2,028,997
12/2021	32	546	332,141	437	265,713	80.00	7.00	1,894,923
12/2022	32	508	312,073	406	249,658	80.00	7.00	1,780,104
Remainder:		4,883	8,258,780	3,906	6,607,024	80.00	7.00	46,561,661
Grand Total:		21,033	16,456,059	16,827	13,164,847	80.00	7.00	93,500,057

Date	Operating Expenses (\$)	Taxes (\$)	Operating Income (\$)	Other Costs (\$)	Periodic Cash Flow (\$)	Cumulative Cash Flow (\$)	10% Cash Flow (\$)
12/2008	321,000	298,146	3,146,937	0	3,146,937	3,146,937	3,038,291
12/2009	480,000	408,120	4,266,046	0	4,266,046	7,412,983	3,806,938
12/2010	480,000	368,638	3,806,149	0	3,806,149	11,219,132	3,087,588
12/2011	480,000	335,116	3,415,935	0	3,415,935	14,635,067	2,519,032
12/2012	472,000	305,523	3,079,637	0	3,079,637	17,714,705	2,064,496
12/2013	468,000	280,124	2,788,186	0	2,788,186	20,502,890	1,699,162
12/2014	468,000	257,826	2,528,860	0	2,528,860	23,031,750	1,401,006
12/2015	462,000	237,414	2,297,326	0	2,297,326	25,329,076	1,157,014
12/2016	439,000	217,787	2,091,922	0	2,091,922	27,420,999	957,765
12/2017	413,000	200,001	1,911,117	0	1,911,117	29,332,115	795,419
12/2018	399,000	185,027	1,750,998	0	1,750,998	31,083,113	662,513
12/2019	396,000	172,394	1,607,143	0	1,607,143	32,690,256	552,798
12/2020	391,000	160,782	1,477,214	0	1,477,214	34,167,471	461,909
12/2021	384,000	150,160	1,360,763	0	1,360,763	35,528,234	386,808
12/2022	384,000	141,064	1,255,040	0	1,255,040	36,783,273	324,321
Remainder:	12,957,000	3,694,340	29,910,321	0	29,910,321	66,693,595	1,886,033
Grand Total:	19,394,000	7,412,462	66,693,595	0	66,693,595	66,693,595	24,801,094

Discount Present Worth:

0.00 %	66,693,595
10.00 %	24,801,094
20.00 %	16,804,083
30.00 %	13,024,515
40.00 %	10,787,594
50.00 %	9,300,182
60.00 %	8,235,841
70.00 %	7,434,444
80.00 %	6,807,943
90.00 %	6,303,824
100.00 %	5,888,782

Economic Dates:

Effective Date	05/2008
Calculated Limit	04/2108
Economic Life	1200 Months
	100 Years 0 Months

Economics Information:

Net Payout Date:	05/2008
Rate of Return:	>100 %
Return on Investment:	0.00
Disc Return on Invest:	0.00

Economics Summary:

	Bbl Oil	Mcf Gas
Ultimate Gross	231,965	75,502,034
Historic Gross	209,997	58,700,053
Gross at Eff Date	210,932	59,045,975
Remaining Gross	21,033	16,456,059
Remaining Net	16,827	13,164,847

EUR CALCULATION (DK)

Annual CashFlow Report

Project: c:\program files\lsh energy\powertools v8.0\projects\m&g drilling.mdb

Summary Lease Report **DAKOTA**

Date	Well Count	Gross Production		Net Production		Average Prices		Sales Total (\$)
		Oil (Bbl)	Gas (Mcf)	Oil (Bbl)	Gas (Mcf)	Oil (\$/Bbl)	Gas (\$/Mcf)	
12/2008	19	946	150,131	756	120,105	80.00	7.00	901,246
12/2009	19	1,186	203,393	949	162,714	80.00	7.00	1,214,908
12/2010	18	964	180,783	771	144,627	80.00	7.00	1,074,073
12/2011	18	836	163,186	669	130,549	80.00	7.00	967,375
12/2012	18	739	147,749	591	118,199	80.00	7.00	874,671
12/2013	17	655	132,245	524	105,796	80.00	7.00	782,474
12/2014	16	582	117,791	465	94,233	80.00	7.00	696,861
12/2015	15	513	105,685	410	84,548	80.00	7.00	624,651
12/2016	14	442	94,522	353	75,618	80.00	7.00	557,594
12/2017	14	395	86,415	316	69,132	80.00	7.00	509,181
12/2018	12	350	75,522	280	60,418	80.00	7.00	445,312
12/2019	11	313	67,546	250	54,037	80.00	7.00	398,295
12/2020	11	262	61,529	210	49,223	80.00	7.00	361,334
12/2021	10	144	56,286	115	45,029	80.00	7.00	324,428
12/2022	9	125	50,576	100	40,461	80.00	7.00	291,211
Remainder:		680	1,313,930	544	1,051,144	80.00	7.00	7,401,550
Grand Total:		9,130	3,007,291	7,304	2,405,832	80.00	7.00	17,425,166

Date	Operating Expenses (\$)	Taxes (\$)	Operating Income (\$)	Other Costs (\$)	Periodic Cash Flow (\$)	Cumulative Cash Flow (\$)	10% Cash Flow (\$)
12/2008	155,607	71,222	674,417	250,000	424,417	424,417	401,216
12/2009	230,342	96,077	888,489	0	888,489	1,312,906	793,079
12/2010	219,262	85,007	769,804	0	769,804	2,082,710	624,594
12/2011	218,186	76,596	672,594	0	672,594	2,755,304	496,109
12/2012	218,111	69,280	587,280	0	587,280	3,342,584	393,805
12/2013	208,040	61,997	512,437	0	512,437	3,855,021	312,377
12/2014	192,970	55,232	448,659	0	448,659	4,303,680	248,630
12/2015	181,903	49,528	393,220	0	393,220	4,696,900	198,097
12/2016	169,156	44,050	344,389	0	344,389	5,041,288	157,726
12/2017	168,000	40,214	300,967	0	300,967	5,342,255	125,312
12/2018	147,000	35,168	263,145	0	263,145	5,605,400	99,599
12/2019	136,000	31,454	230,840	0	230,840	5,836,241	79,428
12/2020	130,000	28,547	202,787	0	202,787	6,039,028	63,433
12/2021	120,000	25,681	178,747	0	178,747	6,217,774	50,827
12/2022	110,000	23,054	158,157	0	158,157	6,375,931	40,882
Remainder:	2,193,000	587,313	4,621,237	0	4,621,237	10,997,168	218,750
Grand Total:	4,797,577	1,380,420	11,247,168	250,000	10,997,168	10,997,168	4,303,862

Discount Present Worth:

0.00 %	10,997,168
10.00 %	4,303,862
20.00 %	3,004,536
30.00 %	2,338,838
40.00 %	1,926,726
50.00 %	1,645,067
60.00 %	1,439,797
70.00 %	1,283,210
80.00 %	1,159,598
90.00 %	1,059,376
100.00 %	976,362

Economic Dates:

Effective Date	05/2008
Calculated Limit	04/2108
Economic Life	1200 Months
	100 Years 0 Months

Economics Information:

Net Payout Date:	07/2008
Rate of Return:	>100 %
Return on Investment:	44.99
Disc Return on Invest:	18.22

Economics Summary:

	Bbl Oil	Mcf Gas
Ultimate Gross	122,264	16,904,333
Historic Gross	112,411	13,795,872
Gross at Eff Date	113,134	13,897,043
Remaining Gross	9,130	3,007,291
Remaining Net	7,304	2,405,832

CHACRA

OFFSET WELLS

Section 3

Township 27N

Range 8W

FEDERAL M (2)

FEDERAL M (3)

GRAHAM (3)

Section 4

Township 27N

Range 8W

DAWSON A (1F)

DAWSON A (1G)

GRAHAM (1A)

Section 5

Township 27N

Range 8W

FILAN (6)

Section 8

Township 27N

Range 8W

SCHWERDTFEGER A (13B)

Section 9

Township 27N

Range 8W

FEDERAL (16)

FEDERAL (21)

GRAHAM C WN FEDERAL COM (1A)

Section 10

Township 27N

Range 8W

GRAHAM (51)

GRAHAM (96)

Section 32

Township 28N

Range 8W

RIDDLE F LS (5)

RIDDLE F LS (5A)

Section 33

Township 28N

Range 8W

BOLACK B LS (1)

BOLACK B LS (1A)

BOLACK B LS (3)

Section 34

Township 28N

Range 8W

HOWELL (3A)

STOREY LS (4)

DAKOTA

Section 3

Township 27N

Range 8W

FEDERAL M (1)

Section 4

Township 27N

Range 8W

DAWSON A (1)

DAWSON A (1F)

DAWSON A (1G)

DAWSON A (1M)

Section 5

Township 27N

Range 8W

FILAN (5)

FILAN (6)

Section 8

Township 27N

Range 8W

SCHWERDTFEGGER A (24)
SCHWERDTFEGGER A (6)
SCHWERDTFEGGER A (6M)
SCHWERDTFEGGER A LS (20)
SCHWERDTFEGGER A LS (20M)

Section 9

Township 27N
Range 8W
FEDERAL (16)
GRAHAM COM (1)

Section 10

Township 27N
Range 8W
GRAHAM (48)

Section 32

Township 28N
Range 8W
GOOCH (3)
GOOCH (3E)
PHILLIPS (3)
PHILLIPS (3E)

Section 33

Township 28N
Range 8W
BOLACK B (8)
BOLACK B (8E)
BOLACK E (1)
BOLACK E (1M)

Section 34

Township 28N
Range 8W
STOREY LS (4A)

MESAVERDE

Section 3

Township 27N
Range 8W
FEDERAL M (1)
FEDERAL M (1A)
FEDERAL M (1B)
GRAHAM (3)
GRAHAM (44)
GRAHAM 3 (8)

Section 4

Township 27N
Range 8W
DAWSON A (1)
DAWSON A (1F)
DAWSON A (1G)
DAWSON A (1M)
GRAHAM (1)
GRAHAM (1A)

Section 5

Township 27N
Range 8W
FILAN (4)
FILAN (5)
FILAN (6)

Section 8

Township 27N
Range 8W
SCHWERDTFEGGER A (13B)
SCHWERDTFEGGER A (24)
SCHWERDTFEGGER A (6M)
SCHWERDTFEGGER A LS (13)
SCHWERDTFEGGER A LS (14)
SCHWERDTFEGGER A LS (20)
SCHWERDTFEGGER A LS (20M)

Section 9

Township 27N

Range 8W

FEDERAL (16)

FEDERAL (16A)

GRAHAM C WN FEDERAL COM (1)

GRAHAM C WN FEDERAL COM (1A)

Section 10

Township 27N

Range 8W

GRAHAM (51)

GRAHAM (51A)

GRAHAM (53)

GRAHAM (53A)

GRAHAM 10 (6)

Section 32

Township 28N

Range 8W

GOOCH (3)

PHILLIPS (1)

PHILLIPS (1A)

RIDDLE F LS (5)

RIDDLE F LS (5A)

Section 33

Township 28N

Range 8W

BOLACK B LS (1)

BOLACK B LS (1A)

BOLACK B LS (3)

BOLACK E (1)

BOLACK E (1M)

Section 34

Township 28N

Range 8W

HOWELL (3)

HOWELL (3A)

STOREY LS (4)

STOREY LS (4A)

PowerTools Map

Project: c:\program files\hns energy\power tools v8.0\projects\m&g drilling.mdb

Date: 5/7/2008
Time: 11:10 AM

OFFSET WELL MAP

31	PHILLIPS 1A#	RIDDLE FLS 3# 5# BOLACK BLS 1#	BOLACK BLS 1# 33	STOREYLS 4# 4A#	35
6	FILAN 5#	DAWSON A 1M# FILAN 4# DAWSON A 6# 5	GRAHAM 1# FEDERAL M 1A# GRAHAM 3 8# FEDERAL M 1# FEDERAL M 1# 1A#	GRAHAM 44# 1A# 3 8# 18# 3# 1#	2
7	SCHWERTFEGER ALS 6M# 13# 24# 20# 8	SCHWERTFEGER ALS 14# 13B# FEDERAL 16#	GRAHAM 53A# GRAHAM 6# 51# 10	GRAHAM 51A# 53#	11