

**EXHIBIT 4**

**Chronology of Events  
 Marcotte #2 Well  
 ALL Sec. 8, T31N, R10W  
 San Juan County, New Mexico**

<b>Date:</b>	<b>Event:</b>
7/29/96	Letter to Total Minatome (D. Gilchrist) RE: Offer to purchase non-producing interest. Also includes other lands.
7/29/96	Letter to Moore Loyal Trust RE: Offer to purchase non-producing interest. Also includes other lands.
2/7/97	Letter to Total Minatome (D. Gilchrist) RE: Acreage support proposal & Farmout proposal w/alternatives: 1) offer to produce non-productive leasehold rights, 2) participate & enter into 640 ac. JOA with 400% NC penalty & no pref rights, or 3) farmout.
4/1/97	Letter to Total Minatome RE: GLA-46 Amendment by amending JOA dated 11/27/51
4/22/97	Certified letter to GLA-46 WIO's RE: proposal to drill & complete Marcotte #2 well. Provided proposed AFE & JOA.
4/22/97	Letter to Lee Wayne Moore & JoAnn Montgomery Moore, Trustees of the Moore Loyal Trust RE: Farmout agreement proposal, or alternatives: 1) offer to purchase non-producing leasehold @ \$100.00 per net acre plus 5% ORRI below base of MV, 2) request participation as to their GWI & enter into 640 ac. JOA w/400% NC penalty & no pref rights, or 3) farmout
5/22/97	Fax follow-up letter to Total Minatome Corp. (re: 2/7/97 initial proposal & 4/1/97 GLA-46 amendment letter)
5/23/97	Rec'd Total Minatome's conditional acceptance of Marcotte #2 AFE per the terms & conditions under Farmout & JOA dated 11/27/51.
6/3/97	Certified letter to Sec. 8 Minerals RE: Notification of intent to establish 640 ac. spacing Unit.
6/16/97	Certified letter to Sec. 8 Mineral Owners, submitted proposed amendment to the Oil & Gas lease to allow 640 ac. spacing.
6/16/97	Letter to Total Minatome, J. Kirby Barry, VP RE: offer more acceptable Farmout terms
7/7/97	Rec'd Tom Moore's 7/1/97 conditional letter of acceptance to farmout terms.

**MERIDIAN OIL**

July 29, 1996

Total Minatome Corporation  
Attn: Ms. Deborah Gilchrist  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

**RE: MERIDIAN OIL INC.  
OFFER TO PURCHASE NON-PRODUCING INTEREST  
T31N-R10W, NMPM  
Sections 4, 8, 9, 13, 15, 16, 17 & 23  
San Juan County, New Mexico**

Dear Ms. Gilchrist:

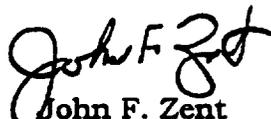
According to our records you own a 14.062500% interest in the operating rights in the referenced acreage. Your interest in operating rights is located below any producing formations and is separate from the interest you own in the producing shallow formations. Meridian Oil Inc. is operator of the wells and owner of the operating rights in this lease in the producing formations.

In an effort to consolidate the lease record, Meridian would like to purchase your non-producing interest in this acreage for \$10.00 per acre.

If you are interested in selling your non-producing operating rights to Meridian, please sign below and return this letter in the enclosed self-addressed stamped envelope. As soon as Meridian receives your signed letter, you will be sent the assignment forms. Once these are executed and accepted by Meridian, you will be sent a check in the amount of the purchase price.

If you have any questions, please contact John Zent at (505) 326-9758.

MERIDIAN OIL INC.

  
John F. Zent  
Regional Landman

AGREED TO AND ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1996.

\_\_\_\_\_  
Deborah Gilchrist  
Total Minatome Corp.

**MERIDIAN OIL**

July 29, 1996

Moore Loyal Trust  
Attn: Tom Moore  
403 North Marienfeld  
Midland, TX 79701

**RE: MERIDIAN OIL INC.  
OFFER TO PURCHASE NON-PRODUCING INTEREST  
T31N-R10W, NMPM  
Sections 4, 8, 9, 13, 15, 16, 17 & 23  
San Juan County, New Mexico**

Dear Mr. Moore:

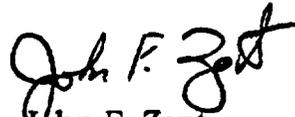
According to our records you own a 1.562500% interest in the operating rights in the referenced acreage. Your interest in operating rights is located below any producing formations and is separate from the interest you own in the producing shallow formations. Meridian Oil Inc. is operator of the wells and owner of the operating rights in this lease in the producing formations.

In an effort to consolidate the lease record, Meridian would like to purchase your non-producing interest in this acreage for \$200.00 total.

If you are interested in selling your non-producing operating rights to Meridian, please sign below and return this letter in the enclosed self-addressed stamped envelope. As soon as Meridian receives your signed letter, you will be sent the assignment forms. Once these are executed and accepted by Meridian, you will be sent a check in the amount of the purchase price.

If you have any questions, please contact John Zent at (505) 326-9758.

MERIDIAN OIL INC.

  
John F. Zent  
Regional Landman

AGREED TO AND ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1996.

\_\_\_\_\_  
Mr. Tom Moore

# BURLINGTON RESOURCES

February 7, 1997

SAN JUAN DIVISION

Total Minatome Corporation  
Attn: Ms. Deborah Gilchrist, Land Manager  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

**RE: Acreage Support Proposal  
Deep Penn Test  
T31N, R10W  
T31N, R11W  
Arch Rock Prospect  
San Juan County, New Mexico**

Gentlemen:

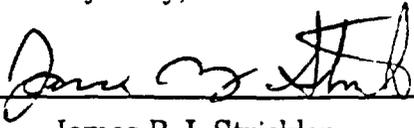
Burlington Resources Oil & Gas Company (Burlington) is in need of your acreage support for a high risk 14,000' Penn test. Please find enclosed a Farmout Proposal covering your acreage in the subject project. Burlington would also like to offer the following alternatives to a farmout for your consideration.

- 1.) Purchase all your non-productive leasehold rights owned by Total and set forth on the attached Exhibit "A" to the farmout letter. The terms offered are \$50.00 per net acre plus a 5% overriding Royalty, ( but in no event delivering less than an 80% Net Revenue Interest Lease) proportionality reduced. The depths covered by an assignment shall include all your rights below the base of the Mesaverde formation. The bonus consideration for your acreage is \$21,446.00 (428.89 Net Acres).
- 2.) Participate with your interest in the drilling and completion of a 14,000' Penn Test with an estimated Dry Hole Cost of \$1,911,700.00 and 600,000.00 completion costs for a total of 2,511,700.00. The well will be covered by a mutually acceptable AAPI Model Form 610-1982 Operating Agreement with a 400% non-consent penalty and no Preferential Right Provision. The JOA shall cover a 640 acre drill block section.

Burlington is hopeful that you will find one of the above offers including the farmout proposal to your satisfaction. As always time is of the essence on putting together this type of prospect. Please respond with your election to our proposals within thirty (30) days of your receipt or sooner possible.

We look forward to hearing from you soon and please don't hesitate to call me at (505) 326-9756 if you should have any questions.

Yours very truly,

By: 

James R.J. Strickler  
Senior Staff Landman

JRS/dg  
farmtotl.doc  
cc: J. Kirby Berry, VP Land

\_\_\_\_\_ Participate for Total's proportionate share in any deep test well in which my acreage is included in a spacing unit. Please send me an Afe and Operating Agreement.

\_\_\_\_\_ Sell Total's interest in the referenced leases below the base of the Mesaverde formation to Burlington Resources for \$50.00 per net acre retaining a 5% overriding royalty interest, proportionately reduced.

\_\_\_\_\_ Farmout Total's interest in t he prospect as outlined on the attached farmout letter.

Agreed to and accepted this  
\_\_\_\_\_ day of \_\_\_\_\_ 1997.

BY: \_\_\_\_\_

**Burlington Resources  
Cost Estimate**

Well Name:	<u>Arch Rock #1</u>	Prepared By:	<u>Kurt A. Shipley</u>
Location:	<u>Section XX, T-31-N, R-10-W</u>	Date:	<u>1/9/97</u>
AFE Type:	<u>(02) Exploration</u>	Approved By:	<u></u>
Formation:	<u>Pennsylvanian</u>	Date:	<u></u>
Proposed TD:	<u>14,000'</u>	Intermediate TD:	<u>3900', 7500'</u>
		Area Team:	<u>Penn</u>
Comments:	<u>Case #1. Drv Hole. Includes Plug and Abandonment.</u>		
	<u>Maximum Reservoir Evaluation Cost Estimate.</u>		
		Cost/ft:	<u>\$136.65/ft</u>

**Intangible Costs**

Account Number	Estimated Days: <u>60</u>	Total Estimated Cost
248		
03	Location Cost	4.9 Acre location per Construction Dept. Estimate. 20,000
		30" Conductor Pipe. Pre-Set. 15,000
05	Move-in, Move-out	Move in and Move out. 100,000
07	Rig Cost	60 days @ \$7000/day. 448,000
08	Safety Equipment	Standby Safety 15 days 2-man crew 24 hour @ \$600/day. 9,600
10	Drilling Fluid	LSND and Dispersed mud systems. Lost circulation considered. 45,000
		Solids control equipment. 60 days at \$1400/day. 89,500
		7 days air drilling 4500 cfm (7 comp, 3 boost, 1 mist) @ \$3000/day. 22,500
16	Fresh/Salt Water, Fluids	95,000
17	Bits	(1) 14-3/4" Re-tip, (1) 26" HO, (2) 17-1/2", (2) 12-1/4", (7) 8-3/4", (6) 6-1/8" bits. 145,500
18	Cementing	HES Cost Estimate. 98,000
		Plug and Abandonment. 40,000
22	Coring and Analysis	Baker Hughes Integ Paradox 60' Core. 5,600
		Reservoir Inc. Analysis. Geologist Estimate. 20,000
23	Fuel	Rig Package. 60 days @ 1200 gal/day @ \$1.20/gal. 92,000
		Air Package. 15 gal/hr per unit @ \$1.20/gal. 18,500
25	Rentals	BOP Rental 20 days @ \$500/day. 11,000
		Miscellaneous. 10,000
26	Fishing	0
28	Other Rentals	5,000
29	Transportation	10,000
32	Directional Services	0
33	Inspection	5,000
34	Logging Services	Schlumberger 500'-7500' Logs. 21,500
		Schlumberger 7500'-12,500' Logs. 21,500
		Schlumberger 12,500'-14,000' Logs. 67,000
		Schlumberger 12,500'-14,000' Sidewall Cores. 17,500
		Mudlogging 35 days @ \$650/day. 24,500
36	Production Testing	0
37	Swabbing, Snubbing, Coiled Tubing	0
39	Stimulation	0
43	Consultants	0
44	Technical Contract Services	HES Drill Stem Test Cost Estimate. 5,000
45	Roustabout Labor	Casing Crews, Welders. 20,000
46	Miscellaneous	5,000
49	Packer Rental	0
53	Environmental Cost	2,000
54	Disposal Cost	Trash baskets, Toilets. 2,000
60	District Tools	Company Owned Equipment. 5,000
72	Overhead Rig Days	60 days @ \$141/day. 8,500
	<b>Total Intangible Cost</b>	<b>\$1,457,700</b>

**Tangible Costs**

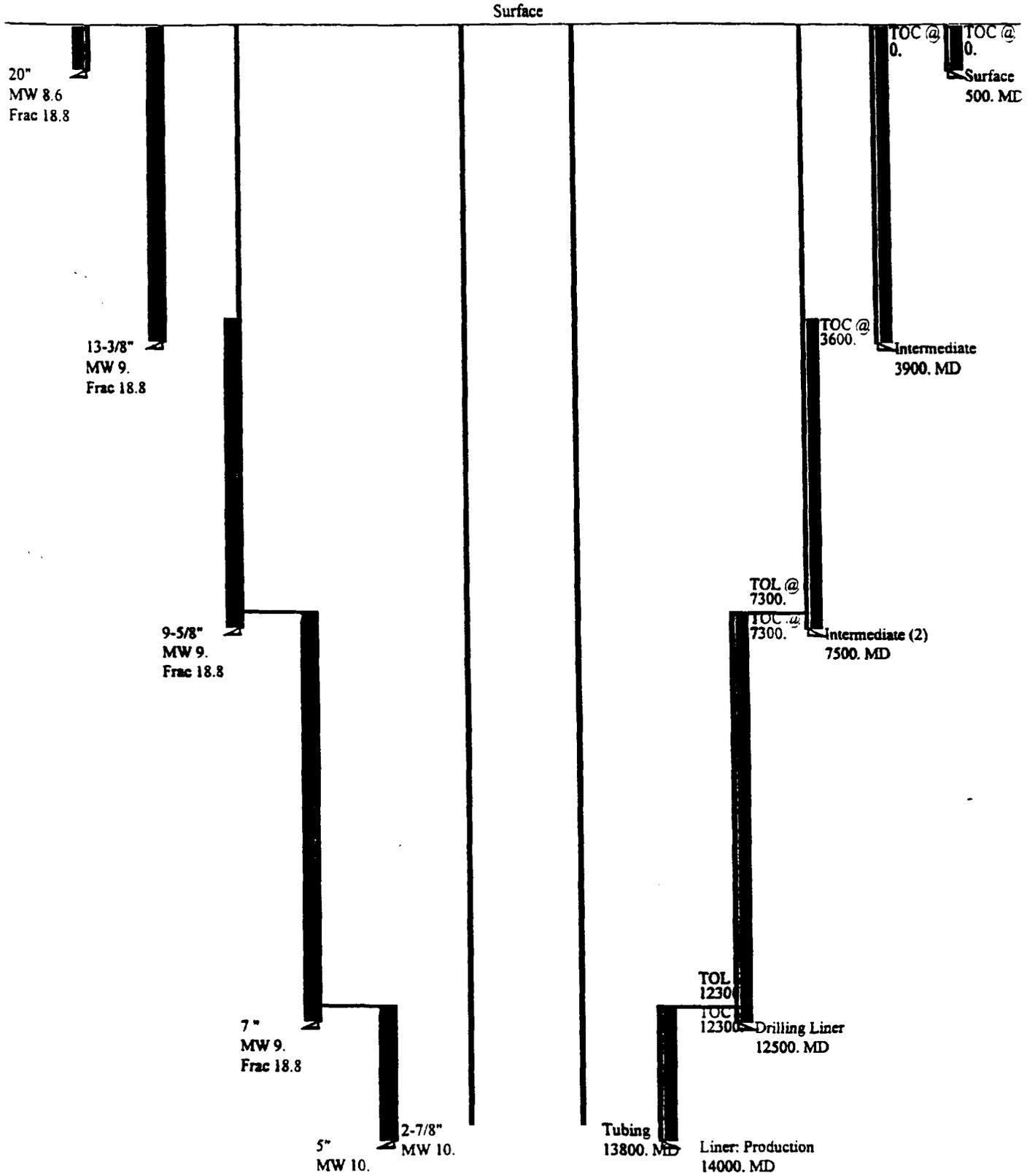
80	Casing	National Oilwell Casing Price. 411,000
81	Tubing	0
84	Casing & Tubing Equipment	Baker 7"X9-5/8" 6-Slip CM6 Liner Hanger. 13,000
86	Wellhead Equipment	20"X13-3/8"X9-5/8" (10,000 PSI) Casing Hanger. 30,000
	<b>Total Tangible Cost</b>	<b>\$484,000</b>

<b>Total Cost</b>	<b>\$1,911,700</b>
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All Costs include tax where applicable.

# Arch Rock #1 - Case #1

## Casing Schematic



# **BURLINGTON RESOURCES**

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SAN JUAN DIVISION

February 7, 1997

Total Minatome Corporation  
Attn: Ms. Deborah Gilchrist, Land Manager  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

**RE: Farmout Letter of Intent  
Sections 13-24: T31N, R10W  
Section 2, T31N, R11W  
Arch Rock Prospect  
San Juan County, New Mexico**

Gentlemen:

Burlington Resources Oil & Gas Company (hereinafter referred to as "Burlington") hereby requests that you grant a Farmout Agreement of the interest of Total Minatome Corporation (hereinafter referred to as "Total") in Sections 3-24: T31N, R10W, and Section 2: T31N, R11W, San Juan County, New Mexico, insofar as Total's interest covers undeveloped depths below the base of the Mesaverde formation (hereinafter referred to as the "Farmout Lands"), on the following terms and conditions:

- 1) On or before July 1, 1997, Burlington will have the right to commence drilling of an Initial Test Well at a legal location in Section 8, 15 or 16 T31N, R10W, San Juan County, New Mexico, and drill said Initial Test Well with due diligence to a depth of 14,000', or a depth sufficient to penetrate and test the Pennsylvanian formation, whichever is the lesser depth. Please see the attached Exhibit "A" identifying Total's leasehold acreage in the farmout lands.
- 2) If the Initial Test Well is completed in the Farmout Lands as a commercial producer of oil and/or gas, Burlington will earn an assignment of 100% of Total's interest, if any, within the production unit established for the Initial Test Well, reserving to Total an overriding royalty equal to 5% of 8/8 on any lease (but in no event delivering less than an 80% net revenue interest), of all oil, gas and other minerals allocated to production from the farmout lease, proportionately reduced.

At payout of said Initial Test Well, Total shall have the option to convert the reserved overriding royalty to a 25% working interest proportionately reduced. Burlington shall notify Total by mail when payout of the earning well occurs, and Total shall have 30 days from receipt of such notice to elect to convert its Overriding Royalty Interest into a Working Interest herein provided or retain its Overriding Royalty Interest.

- 3) In the event the Initial Test Well is drilled in a timely manner set out above, Burlington will earn the right to drill an Option Well at another location within the Farmout Lands, or acreage pooled therewith, within 365 days from the date of drilling rig release on the Initial Test Well, and earn an assignment of Total's interest in the Option Well's production unit under the same terms and conditions as for the Initial Test Well. There is a possibility of H<sub>2</sub>S gas which necessitates the building of a treatment plant and appropriate infrastructure to produce a sour Pennsylvanian well. The Option Well to be drilled to the same depth and formation as the Initial Test Well. Burlington is contemplating 640 acre spacing with 1200' set backs from the sections or Unit Lines for Pennsylvanian production.
- 4) Burlington shall have the right and option to earn the remainder of Total's leasehold in the Farmout Lands, on a unit by unit basis, under the same terms and conditions as the Initial Test Well by allowing not more than one hundred eighty (180) days to elapse between completion of one Option Well and commencement of another Option Well. The 180 day continuous development program shall be extended by an additional 180 days in the event the BLM and NMOCD, other regulatory agency or force majeure delay the timely issue of permits necessary to drill on the Farmout Lands. The reason for this extension is the BLM indicates an Environmental Impact Statement (EIS) may be required in the event a successful discovery well is drilled and completed. This possibility would delay the approval of the permits to drill additional wells on the Farmout lands within the original 180 day time frame.

- 5) Burlington agrees to use good field practice and industry standards in the drilling of each well. Burlington further agrees to furnish to Total the well data as set out in Total's Well Data Requirement Sheet (limited to data scheduled to be obtained in Burlington's drilling and completion program).
- 6) Total and Burlington agree to enter into a definitive Farmout Agreement that will 1) describe in more detail the terms and conditions under which Total is farming out its lands to Burlington, 2) includes as an exhibit an AAPL Model Form 610-1982 Operating Agreement with a 400% non-consent penalty and no preferential right provision, and 3) supersede and replace this Option Farmout Letter of Intent in its entirety.
- 7) Failure of Burlington to drill the Initial Test Well will result in a forfeiture of Burlington's right to earn an assignment of Total's leasehold interest under this Agreement.
- 8) In the event Burlington is unable to reach the intended depth in any Initial Test Well or any Option Well, because further drilling becomes impractical, Burlington may commence to drill a substitute well within 90 days and, if completed as a commercial producer, earn the rights that would have been earned by the well for which it is a substitute.
- 9) Burlington may assign part of any interest earned hereunder to Conoco Inc., but may not assign part of any such interest to any other party without the consent of Total.

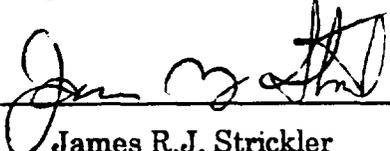
All operations shall be conducted at Burlington's sole expense and in a proper and workmanlike manner and in accordance with all applicable laws and regulations of the constituted authorities, and Burlington shall defend, indemnify and hold Total and its officers, directors, agents, employees and invitees harmless from all liability for damage

(including attorney's fees) to the person (including death) and/or property of all persons arising from Burlington's performance or non-performance of operations conducted hereunder.

If this Option Farmout Letter of Intent meets with your approval, please execute a copy of same and return to the undersigned within thirty (30) days from the date hereof. Please respond sooner if at all possible to allow us time to overcome the regulatory and logistical hurdles necessary to permit and drill the Initial Test Well. If you should have any questions concerning our Farmout request, please call me at (505) 326-9756.

Yours very truly,

Burlington Resources Oil & Gas Company

By:   
James R.J. Strickler  
Senior Staff Landman

JRS/dg  
farmtotl.doc

AGREED TO AND ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1997.

TOTAL MINATOME CORPORATION

By: \_\_\_\_\_

Title: \_\_\_\_\_

EXHIBIT "A"

TOTAL MINATOME CORPORATION  
ARCH ROCK PROSPECT

Township 31 North, Range 10 West, N.M.P.M.

Section 3: Lot 4 South and East of River,  
Lots 5 thru 9, S/2NW/4

Section 4: Lot 5, E/2SW/4, NW/4SW/4 and  
Part SW/4NW/4

Section 8: Lots 1,2,4 and 5

Section 9: Lots 1,2, NE/4NW/4

Section 13: Lots 3 and 4

Section 14: Lot 10, SW/4NW/4, NW/4SW/4, E/2SW/4

Section 15: SE/4NW/4

Section 16: NW/4NE/4, SE/4NE/4, SE/4NW/4,  
NW/4SW/4, SE/4SW/4, NW/4SE/4,  
S/2SE/4

Section 17: Lots 1 thru 10

Section 23: NW/4NE/4, NE/4NW/4, NE/4SE/4

Section 24: NW/4SW/4

Township 31 North, Range 11 West, N.M.P.M.

Section 2: SE/4SW/4

San Juan County, New Mexico

Total Gross Acres 2,300.78

Total Net Acres 428.89

Tract % Interest Varies from 10.00% to  
37.08%

# **BURLINGTON RESOURCES**

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SAN JUAN DIVISION

April 1, 1997

Total Minatome Corporation  
Attn: Ms. Deborah Gilchrist, Land Manager  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

**RE: GLA-46  
Amendment  
San Juan County, New Mexico**

Dear Ms. Gilchrist:

On November 27, 1951, Brookhaven Oil Company and San Juan Production Company entered into an Operating Agreement pertaining to certain lands in San Juan County, New Mexico. Said Agreement, as amended, provided for the drilling of Mesaverde wells by San Juan Production Company and the recovery of Brookhaven's share of the cost of drilling such wells subject to the limitations and in accordance with the provisions of said Agreement.

Total Minatome Corporation (Total) in consideration for Burlington Resources Oil & Gas Company (Burlington) showing Total proprietary geology, 2D and 3D seismic for the purpose of exploring and drilling for a deep gas Pennsylvanian well located in the SE/4 of Section 8, T31N, R10W, (Arch Rock Prospect) San Juan County, New Mexico, agrees to amend the November 27, 1951 Operating Agreement. Total and Burlington shall set a mutually agreeable time and place to show Total management the Arch Rock prospect geology and seismic which will include a data and well package, on or before April 19, 1997. Total, after said prospect review shall have a fifteen (15) day election period to either 1) participate in the drilling and completion of a Pennsylvanian well in Section 8, T31N, R10W, San Juan County, New Mexico, or 2) Farmout its interest in the Arch Rock Prospect on those certain terms and conditions outlined on Exhibit "A" to this Letter Agreement.

By this Letter Total Minatome Corporation as successors in interest to Lear Petroleum Partners Operating Company, L.P. (formerly Brookhaven Oil Company) and Burlington Resources Oil & Gas Company (formerly El Paso Gas Company) as successor in interest to San Juan Production Company, do hereby evidence the Amendment to the Operating Agreement dated November 27, 1951 as amended to provide for the following:

Total Minatome  
April 1, 1997  
Page 2

Total agrees to amend the Operating Agreement dated November 27, 1951, by deleting paragraphs 5-14, Exhibit "C" (Accounting Procedure) and the August 8, 1986 Letter Agreement (Gas Balancing Agreement) in its entirety, and replacing with the attached Exhibit "B", AAPL Model Form 610 1982 Operating Agreement. Said Operating Agreement provides among other things with the following:

1. 400% Non-Consent Penalty
2. \$25,000 Limitation of Expenditure
3. 1984 COPAS Accounting Procedure
4. The Preferential Right to Purchase Provision deleted
5. Gas Balancing Agreement.
6. Effective Date, April 1, 1997

Please evidence your acceptance of the foregoing by signing and returning a copy of this letter to the undersigned within fifteen (15) days of your receipt.

Yours very truly,

Burlington Resources Oil & Gas Company

By: \_\_\_\_\_

James R.J. Strickler  
Senior Staff Landman

JRS/dg  
amend\_27

Agreed to and Accepted this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

**TOTAL MINATOME CORPORATION**

By: \_\_\_\_\_

Title: \_\_\_\_\_

# BURLINGTON RESOURCES

SAN JUAN DIVISION

April 22, 1997

## CERTIFIED MAIL-RETURN RECEIPT

To Working Interest Owners  
(see list below)

RE: Marcotte #2 Well  
Pennsylvanian formation  
Proposed depth 14,000'  
ALL Section 8, T31N-R10W  
639.78 acres, more or less  
San Juan County, New Mexico

Gentlemen:

Burlington Resources Oil & Gas Company (Burlington) proposed to drill and complete the captioned well in the Pennsylvanian formation. The approximate location is 1540' FSL, 935' FEL (NE/SE) Section 8, T31N-R10W, with a proposed depth of 14,000'. Attached for your consideration and approval is one (1) copy of our Well Cost Estimate to drill and complete the subject well for \$2,316,973.00. Our records indicate the ownership of the well and AFE share to be as follows:

<u>Company</u>	<u>GW</u>	<u>AFE Share</u>
Burlington	9.310450%	\$ 215,721.00
Conoco Inc.	9.310450%	\$ 215,720.00
Amoco Production Company	68.073400%	\$1,577,242.00
Total Minatome Corp.	4.652200%	\$ 107,790.00
Cross Timbers Oil Co., LP	3.374700%	\$ 78,191.00
Lee Wayne Moore and JoAnn Montgomery Moore, Trustees	2.251700%	\$ 52,171.00
George William Umbach	1.416600%	\$ 32,822.00
Robert Warren Umbach	1.416600%	\$ 32,822.00
Lowell White Family Trust	.048460%	\$ 1,123.00
Walter A. Steele	.048460%	\$ 1,123.00
Estate of G. W. Hannett	.040380%	\$ 936.00
T. G. Cornish	.032300%	\$ 748.00
Patricia Hueter	.008100%	\$ 188.00
Mary Emily Voller	.008100%	\$ 188.00
A. T. Hannett	.008100%	\$ 188.00
	<u>100.000000%</u>	<u>\$2,316.973.00</u>

Working Interest Owners  
April 22, 1997  
Page 2

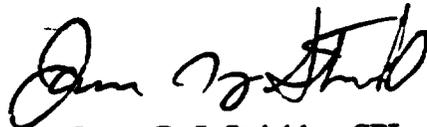
An Operating Agreement is enclosed for your review and approval.

If you wish to participate in the drilling of the above referenced well, please verify your interest and return the following within thirty (30) days to the undersigned:

1. One (1) executed copy of this letter
2. One (1) executed copy of the Well Cost Estimate
3. One (1) executed signature page for the Operating Agreement dated April 1, 1997

Your prompt attention to this proposal is requested as we plan to begin operations in the near future. Please advise in writing if you do not wish to participate.

Very truly yours,



James R. J. Strickler, CPL  
Senior Staff Landman  
(505) 326-9756

JRS:ll

**The undersigned hereby elects this \_\_\_\_\_ day of \_\_\_\_\_, 1997, to participate in and pay its proportionate share of the well costs for the drilling and completion of the Marcotte #2, as correctly shown above.**

**COMPANY/OWNER:** \_\_\_\_\_

**BY:** \_\_\_\_\_

**TITLE:** \_\_\_\_\_

**BURLINGTON RESOURCES**

Farmington Region  
 Post Office Box 4289  
 Farmington, New Mexico. 87499  
 (505) 326-9700

AUTHORITY FOR EXPENDITURE

AFE No.: 3544 Property Number: 012580204 Date: 2/20/97  
 Lease/Well Name: Marcotte #2 DP Number: 61923A  
 Field Prospect: San Juan Basin Penn Operator: Burlington Resources Region: Farmington  
 Location: Sec. 8, T31N, R10W County: San Juan State: NM  
 AFE Type: 1 - New Drill Original: X Supplement:      Addendum:      API Well Type:       
 Objective Formation: Pennsylvanian Authorized Total Depth (Feet): 14,000'  
 Project Description: Pennsylvanian test in San Juan Basin - Exploratory well - Arch Rock Prospect  
 Estimated Start Date: 2nd Qtr 1997 Prepared By: C. E. Lane  
 Estimated Completion Date: 2nd Qtr 1997

GROSS WELL DATA

	Drilling		Workover/ Completion	Construction Facility	Total
	Dry Hole	Suspended			
Days:	<u>58</u>	<u>2</u>	<u>12</u>	<u>0</u>	<u>72</u>
This AFE:	<u>\$1,713,800</u>	<u>\$77,100</u>	<u>\$407,073</u>	<u>\$119,000</u>	<u>\$2,316,973</u>
Prior AFE's:	<u>0</u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>\$0</u>
<b>TOTAL COSTS:</b>	<u>\$1,713,800</u>	<u>\$77,100</u>	<u>\$407,073</u>	<u>\$119,000</u>	<u>\$2,316,973</u>

JOINT INTEREST OWNERS

Company:	Working Interest Percent	Dry Hole \$	Completed \$
Burlington Resources:	<u>9.310450%</u>	<u>\$ 109,286</u>	<u>\$ 215,721</u>
Trust:	<u>0.00%</u>	<u>0</u>	<u>\$0</u>
Others :	<u>90.689550%</u>	<u>\$1,064,514</u>	<u>\$2,101,252</u>
<b>AFE TOTAL:</b>	<u>100.00%</u>	<u>\$1,713,800</u>	<u>\$2,316,973</u>

BURLINGTON RESOURCES APPROVAL

Approved: [Signature] Approved: Robert J. Kennedy  
 Title: Reg. Dir. II Date: 4/10/97 Title: Land Manager Date: 4-14-97  
 Approved: Danny W. Hill Approved: [Signature]  
 Title: Manager Date: 4/1/97 Title: Land Manager Date: 4/10/97

PARTNER APPROVAL

Company Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Authorized By: \_\_\_\_\_ Title: \_\_\_\_\_

# **BURLINGTON RESOURCES**

SAN JUAN DIVISION

April 22, 1997

Lee Wayne Moore and  
JoAnn Montgomery Moore  
Trustees of the Moore Loyal Trust,  
U/T/A dated August 20, 1979  
403 N. Marienfield  
Midland, TX 79701

**RE: Acreage Support Proposal  
Deep Penn Test  
T31N, R10W  
T31N, R11W  
Arch Rock Prospect  
San Juan County, New Mexico**

Gentlemen:

Burlington Resources Oil & Gas Company (Burlington) is in need of your acreage support for a high risk 14,000' Penn test. Mr. Lee Wayne Moore, you acquired your interest in the subject lands in 1955. The Deep Penn was never contemplated in 1955, especially with the possibility of encountering H<sub>2</sub>S and other environmental liabilities. We strongly recommend that you consider a Farmout of the interest as a prudent business decision and limit the Trust's liability. If our efforts bear success then the interest will bring in new revenues to help replace the old production on the subject lands. We solicit your cooperation to allow Burlington to take the risk. Please find enclosed a Farmout Proposal covering your acreage in the subject project. Burlington would also like to offer the following alternatives to a farmout for your consideration:

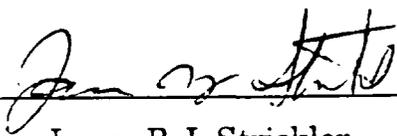
- 1.) Purchase all your non-productive leasehold rights owned and set forth on the attached Exhibit "A" to the farmout letter. The terms offered are \$100.00 per net acre plus a 5% overriding Royalty ( but in no event delivering less than an 80% Net Revenue Interest Lease) proportionality reduced. The depths covered by an assignment shall include all your rights below the base of the Mesaverde formation. The bonus consideration for your acreage is \$14,927.00 (149.27 Net Acres).
- 2.) Participate with your interest in the drilling and completion of a 14,000' Penn Test with an estimated cost of \$2,316,973.00 (see attached letter with AFE and JOA). The well will be covered by a mutually acceptable AAPL Model Form 610-1982 Operating Agreement with a 400% non-consent penalty and no Preferential Right to Purchase Provision. The JOA shall cover a 640 acre drill block section.

Moore Loyal Trust  
April 22, 1997  
Page 2

Burlington is hopeful that you will find one of the above offers including the farmout proposal to your satisfaction. As always time is of the essence on putting together this type of prospect. Please respond with your election to one of our proposals within thirty (30) days of your receipt or sooner if possible.

We look forward to hearing from you soon and please don't hesitate to call me at (505) 326-9756 if you should have any questions.

Yours very truly,

By:   
James R.J. Strickler  
Senior Staff Landman

JRS/ll  
farm\_mor

\_\_\_\_\_

**Participate for the Moore Loyal Trust proportionate share of a deep test well located in Section 8, T31N-R10W. Please see the attached AFE and Operating Agreement.**

\_\_\_\_\_

**Sell the Moore Loyal Trust interest in the referenced leases below the base of the Mesaverde formation to Burlington Resources for \$100.00 per net acre retaining a 5% overriding royalty interest, proportionately reduced.**

\_\_\_\_\_

**Farmout the Moore Loyal Trust interest in the prospect as outlined on the attached Farmout letter.**

AGREED TO AND ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1997.

**LEE WAYNE MOORE AND JOANN MONTGOMERY MOORE,  
TRUSTEES OF THE MOORE LOYAL TRUST, U/T/A dated  
August 20, 1979**

By: \_\_\_\_\_

Name: Lee Wayne Moore, Trustee

By: \_\_\_\_\_

Name: JoAnn Montgomery Moore, Trustee

# BURLINGTON RESOURCES

May 22, 1997

SAN JUAN DIVISION

VIA FACSIMILE

Total Minatome Corporation  
Attn: Ms. Deborah Gilchrist, Land Manager  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

**RE: GLA-46 - AMENDMENT  
MARCOTTE 2  
SECTION 8, T32N, R10W  
ARCH ROCK PROSPECT  
SAN JUAN COUNTY, NEW MEXICO**

Dear Ms. Gilchrist:

This is in reference to Burlington Resources Oil & Gas Company's (Burlington) acreage support request letter to Total Minatome Corporation (Total), dated February 7, 1997, and GLA-46 amendment letter dated April 1, 1997. So far, GLA-46 owners, with the exception of Total, have agreed to support the subject well by either farming out their interest or participating and executing our proposed JOA. Burlington requests that Total proceed along with the other GLA-46 owners to either:

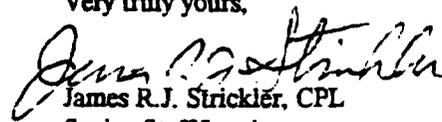
1. Participate in the subject well and execute our proposed JOA submitted to you on April 1, 1997, said JOA shall be limited in depths below the Dakota formation, or
2. Farmout your interest in the Arch Rock prospect as outlined in Exhibit "A" to the April 1, 1997 letter.

Historically, it is clear the November 27, 1951, farmout/operating agreement, known as GLA-46, covered the Pictured Cliffs and Mesaverde formations. All other formations were handled by amendment on a Ad Hoc basis. This agreement was never intended to cover deep gas exploration as indicated by past experience. The agreement incidentally has been amended over thirty (30) times to illustrate this point. Burlington and the other GLA-46 owners consistent with a spirit of cooperation and historic practice have amended the GLA accordingly.

Burlington does not agree with your interpretation of the agreement which allows you to be carried or effectively bring down the project on the subject well. A reasonable industry participation is evidenced by the 81.25% of the GLA-46 owners who have entered the amendment to the agreement. Burlington has worked diligently for over one year in putting together this extremely complex land area to drill this well. We hope that your management will support us in the drilling of a very speculative and expensive project by agreeing to either options one or two above.

We look forward to hearing from you soon, since time is of the essence to go forward with the drilling of this well. If you should have any questions, please call me at (505) 326-9756.

Very truly yours,

  
James R.J. Strickler, CPL  
Senior Staff Landman

JRS:mt  
Total\_2.doc

# TOTAL

## TOTAL MINATOME CORPORATION

Post-It™ brand fax transmittal memo 7671		# of pages: 3
To: James Strickler	From: C. Tubel	
Co: Burlington Res	Co: TMC	
Dept:	Phone #: 739-3020	
Fax #: 505-326-9833	Fax #:	

May 23, 1997

Burlington Resources, Inc.  
 3535 East 30th St.  
 P.O. Box 4289  
 Farmington, New Mexico 87499-4289  
 Attention: James J. Strickler

Re: Marcotte #2  
 Pennsylvanian formation  
 Section 8, T31N-R10W  
 San Juan County, New Mexico

Gentlemen:

Total Minatome Corporation (TMC) agrees to participate in the above referenced well per the terms and conditions of the Farmout and Operating Agreement dated November 27, 1951, between Brookhaven Oil Company and San Juan Production Company, as amended and supplemented.

Enclosed is one fully executed copy of your participation letter dated April 22, 1997 on behalf of TMC.

Sincerely,



Deborah J. Gilchrist  
 Landman

*Called @ 2:00 5/23/97*



**BURLINGTON  
RESOURCES**

SAN JUAN DIVISION

April 22, 1997

LB 4-25  
PSCERTIFIED MAIL-RETURN RECEIPT**RECEIVED**To Working Interest Owners  
(see list below)

APR 25 1997

LAND ADMINISTRATION

RE: Marcotte #2 Well  
 Pennsylvanian formation  
 Proposed depth 14,000'  
 ALL Section 8, T31N-R10W  
 639.78 acres, more or less  
 San Juan County, New Mexico

Gentlemen:

Burlington Resources Oil & Gas Company (Burlington) proposed to drill and complete the captioned well in the Pennsylvanian formation. The approximate location is 1540' FSL, 935' FEL (NE/SE) Section 8, T31N-R10W, with a proposed depth of 14,000'. Attached for your consideration and approval is one (1) copy of our Well Cost Estimate to drill and complete the subject well for \$2,316,973.00. Our records indicate the ownership of the well and AFE share to be as follows:

<u>Company</u>	<u>GW</u>	<u>AFE Share</u>
Burlington	9.310450%	\$ 215,721.00
Conoco Inc.	9.310450%	\$ 215,720.00
Amoco Production Company	68.073400%	\$1,577,242.00
Total Minatome Corp.	4.652200%	\$ 107,790.00
Cross Timbers Oil Co., LP	3.374700%	\$ 78,191.00
Lee Wayne Moore and JoAnn Montgomery Moore, Trustees	2.251700%	\$ 52,171.00
George William Umbach	1.416600%	\$ 32,822.00
Robert Warren Umbach	1.416600%	\$ 32,822.00
Lowell White Family Trust	.048460%	\$ 1,123.00
Walter A. Steele	.048460%	\$ 1,123.00
Estate of G. W. Hannett	.040380%	\$ 936.00
T. G. Cornish	.032300%	\$ 748.00
Patricia Hueter	.008100%	\$ 188.00
Mary Emily Voller	.008100%	\$ 188.00
A. T. Hannett	.008100%	\$ 188.00
	<u>100.000000%</u>	<u>\$2,316,973.00</u>

Working Interest Owners  
April 22, 1997  
Page 2

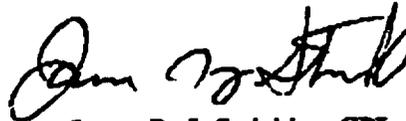
An Operating Agreement is enclosed for your review and approval.

If you wish to participate in the drilling of the above referenced well, please verify your interest and return the following within thirty (30) days to the undersigned:

- 1. One (1) executed copy of this letter
- 2. One (1) executed copy of the Well Cost Estimate
- 3. One (1) executed signature page for the Operating Agreement dated April 1, 1997

Your prompt attention to this proposal is requested as we plan to begin operations in the near future. Please advise in writing if you do not wish to participate.

Very truly yours,

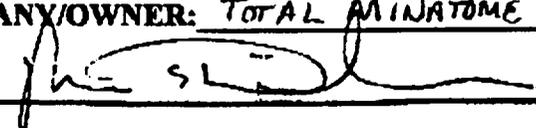


James R. I. Strickler, CPL  
Senior Staff Landman  
(505) 326-9756

JRS:ll

The undersigned hereby elects this 23 day of MAY, 1997, to participate in ~~and pay its proportionate share of the well costs for the drilling and completion of the Marcotte #2, as correctly shown above,~~ under the terms of the Farmout and Operating Agreement dated November 27, 1951, between Brookhaven Oil Company and San Juan Production Company as amended and supplemented.

COMPANY/OWNER: TOTAL MINATOME CORPORATION

BY: 

TITLE: Vice President Q-15

# BURLINGTON RESOURCES

SAN JUAN DIVISION

June 3, 1997

## CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Lynea Slazyk  
2960 Marsann Lane  
Dallas, TX 75234

**RE: NOTIFICATION OF INTENT TO  
ESTABLISH SPACING UNIT  
Burlington Resources Oil & Gas Corporation  
All of Section 8, T31N, R10W  
San Juan County, New Mexico**

Dear Lynea Slazyk:

Burlington Resources Oil & Gas Corporation ("Burlington") has requested that the New Mexico Oil Conservation Commission adopt gas spacing units consisting of 640-acres for gas production below the base or the Dakota formation ("deep gas") for the San Juan Basin (OCD Case 11745).

While that decision is still pending before the Commission, Burlington is proceeding with efforts to consolidate on a voluntary basis oil and gas interests within certain governmental sections as possible deep gas 640-acre spacing units on which Burlington intends to locate and drill gas wells to the top of the Pre-Cambrian Aged formation. One of those proposed 640- acre spacing units will be Section 8, T31N, R10W in which Amoco Production Company and their partners are working interest owners who are being asked to participate on a voluntary basis with Burlington. If Burlington is able to complete a well capable of production, then Burlington intends to distribute the proceeds from production based upon each interest owner's proportionate share of acreage within the 640-acre unit.

Based upon our preliminary title examination, it appears that Amoco and its partners may be the lessee of certain leases in this section which are subject to royalty or overriding royalties interest owned by you. Some of these leases contain pooling provisions limiting the size of spacing units to less than 640-acres. Because such a provision would be inconsistent with 640-acre gas spacing, Burlington intends to ask the Oil Conservation Division for approval to set aside such provisions so that proceeds can be paid based upon the percentage of a lease acreage contained in that 640-acre unit.

We invite you to determine if you are or maybe a royalty owner whose interests is based upon a lease which contains such a provision. If so, on behalf of Burlington I wish to provide you with an opportunity to voluntarily participate based upon proportionately sharing on a 640-acre basis. Please contact either Julie Jerkins of Amoco at (303) 830-4844 or James Strickler of Burlington at (505) 326-9756 concerning arriving at a voluntary agreement of this matter.

Very truly yours,

  
James R.J. Strickler, CPL  
Senior Staff Landman

JRS:mt  
marcott1.doc

Lynea Slazyk  
2960 Marsann Lane  
Dallas, TX 75234

Lena E. Farris, Trustee  
250 East Alameda, Apt. 539  
Santa Fe, NM 87501

Wright G. McEwen and  
Velma McEwen, Trustees  
u/t/a 4-12-93  
2232 Highway 550  
Aztec, NM 87410

Edith Irene Blair  
4622 Seminole Avenue  
San Diego, CA 92115

Kenyon Family Trust  
c/o William Kenyon  
4447 Vista del Tierra  
Del Mar, CA 92014

A. Janelle Osborne  
5945 Norsak Court  
La Mesa, CA 91942

Bankers Trust Company, as Trustees on  
behalf of American Housing Trustees  
c/o Clyde E. Smith  
2252 Highway 550  
Aztec, NM 87410

Lucille T. Fleming, Trustee of the 1986  
Fleming Revocable Trust  
19 Glorietta Court  
Orinda, CA 94563

Katharyn A. Reiser  
1300 Riviera Drive  
Idaho Falls, ID 83404

Wade R. Fleming  
4319 North 5500 East  
Idaho Falls, ID 83401

Frankie S. Carruthers, Trustee of the  
Frankie S. Carruthers Trust  
897 CR 2900  
Aztec, NM 87410

Willard Grant Hottell  
8508 CR 52i  
Bayfield, CO 81122

Emma Jean Claunch  
727 East Baja Drive  
Hobbs, NM 88240

Jacob Eugene Hottell  
83 CR 3004  
Aztec, NM 87410

Mary E. Smith  
RR 2 Lepetch Road  
Quesnel, BC, Canada and/or  
1300 Oakwood  
Bloomfield, NM 87413

Mary Maude Harris  
15 CR 2470  
Aztec, NM 87410

Virginia R. Hadden and  
Huedell Hadden  
17 CR 2470  
Aztec, NM 87410

Harold Pepin and  
Beverly Pepin  
PO Box 1002  
Aztec, NM 87410

Lloyd Coberly and  
Oneida Coberly  
PO Box 372  
Aztec, NM 87410

Clarence Don Keenom and  
Elizabeth Jo Keenom  
2179 Highway 550  
Aztec, NM 87410

Tina Melissa Giles  
2183 Highway 550  
Aztec, NM 87410

Ruby Pauline Boyd  
Durango Highway  
Aztec, NM 87410

F.P. Crum and  
Lois G. Crum, Trustees  
PO Box 400  
Aztec, NM 87410

Church of the Nazarene  
6401 the Paseo  
Kansas City, MO 64131

Estate of Frank J. Welk  
c/o Edward O. Foster  
4598 Edgeware Road  
San Diego, CA 96116

Alma L Brandenburg, Trustee  
u/t/a 5-6-93  
855 CR 2900  
Aztec, NM 87410

Carl F. Brandenburg and  
John D. Brandenburg, Joint Tenants  
855 CR 2900  
Aztec, NM 87410

Ferald T. Marcotte  
3510 Carmel Drive  
Casper, WY 82604

Joe B. Dickie and  
Jimmie A. Dickie  
2136 Highway 550  
Aztec, NM 87410

D. Polk Brown  
808 Baird Circle  
Aztec, NM 87410

**Ann Brown**  
#236 CR 4800  
Bloomfield, NM 87413

**Erby Dennis Brown**  
Star Route, Box 3077  
Chugiak, AK 99567

**Hilma V. Brown**  
2267 Pleasant Hill Road  
Pleasant Hill, CA 94523

**Bennie Brown**  
2201 Highway 550  
Aztec, NM 87410

**Joe E. Brown**  
3426 Pima Drive  
Flagstaff, AZ 86001

**Charles E. Brown, Jr.**  
1209 Kentucky  
Silver City, NM 88061

**Kenneth Brown**  
1308 North Kewanis  
Sioux Falls., SD 52104

**Katharine Caven**  
812 Kentucky Street, SE  
Albuquerque, NM 87108

**Nina Whitmen**  
3059 Vivian Street  
Lakewood, CO 80215

**Heirs of Mithero B. Brown, Deceased**  
c/o Betty B. Johnson  
416 Lair Lane  
Canyon, TX 79015-4222

# BURLINGTON RESOURCES

---

SAN JUAN DIVISION

June 16, 1997

**CERTIFIED MAIL-RETURN RECEIPT REQUESTED**

Jerald T. Marcotte  
3510 Carmel Drive  
Casper, WY 82604

**RE: NOTIFICATION OF INTENT TO  
ESTABLISH SPACING UNIT  
Burlington Resources Oil & Gas Corporation  
All of Section 8, T31N, R10W  
San Juan County, New Mexico**

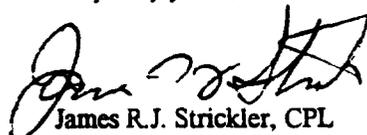
Gentlemen:

This is in reference my letter June 3, 1997, concerning 640 acre gas spacing for production below the base of the Dakota formation ("deep gas"). Please find enclosed an Amendment to Oil and Gas Lease, which allows you to voluntarily participate with your proportionate share of a 640 acre deep gas spacing unit. This amendment will not affect your shallow gas production spacing of 320 acres for the Mesaverde, Dakota, Fruitland Coal, or 160 acres for Pictured Cliffs formations.

If the enclosed amendment meets with your approval, please execute one copy before a Notary Public and return to the undersigned within thirty (30) days of your receipt, or sooner if possible. Please keep the extra copy for your files. If we have enclosed a copy of an Proof of Death and Heirship Affidavit, please complete the information on said form, sign before a Notary and return to me as soon as possible.

Please call me at (505) 326-9756, if you should have any questions.

Very truly yours,

  
James R.J. Strickler, CPL  
Senior Staff Landman

JRS:mt  
marcott6.doc

**MINERAL OWNER LIST  
SECTION 8, T31N, R10W  
SAN JUAN COUNTY, NEW MEXICO  
WITHOUT 640 ACRE POOLING CLAUSES**

Heirs of Mithero B. Brown, Deceased  
c/o Betty B. Johnson  
416 Lair Lane  
Canyon, TX 79015-4222

Lucille T. Fleming, Trustee of the 1986  
Fleming Revocable Trust  
19 Glorietta Court  
Orinda, CA 94563

Katharyn A. Reiser  
1300 Riviera Drive  
Idaho Falls, ID 83404

Wade R. Fleming  
4319 North 5500 East  
Idaho Falls, ID 83401

Frankie S. Carruthers, Trustee of the  
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897 CR 2900  
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8508 CR 52i  
Bayfield, CO 81122

Emma Jean Claunch  
727 East Baja Drive  
Hobbs, NM 88240

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83 CR 3004  
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Mary E. Smith  
RR 2 Lepetich Road  
Quesnel, BC, Canada and/or  
1300 Oakwood  
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Mary Maude Harris  
15 CR 2470  
Aztec, NM 87410

Virginia R. Hadden and  
Huedell Hadden  
17 CR 2470  
Aztec, NM 87410

Harold Pepin and  
Beverly Pepin  
PO Box 1002  
Aztec, NM 87410

Lloyd Coberly and  
Oneida Coberly  
PO Box 372  
Aztec, NM 87410

Clarence Don Keenom and  
Elizabeth Jo Keenom  
2179 Highway 550  
Aztec, NM 87410

Tina Melissa Giles  
2183 Highway 550  
Aztec, NM 87410

Ruby Pauline Boyd  
Durango Highway  
Aztec, NM 87410

F.P. Crum and  
Lois G. Crum, Trustees  
PO Box 400  
Aztec, NM 87410

Church of the Nazarene  
6401 the Paseo  
Kansas City, MO 64131

Estate of Frank J. Welk  
c/o Edward O. Foster  
4598 Edgeware Road  
San Diego, CA 96116

Alma L. Brandenburg, Trustee  
u/t/a 5-6-93  
855 CR 2900  
Aztec, NM 87410

Carl F. Brandenburg and  
John D. Brandenburg, Joint Tenants  
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Jerald T. Marcotte  
3510 Carmel Drive  
Casper, WY 82604

Joe B. Dickie and  
Jimmie A. Dickie  
2136 Highway 550  
Aztec, NM 87410

D. Polk Brown  
808 Baird Circle  
Aztec, NM 87410

Ann Brown  
Route 3, Box 153  
Bloomfield, NM 87413

Erby Dennis Brown  
Star Route, Box 3077  
Chugiak, AK 99567

Hilma V. Brown  
2267 Pleasant Hill Road  
Pleasant Hill, CA 94523

Bennie Brown  
2201 Highway 550  
Aztec, NM 87410

Joe E. Brown  
3426 Pima Drive  
Flagstaff, AZ 86001

Charles E. Brown, Jr.  
1209 Kentucky  
Silver City, NM 88061

Kenneth Brown  
1308 North Kewanis  
Sioux Falls, SD 52104

Katharine Caven  
812 Kentucky Street, SE  
Albuquerque, NM 87108

Nina Whitmen  
3059 Vivian Street  
Lakewood, CO 80215

# BURLINGTON RESOURCES

SAN JUAN DIVISION

June 16, 1997  
Federal Express

Total Minatome Corporation  
Attn: Mr. J. Kirby Barry,  
VP Gen. Counsel & Land  
2 Houston Center, Suite 2000  
P.O. Box 4326  
Houston, TX 77210-4326

RE: Acreage Support Proposal  
Deep Penn Test  
Marcotte #2 Well (Section 8)  
Scott #24 Well (Section 9)  
Sec. 8 & 9, T31N, R10W  
Arch Rock Prospect  
San Juan County, New Mexico

Dear Mr. Berry:

Thank you for talking with Bobby Kennedy, Land Manager, Burlington Resources Oil & Gas Company (Burlington) last week and agreeing to review Total Minatome Corporation's (Total Minatome) position regarding support for the subject test wells. In an effort to secure your support and minimize the review period, Burlington would like to offer more acceptable Farmout terms (See Option 3 below). Total Minatome, in consideration for Burlington showing its proprietary geology, 2-D and 3-D seismic for the purpose of exploring and drilling the subject Pennsylvanian wells, agrees to do one of the following options in support of the subject wells. Total Minatome and Burlington shall set a mutually agreeable time, on or before June 28, 1997, to show Total's management the Arch Rock prospect geology and seismic which will include a data and well package in Burlington's Farmington office. Total Minatome, after said prospect review, shall have a ten (10) day election period to respond in writing and make an election to do one of the following:

- 1). Participate with its interest in the drilling and completion of a 14,000' Penn Test located in the SE/4 Section 8 and NW/4 of Section 9, T31N, R10W, with an estimated Dry Hole Cost for each well of \$1,713,800.00 and \$603,173.00 completion cost for a total of \$2,316,973.00. The wells will be governed by that certain AAPL Model Form 610-1982 Operating Agreement with a 400% non-consent penalty and no Preferential Right Provision as outlined in my April 22, 1997 and April 29, 1997 formal well proposal's, respectively. This Model Form Operating Agreement will cover a 640 acre drillblock section.
- 2.) Elect a Non-Consent position to the full extent of its interest in the drilling, testing, completing and equipping of the above described wells to allow operator to recoup the 400% Non-Consent Penalty applicable to its proportionate share of all expenditures therefor.

Total Minatome  
June 16, 1997  
Page 2

- 3.) Farmout without warranty of title its interest covering non-productive leasehold rights as set forth on Exhibit "A". The terms and conditions of said Farmout are more fully set out on the attached June 16, 1997, Farmout Letter of Intent Agreement attached to this letter and replaces the April 22, 1997 Farmout Letter previously sent to Total. We have improved the Farmout terms by increasing the override retained by Total Minatome to the difference between the existing royalty and overriding royalty burdens and twenty-five (25%) percent proportionately reduced and the backin after payout shall be thirty (30%) percent. We have also reduced the original farmout acreage by approximately one half.

Burlington is ready to show you the prospect geology as soon as possible in order for you to make your election to item's 1, 2 or 3. Please respond to this proposal within ten (10) days of your receipt or sooner, so we can set up a showing to you next week.

If the above is agreeable to Total Minatome please sign in the space indicated below and return to the undersigned for further handling. We look forward to hearing from you soon and please don't hesitate to call me at (505) 326-9756 or Fax (505) 326-9781, if you should have any questions.

Yours very truly,

  
James R.J. Strickler, CPL  
Senior Staff Landman

JRS/dg  
farmtot3.doc  
cc: Deborah Gilchrist-Total  
Brad Watts

AGREED TO AND ACCEPTED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1997.

TOTAL MINATOME CORPORATION

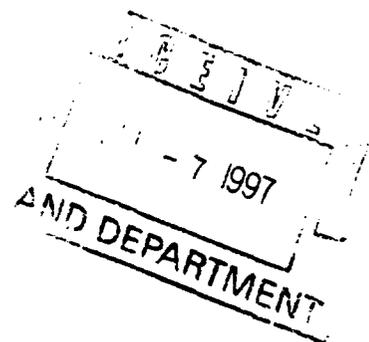
By: \_\_\_\_\_

Title: \_\_\_\_\_

**Tom E. Moore  
403 N. Marienfeld  
Midland, Texas 79701  
(915) 682-8697**

July 1, 1997

Mr. James Strickler  
Burlington Resources  
P.O. Box 4289  
Farmington, NM 87499-4289



Re: Marcotte #2 Well  
Section 8, T31N - R10W  
639.78 acres, more or less  
San Juan County, NM

Mr. Strickler:

The Moore Loyal Trust proposes to farm out their interest in Section 8 - T31N-R10W, San Juan County, NM to Burlington Resources on the following basis:

- A. Moore will deliver to Burlington a 60% NRI Lease, thus reserving to Farmor an overriding royalty equal to 27.5%, proportionately reduced.
- B. At payout of initial test well, Moore shall have the option to convert the reserved overriding royalty to a 40% working interest, proportionately reduced.
- C. In the event that the Marcotte #2 is a non-commercial well, Moore's full, not reduced, interests shall be reassigned to him within 30 days.
- D. In the event that the Marcotte #2 is non-commercial and is utilized in any revenue earning capacity, Moore shall share, at no reduction of interest, in the monies.
- E. This farmout proposal applies only to Section 8, T31 - R10 of San Juan County, New Mexico and does not commit Moore's interest in any other sections or areas.
- F. The drilling of the Marcotte #2 must commence by September 1, 1997.

James, if this proposal meets with your approval, please draw up the agreement and send it to me.

Thank you for your help with this problem.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom E. Moore', written in a cursive style.

Tom E. Moore

TEM/pb