| St<br>ergy, Minerals<br>Oil C<br>12<br>San<br>LICATION FC   | ate of N<br>and Nat<br>220 Sou<br>ta Fe, N<br>OR DOV<br>0 BOX<br>Add<br>34-17:<br>it Letter-3<br>.30-0     | lew Mexico<br>ural Resource<br>vation Div<br>th St. Franci<br>ew Mexico<br>WNHOLE (<br>2227<br>Iress<br>S-27E<br>Section-Townsh<br>15-32995<br>INTERN | vision<br>s Dr.<br>87505<br>COMMING         | ING<br>ARTH<br>EDDY<br>Type: X<br>ZONE           | Re<br>API<br>Establish F<br>EXIST<br>X<br>ESIA, NM<br>COUNTY<br>Federal                        | vised June PLICATIO X_Sin Pre-Approv TING WEI Yes 88211 County State VER ZON   | N TYPE<br>ngle Well<br>ved Pools<br>LBORE<br>No<br>No<br><br>Fee<br>E                           |
|---|--|---|---|--|--|--|---|
| St<br>ergy, Minerals<br>Oil C<br>12<br>San<br>LICATION FC<br>P<br>0-3<br>0.<br>UPPER ZONE<br>AKE Q-GB-S | and Nat<br>Conser<br>220 Sou<br>ta Fe, N<br>OR DOV<br>0 BOX<br>Add<br>34-17:<br>it Letter-3<br>.30-0<br>SA | ural Resource<br>vation Div<br>th St. Franci<br>ew Mexico<br>WNHOLE (<br>2227<br>tress<br>S-27E<br>Section-Townsh<br>15-32995<br>INTERN               | vision<br>s Dr.<br>87505<br>COMMING         | ING<br>ARTH<br>EDDY<br>Type: X<br>ZONE           | Re<br>API<br>Establish F<br>EXIST<br>X<br>ESIA, NM<br>COUNTY<br>Federal<br>Federal<br>RED LAKE | vised June PLICATIO X_Sin Pre-Approv TING WEI Yes 88211 County State VER ZON   | 10, 2003<br>N TYPE<br>Igle Well<br>red Pools<br>LBORE<br>No<br>No<br><br>Fee<br>E               |
| 12<br>San<br>LICATION FO<br>P<br>0  | 220 Sou<br>ta Fe, N<br>OR DOV<br>0 BOX<br>Add<br>34-17:<br>  | th St. Franci<br>ew Mexico<br>WNHOLE (<br>2227<br>ress<br>S-27E<br>Section-Townsh<br>15-32995<br>INTERN   | s Dr.<br>87505<br>COMMINGI                  | ARTH<br>EDDY<br>Fype: X<br>ZONE                  | _Establish F<br>EXIST<br>X<br>ESIA, NM<br>COUNTY<br>Federal<br>RED LAKE                        | X Sin<br>Pre-Approv<br>TING WEI<br>Yes<br>88211-<br>County<br>State<br>VÉR ZON | IBORE No<br>-0027<br>Fee  |
| 0-3<br>0. Ur<br>348 API No<br>UPPER ZONE<br>3AKE Q-GB-5   | Add<br>34-17:<br>nit Letter-5<br>. <u>30-0</u>   | ress<br>S-27E<br>Section-Townsl<br>15-32995<br>INTERI   | Lease 7                                     | EDDY<br>Гуре: <u>X</u><br>ZONE                   | COUNTY<br>_Federal<br>LOX<br>RED LAKE  | County<br>State<br>VER ZON   | Fee<br>E  |
| o. Ur<br><u>348</u> API No<br><b>UPPER ZONE</b><br><u>AKE Q-GB-</u><br>)                                | 34-175<br>iit Letter-5<br>. <u>30-0</u><br>SA  | S-27E<br>Section-Townsh<br>15-32995   | Lease 7                                     | Гуре: <u>X</u><br>ZONE                           | _Federal   | State  | E   |
| UPPER ZONE<br>AKE Q-GB-S  | SA   |   | <u></u>                                     | LONE   | LOX<br>RED LAKE  | VÉR ZON  | E   |
| AKE Q-GB-S  | SA   |   | MEDIATE 2                                   |  | RED LAKE   |  |   |
| )   |  |   |   |  |  | GLORIE   | TA YES  |
| · · · · · · · · · · · · · · · · · · ·   | FORAT  |   |   |  | 96836  |  |   |
| -2801' PERI   | FORAT  | rn.   |   |  |  |  |   |
|   |  |   |   |  | 2998-328   | O' PERF  | 'ORATED   |
| FICAL LIFT  |  |   |   |  | ARTIFICI   | AL LIFI  | 2   |
| 50 PSI<br>JCING BHP   |  |   |   |  | EST. 100<br>PRODUCIN   |  |   |
| >   |  |   |   |  | 41.8°  |  |   |
| ZONE  |  |   |   |  | COMPLETI   | ON UNDI  | ERWAY   |
| N/A   |  | Date:   |   |  | Date: N/   | A  |   |
|   |  | Rates:  |   |  | Rates:   |  |   |
| Gas<br>% 68   |  | Oil   | Gas<br>%                                    | %  | Oil<br>29  | Gas<br>% 32  | %   |
|   | ONE<br>N/A<br>Gas  | CONE<br>N/A<br>Gas  | ONE Date:<br>N/A Date:<br>Rates:<br>Gas Oil | CONE Date:<br>N/A Date:<br>Rates:<br>Gas Oil Gas | ONE Date:<br>N/A Date:<br>Rates:<br>Gas Oil Gas  | CONE COMPLETI<br>N/A Date: Date: N/<br>Rates: Rates:<br>Gas Oil Gas Oil<br>29  | CONE COMPLETION UNDE<br>N/A Date: Date: N/A<br>Rates: Rates:<br>Gas Oil Gas Oil Gas<br>49 29 32 |

| Are all working, royalty and overriding royalty interests identical in all commingled zones?<br>If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?     | Yes <u>X</u><br>Yes | No<br>No    |
|---|---------------------|-------------|
| Are all produced fluids from all commingled zones compatible with each other?   | Yes_X               | No          |
| Will commingling decrease the value of production?  | Yes                 | No <u>X</u> |
| If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands<br>or the United States Bureau of Land Management been notified in writing of this application? | Yes_X               | No          |
| NMOCD Reference Case No. applicable to this well: R-11363 PRE-APPROVED POOL   |                     |             |

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 In Collin'             | <br>ENGINEER        | DATE | 16 Dec 03 |
|----------------------------------|---------------------|------|-----------|
| TYPE OR PRINT NAME BRIAN COLLINS | <br>TELEPHONE NO. ( | 505  | 748-3303  |

engineering@marbob.com E-MAIL ADDRESS

| Submit 3 Copies To Appropriate District State of New Mexico  | Form C-103   |
|--|--|
| District I<br>1625 N. French Dr., Hobbs, NM 88240  | Sources Revised May 08, 2003 WELL API NO.                |
| District II<br>1301 W. Grand Ave., Artesia, NM 88210 OIL CONSERVATION DIV  | 1 S Indicate Type of Lease                               |
| District III<br>1000 Rio Brazos Rd., Aztec, NM 87410<br>1000 Rio Brazos Rd., Aztec, NM 87410   | r. STATE FEE   |
| District IV<br>1220 S. St. Francis Dr., Santa Fe, NM<br>District IV<br>1220 S. St. Francis Dr., Santa Fe, NM   | 6. State Oil & Gas Lease No.<br>N/A                      |
| 87505 SUNDRY NOTICES AND REPORTS ON WELLS  | 7. Lease Name or Unit Agreement Name                     |
| (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BAC<br>DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUC<br>PROPOSALS.)                     | H OD FEDERAL   |
| 1. Type of Well:<br>Oil Well $\checkmark$ Gas Well $\bigcirc$ Other  | 8. Well Number   |
| 2. Name of Operator MARBOB ENERGY CORPORATION  | 9. OGRID Number  |
| 3. Address of Operator P O BOX 227, ARTESIA, NM 88211-0  | 14049       10. Pool name or Wildcat                     |
| 4. Well Location   | 227 RED LAKE GLORIETA/YESO NE                            |
|  | line and 2310 feet from the EAST line                    |
|  |  |
| Section 34 Township 17S Range 2<br>11. Elevation (Show whether DR, RKB,<br>3601' GR  |  |
| 12. Check Appropriate Box to Indicate Nature   | of Notice, Report or Other Data                          |
| NOTICE OF INTENTION TO:  | SUBSEQUENT_REPORT OF:                                    |
|  |  |
|  | MENCE DRILLING OPNS PLUG AND ABANDONMENT                 |
|  | ING TEST AND   |
| OTHER: DOWNHOLE COMMINGLING OTH  |  |
| <ol> <li>Describe proposed or completed operations. (Clearly state all pertion<br/>of starting any proposed work). SEE RULE 1103. For Multiple Con<br/>or recompletion.</li> </ol> |  |
| SEE ATTACHED C-107A APPLICATION FOR DOWNHOLE CO<br>DIVISION ORDER #R-11363 PRE-APPROVED POOLS  | DMMINGLING   |
| THE PROPOSED ALLOCATION IS: REDLAKE Q-GB-SA 5130<br>REDLAKE GLORIETA/YE  | 0 - OIL 71% - GAS 68%<br>SO NE 96836 - OIL 29% - GAS 32% |
| NEW ALLOCATION WILL BE SUBMITTED IF ACTUAL WELL I<br>THAN THAT ABOVE.  | PRODUCTION IS SIGNIFICANTLY DIFFERENT                    |
|  |  |
|  |  |
|  |  |
| I hereby certify that the information above is true and complete to the best of r  | ny knowledge and belief.                                 |
| SIGNATURE Initallin  | DATE 16 Decl 3   |
| Type or print name BRIAN COLLINS   | Telephone No. (505) 748-3303                             |
| (This space for State use)   |  |
| APPPROVED BYTITLE<br>Conditions of approval, if any:   | DATE   |

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| DISTRICT , I<br>P.O. B.: 1980, Hobbs, NM 88241-10 |  |                        | DO3<br>Energy.          |          |                  | W Mexico<br>Resources Departme | hent  | Submit   | For<br>Revised Februar<br>to Appropriate Dist   |   |
|---|--|------------------------|-------------------------|----------|------------------|--------------------------------|-------|--|---|---|
| DISTRICT II<br>P.O. Drawer DD, Artesia, NM 88211  | -0719  | OIL                    |                         | P.0.     | Box 2            |                                |       | ON   | State Lease   | - 4 Copies  |
| DISTRICT III<br>1000 Rio Brazos Rd., Aztec, NI    | <b>H 874</b> 10  |                        | Santa F                 | 'e, New  | Mexic            | o 87504–20                     | 880   |  |   |   |
| DISTRICT IV<br>P.O. BOX 2068, SANTA FE, N.M. 875  | 504-2088   | WELL LO                | OCATION                 | AND .    | ACREA            | GE DEDIC.                      | ATIO  | N PLAT   | AMENDED   | REPORT  |
| API Number  |  | 1                      | Pool Code<br>6836       |          | R                | ED LAKE; G                     | GLORI | Pool Name<br>ETA YESO, 1   | NORTHEAST   |   |
| Property Code                                     |  | I <u></u> ,            |                         | -        | erty Nam<br>EDER | le                             |       | · · · · · · · · · · · · · · · · · · ·  | Well Num  | ber   |
| OGRID No.   |  |                        | Operator Name Elevation |          |                  |                                |       |  |   |   |
| 14049   | L  | <u>M</u> .             | ARBUB                   |          | e Loca           |                                | 1     |  | 3601  | l<br>   |
| UL or lot No. Section                             | Township   | Range                  | Lot Idn                 | Feet fro |                  | North/South li                 |       | Feet from the  | East/West line  | County  |
| 0 34  | 17-S   | 27-E                   | II                      |          | 30               | SOUTH                          | I .   | 2310   | EAST  | EDDY  |
| UL or lot No. Section                             | Township   | Range                  | Lot Idn                 | Feet fro |                  | rent From<br>North/South H     |       | ICE<br>Feet from the   | East/West line  | County  |
|   |  |                        |                         |          |                  |                                |       |  |   |   |
| Dedicated Acres Joint of                          | r Infill Co  | nsolidation            | Code Ord                | der No.  |                  |                                |       |  |   |   |
| NO ALLOWABLE W                                    |  |                        |                         |          |                  | NTIL ALL IN<br>APPROVED E      |       |  | EN CONSOLIDA  | TED   |
|   | GEODETIC CC<br>NAD 27<br>Y = 649<br>X = 521<br>LAT. 32'47' | NME<br>9005.1<br>021.8 | 6                       |          | 4.3              |                                |       | I hereby<br>contained herein<br>best of my know<br>Signature<br>Melanic<br>Printed Name<br>Land De<br>Title<br>July 3(<br>Date<br>SURVEYO<br>I hereby certify<br>on this plat wa<br>actual surveys<br>supervison and<br>correct to the | e J. Parker<br>epartment<br>0, 2003<br>R CERTIFICAT<br>that the well locati<br>made by me or<br>i that the same is<br>best of my belief | formation<br>the to the<br>steet to t |
|   | LONG. 104*1  | 5'53.75"W              | 3598.1'                 | 360<br>  | 231              | <br>                           |       | Date Surveyed<br>Signature A<br>Professional   | Seet of<br>Survey of 7<br>3.11.0724   | L.A.<br><b>65/03</b><br><b>12641</b>  |

District I

District II

NM 88240

1301 W. Grand Avenue, A sia, NM 88210

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

District III 1000 Rio Brazos Road, Aztec, NM 87410

District IV

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107A Revised June 10, 2003

**Oil Conservation Division** 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION TYPE X Single Well Establish Pre-Approved Pools EXISTING WELLBORE X Yes No

# APPLICATION FOR DOWNHOLE COMMINGLING

| MARBOB ENERGY CORPORATION | P O BOX 227                        | ARTESIA, NM 88211-0027 |
|---------------------------|------------------------------------|------------------------|
| Operator                  | Address                            |                        |
| OD FEDERAL #2             | 0-34-17S-27E                       | EDDY COUNTY            |
| Lease Well No.            | Unit Letter-Section-Township-Range | County                 |

OGRID No. 14049 Property Code 32848 API No. 30-015-32986 Lease Type: X Federal \_\_\_\_\_ State \_\_\_\_ Fee

| DATA ELEMENT   | UPPER ZONE                   | INTERMEDIATE ZONE | LOWER ZONE                    |
|--|------------------------------|-------------------|-------------------------------|
| Pool Name  | RED LAKE Q-GB-SA             |                   | RED LAKE GLORIETA YESO N      |
| Pool Code  | 51300                        |                   | 96836                         |
| Top and Bottom of Pay Section<br>(Perforated or Open-Hole Interval)  | 1933-2790' PERFORAT          | ED                | 3059-3295' PERFORATED         |
| Method of Production<br>(Flowing or Artificial Lift)   | ARTIFICAL LIFT               |                   | ARTIFICAL LIFT                |
| Bottomhole Pressure<br>(Note: Pressure data will not be required if the bottom<br>perforation in the lower zone is within 150% of the<br>depth of the top perforation in the upper zone)       | EST. 50 PSI<br>PRODUCING BHP |                   | EST. 100 PSI<br>PRODUCING BHP |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)  | 38.5°                        |                   | 41.8°                         |
| Producing, Shut-In or<br>New Zone  | NEW ZONE                     |                   | COMPLETION UNDERWAY           |
| Date and Oil/Gas/Water Rates of<br>Last Production.<br>(Note: For new zones with no production history,<br>applicant shall be required to attach production<br>estimates and supporting data.) | Date: N/A<br>Rates:          | Date:<br>Rates:   | Date: N/A<br>Rates:           |
| Fixed Allocation Percentage<br>(Note: If allocation is based upon something other<br>than current or past production, supporting data or<br>explanation will be required.)                     | Oil Gas<br>71 % 68 %         | Oil Gas %         | Oil Gas<br>29 % 32 %          |

### **ADDITIONAL DATA**

| Are all working, royalty and overriding royalty interests identical in all commingled zones?<br>If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?     | Yes <u>X</u><br>Yes | No<br>No |
|---|---------------------|----------|
| Are all produced fluids from all commingled zones compatible with each other?   | Yes_X               | _ No     |
| Will commingling decrease the value of production?  | Yes                 | X        |
| If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands<br>or the United States Bureau of Land Management been notified in writing of this application? | Yes X               | No       |
| NMOCD Reference Case No. applicable to this well:   |                     | <b>`</b> |
| A Marshare and a  |                     |          |

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 Kin Cullen'            |         | ENGINEER        | DATE_ | 16 Dec 03 |
|----------------------------------|---------|-----------------|-------|-----------|
| TYPE OR PRINT NAME_BRIAN_COLLINS | <u></u> | TELEPHONE NO. ( | 05_)  | 748-3303  |
|                                  |         |                 |       |           |

engineering@marbob.com E-MAIL ADDRESS

| Submit 3 Copies To Appropriate District Office                                 |                                | f New Me   |                   |                               | Form C-103  |
|--|--------------------------------|------------|-------------------|-------------------------------|---|
| District I<br>1625 N. French Dr., Hobbs, NM 88240                              | Energy, Mineral                | s and Natu | ral Resources     | WELL API NO.                  | Revised May 08, 2003  |
| District II<br>1301 W. Grand Avc., Artesia, NM 88210                           | OIL CONSER                     | VATION     | DIVISION          | 30-015-3298                   | 6   |
| District III   | 1220 Sout                      |            |                   | 5. Indicate Type<br>STATE     | e of Lease  |
| 1000 Rio Brazos Rd., Aztec, NM 87410<br><u>District IV</u>                     | Santa H                        | Fe, NM 87  | 7505              | 6. State Oil & C              |   |
| 1220 S. St. Francis Dr., Santa Fc, NM<br>87505                                 |                                |            |                   | N/A                           |   |
| SUNDRY NOTIO   | CES AND REPORTS O              |            |                   | 7. Lease Name                 | or Unit Agreement Name  |
| DIFFERENT RESERVOIR. USE "APPLIC<br>PROPOSALS.)                                |                                |            |                   | OD FEDERA                     |   |
| 1. Type of Well:<br>Oil Well 🔽 Gas Well 🔲                                      | Other                          |            |                   | 8. Well Number<br>2           | ſ   |
| 2 Name of Operator   | B ENERGY COR                   | PORATI     | ON                | 9. OGRID Num<br>14049         | iber  |
| 3. Address of Operator P O BO  |                                |            |                   | 10. Pool name o               |   |
| 4. Well Location   |                                |            |                   | RED LAKE GL                   | ORIETA/YESO NE  |
|  | 00                             | SOUTU      | 16                | 55                            | EAST  |
|  | 990 feet from the              |            | line and 16       |                               | om the EAST line  |
| Section 34   | Township 11. Elevation (Show v | 17S Ra     | nge 27E           | NMPM EDDY                     | County NM   |
|  | 3604' GR                       |            |                   |                               |   |
| 12. Check A<br>NOTICE OF IN  | ppropriate Box to I            | ndicate N  |                   | Report or Other<br>SEQUENT RE |   |
|  |                                | N 🔲        | REMEDIAL WOR      | ·                             |   |
|  | CHANGE PLANS                   |            | COMMENCE DRI      |                               | PLUG AND  |
|  | MULTIPLE                       |            | CASING TEST AN    |                               |   |
|  | COMPLETION                     |            | CEMENT JOB        |                               |   |
| OTHER: DOWNHOLE COMM   |                                | ~          | OTHER:            |                               |   |
| 13. Describe proposed or composed or starting any proposed wo or recompletion. |                                |            |                   |                               |   |
| SEE ATTACHED C-107A<br>DIVISION ORDER #R-113                                   |                                |            | LE COMMINGLIN     | IG                            |   |
| THE PROPOSED ALLOC   | ATION IS: REDLAKE              | E Q-GB-SA  | A 51300 - OIL 71% | 5 - GAS 68%                   |   |
|  | REDLAKI                        | E GLORIE   | TA/YESO NE 968    | 36 - OIL 29% - G              | AS 32%  |
| NEW ALLOCATION WILL<br>THAN THAT ABOVE.  | BE SUBMITTED IF                | ACTUAL W   | ELL PRODUCTIO     | ON IS SIGNIFIC                | ANTLY DIFFERENT   |
|  |                                |            |                   |                               |   |
|  |                                |            |                   |                               |   |
|  |                                |            |                   |                               |   |
|  | 1 1 1                          |            |                   |                               |   |
| I hereby certify that the information a  | house is true and compl        |            |                   | e and belief.                 | 11 12 00  |
| SIGNATURE  | rum                            | _TITLE_E   | NGINEER           |                               | DATE |
| Type or print name BRIAN COI   | LINS                           |            |                   | Telep                         | hone No. (505) 748-3303   |
| (This space for State use)   |                                |            |                   |                               |   |
| APPPROVED BY   |                                | _TITLE     |                   |                               | _DATE   |

Conditions of approval, if any:

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•

| DISTRICT <sup>2</sup> I<br>P.O. Box 1980, Hobbs,<br>DISTRICT II<br>P.O. Drawer DD, Artest<br>DISTRICT III | ia, NM 88211  | 960<br>-0718   | 011 0 20<br>011                    | Ener<br>CO                              | gy. Minerals at<br>NSER<br>P.0. | nd Natural<br>VATI<br>Box 2 | w Mexico<br>Resources Department<br>ON DIVIS<br>2088<br>20 87504-2088 | Submit  | Revised Februa<br>to Appropriate Dis<br>State Lease   | trict Office                            |
|---|---------------|--|------------------------------------|---|---------------------------------|-----------------------------|---|---|---|---|
| 1000 Rio Brazos Rd<br>DISTRICT IV<br>P.O. BOX 2058, SANTA   |               |  | WELL LO                            |   |                                 |                             | AGE DEDICATI  | ON PLAT   | 🗆 AMENDEI   | ) REPORT                                |
| API N   | API Number    |  |                                    | Pool Cod                                | 8                               | 1                           |   | Pool Name   | ····  |   |
| <u></u>   |               |  | <u> </u>                           | 96836                                   |                                 |                             | D LAKE; GLORI   | ETA YESO, N   |   |   |
| Property Co   | Property Code |  |                                    |   | _                               | perty Nam<br>FEDER          |   |   | Well Nur<br>2   | n ber                                   |
| OGRID No.   |               |  |                                    |   |                                 | ator Nam                    |   | ······································  | Elevatio  | <br>n                                   |
| 14049   |               |  | M                                  | ARBOI                                   | B ENERG                         | GY CO                       | RPORATION   |   | 360-  | 4'                                      |
|   |               |  |                                    |   | Surfa                           | ce Loc                      | ation   |   |   |   |
| UL or lot No.   | Section       | Township   | Range                              | Lot Idn                                 | Feet fr                         | om the                      | North/South line  | Feet from the   | East/West line  | County                                  |
| 0   | 34            | 17–S   | 27-E                               |   |                                 |                             | SOUTH   | 1655  | EAST  | EDDY                                    |
|   |               | I  | Bottom                             | Hole Location If Different From Surface |                                 |                             |   | face  | J   | · · · · · · · · · · · · · · · · · · ·   |
| UL or lot No.   | Section       | Township   | Range                              | Lot Idn                                 |                                 | Feet from the               | East/West line  | County  |   |   |
|   |               | -  |                                    |   | 1                               |                             | North/South line  |   |   |   |
| Dedicated Acres   | Joint o       | r Infill Co  | nsolidation (                      | Code                                    | Order No.                       |                             | L   |   | L   | <u> </u>                                |
|   |               |  |                                    |   |                                 |                             | •   |   |   |   |
|   |               | GEODETIC CC<br>NAD 27<br>Y = 649<br>X = 521<br>LAT. 32°47'<br>_ONG. 104°13 | NME<br>9666.1<br>672.8<br>09.61 "N |   | 97.3' <u>-</u> 500              | 3603.                       | 8'  | contained hereis<br>best of my know<br>Signature<br>Melanic<br>Printed Name<br>Land De<br>Title<br>July 30<br>Date<br>SURVEYO<br>I hereby certify<br>on this plat wa<br>actual surveys<br>supervison, and<br>correct to the | R CERTIFICAT<br>that the well locati<br>is plotted from field<br>made by me or<br>i that the same is<br>best of my belief<br>Y 11, 2003 | ION<br>notes of<br>under my<br>true and |
|   | •             |  | ı                                  |   | 1.                              | i)                          |   | Professional  | Surveyor . YO'  |   |

# Engineering Summary Form C-107A Application for Downhole Commingling

Marbob Energy Corporation OD Federal No. 1 (Unit O, Sec. 34-T17S-R27E) OD Federal No. 2 (Unit O, Sec. 34-T17S-R27E)

Marbob Energy proposes to downhole commingle the San Andres (Red Lake Q-GB-SA 51300) and the Yeso (Red Lake Glorieta Yeso, NE 96836) in the captioned wells. This proposal is identical to the downhole comminglings that Devon Energy has done offsetting the captioned wells (Orders R-11363, DHC-2390, DHC-2685, DHC-2701).

No crossflow will occur because these wells will be rod pumped in a pumped down condition. The MJ State No. 1 is currently completed in the Yeso and will be used as a "typical" Yeso well. The MJ State No. 2 is currently completed in the San Andres and will be used as a "typical" San Andres well. The proposed zonal allocation is described below.

<u>Yeso:</u> Production declines exponentially at 84%/yr. for one year, followed by 35%/yr. for oil and 32%/yr. for gas. (Best engineering estimate using the production history of nearby Devon wells.)

| Q1yr | = 90 bopd<br>= 14 bopd<br>= 1.5 bopd | d=84%/yr.<br>d=35%/yr.<br>assumed            |
|------|--------------------------------------|--|
| EUR  | = <u>-365 (90-14)</u><br>In (184)    | + <u>-365 (14-1.5)</u> = 25.7 MBO<br>In(135) |
| Q1yr | = 140 mcfd<br>= 22 mcfd<br>= 5 mcfd  | d=84%/yr.<br>d=32%/yr.<br>assumed            |
| EUR  | = - <u>365 (140-22)</u><br>In (184)  | + <u>-365 (22-5)</u> = 39.6 MMCF<br>In (132) |

| San Andres: | Production declines exponentially at 80%/yr. for one year, followed |  |  |
|-------------|---|--|--|
|             | by 24%/yr. for oil and 20%/yr. for gas. (Best engineering estimate  |  |  |
|             | using the production history of nearby Devon wells.)                |  |  |

| Q1yr  | = 145 bopd<br>= 29 bopd<br>= 1.5 bopd | d=24%/yr.                                     |   |  |  |
|---|---------------------------------------|---|---|--|--|
| EUR   | = <u>-365 (145-29)</u><br>In (180)    | + <u>-365 (29-1.5)</u> = 62.9 MBC<br>In (124) | C |  |  |
|   | = 180 mcfd                            |   |   |  |  |
| •   | = 36 mcfd<br>= 5 mcfd                 | -   |   |  |  |
| EUR   |                                       | + <u>-365 (36-5)</u> = 83.4 MMCF<br>In (120)  | = |  |  |
| Yeso Oil = $25.7 \text{ MBO} = .29 = 29\%$<br>25.7 + 62.9     |                                       |   |   |  |  |
| San Andres Oil = 129 = .71 = 71%                              |                                       |   |   |  |  |
| Yeso Gas = <u>39.6 MMCF</u> = .32 = 32%<br><u>39.6 + 83.4</u> |                                       |   |   |  |  |
| San Andres Gas = 132  |                                       |   |   |  |  |

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| (E'S LEASES  | e 2002) MONTH: Me                         | 2002  |
|--|---|---|
| ARCO 26 A /  | MJ STATE<br>TP LP PREV EST TOTAL          |   |
| WTR ELK HORN GPM/  | TP LP PREV EST TOTAL                      |   |
| 302 124  | - 249 94 92 17474                         | OIL WTR $50 - 1 $                                 |
| 170 130  | -24.596 90 17570<br>-24.79590 17660       | $\frac{20}{32} - \frac{2}{3} - \frac{2}{3}$       |
| 1213 100   | - 24.7 95 90 17446<br>- 24.9 96 703 17771 | $\frac{32}{32} - \frac{3}{4}$                     |
| 357 30   | - 23.1 95 94 17862                        |   |
| 126  | - 25 94 93 17952                          | 28 <u> </u>                                       |
| 193 120  | - 25 94 92 18043                          | de -  |
| 200 126  | 25.3 95 93 19150                          | 32 - 81<br>85 - 91                                |
| 124  | 24.2 151 115 18302<br>25.1 189 203 18443  | 85 - 9<br>106 - 10                                |
| 267 124  | 35.2 320 229 18.114                       | 140 - 11  |
| 178/ 120   | 25.9 233 234 15950                        | 110 - 12  |
| 169 140  | 55 236 540 19193                          | $\frac{98}{13} - \frac{13}{14}$                   |
| $\begin{array}{c} alf \\ las \\$ | 291.5 238 249 19422<br>251 258 351 19681, | 118 - 14<br>127 - 15                              |
| $309 \land 130$  | 24/1 266 264 19448                        | 1/12 - 16   |
| 301/ \ 135   | 25.1 265 214 20234                        | 18 - 17   |
| 235/ $135$   | 26.0 264 265 20418                        | 115 - 18  |
| 135  | 25.3 263 255 20152<br>21.0 251 207 20999  | 1111 - 19<br>161 - 20 55                          |
| 215 $126$  | 25.0 241 202 21236                        | 114 - 21 1  |
| $3\phi$  | 25.5 250 241 21493                        | 115 - 22 5  |
| 130  | 260 216 213 21181                         | 114 540 23  |
| 13 \130  | 360 282 312 22053                         | 1/13 $24$ $25$ $25$ $25$ $25$ $25$ $25$ $25$ $25$ |
|  | 1JSt. #2 San Andres IP≈ 17                | 5-30 = 145 BOPD 26 5                              |
|  |   |   |
|  |   | 28  |
|  | JST.#1 Yeso IP & 90 BOPD<br>~ 140 MCFD    | (January 2002) 29                                 |
|  |   | (Janvary 2002) 29<br>30 31                        |
|  |   |   |

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December 11, 2003

Bureau of Land Management 2909 W. 2<sup>nd</sup> St. Roswell, NM 88201

Attn: Mr. Armando Lopez

Re: Downhole Commingling Application OD Federal #1 - Unit O, Sec. 34-T17S-R27E OD Federal #2 - Unit O, Sec. 34-T17S-R27E Eddy County, New Mexico

Dear Mr. Lopez:

Enclosed are copies of the downhole commingling applications submitted to the NMOCD for the captioned wells.

Please contact me at 505-748-3303 if you have any questions.

Sincerely,

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Brian Collins Petroleum Engineer

BC/dlw enclosure