| DATE IN | |
|---------|--|
| | ABOVE THIS LINE FOR DIVISION USE ONL $30 - 045 - 33378$ |
| | NEW MEXICO OIL CONSERVATION DIVISION white 3-11-11#1 |
| | ABOVE THIS LINE FOR DIVISION USE ONL ABOVE THIS LINE FOR DIVISION USE ONL SO - 045 -33378 So - 045 -33378 White 37-11-11#[1220 South St. Francis Drive, Santa Fe, NM 87505 Synergy (163455 |
| | ADMINISTRATIVE APPLICATION CHECKLIST |
| Т | CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE |
| | [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 [] NSL [] 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 |
| | [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.

Print or Type Name

Signature

Title

e-mail Address

| | <u>District I</u> 1625 N. Franch Drive, Hebbs, NM1 88240 District II | | New Mexico atural Resources Department | Form C-107 Revised June 10, 200 |
|-------------|--|---|---|------------------------------------|
| | 1301 W. Gund Avenue, Anesia, NM 88210 <u>District III</u> 1000 Rin Brzzas Road, Aznec, NM 87410 | APPLICATION TYP <u>X</u> Single Wel Establish Pre-Approved Pool | | |
| ECEIVED | District IV 120 \$ \$1 Frakis D., Santa Fe, NM 87505 | | New Mexico 87505 | EXISTING WELLBOR |
| 19 JUL 29 F | <u>Synergy Operating, LLC</u> Operator Z. | | 5513, Farmington, NM 87499 Idress | 000 |
| | | | t K-Section 19-T29N-R11W | San Juan |
| | OGRID No. <u>163458</u> Property Co | | -Section-Township-Range -045-33378 Lease Type: <u>X</u> | County FederalFee |
| | DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
| | Pool Name | Aztec Fruitland Sand | Basin Fruitland Coal | Fulcher Kutz Pictured Cliffs |
| | Pool Code | 71200 | 71629 | 77200 |
| | Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 1572' to 1588' | 1464' to 1645' | 1652' to 1660' |
| | Method of Production (Flowing or Artificial Lift) | Flowing/Pumping | Invapable of Production | Flowing/Pumping |
| | 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) | N/A | N/A | N/Å · · |
| | Oil Gravity or Gas BTU (Degree API or Gas BTU) | | \land | |
| | Producing, Shut-In or New Zone | New Zone | Shut-In | New Zone |
| . [| Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, | Date: | Date: \$5-18-2006 to present | Date: |
| | applicant shall be required to attach production estimates and supporting data.) | Rates: | Rates: Zero Water – Zero Gas | 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 48.2 % 48.2 % | OA Gas Zero % Zero % | Oil Gas . 51.8 % 51.8 % |
| | | ADDITIO | NALDATA | |
| , j | Are all working, royalty and overriding If not, have all working, royalty and ove | royalty interests identical in all co prriding royalty interest owners bee | mmingled zones? en notified by certified mail? | Yes No X Yes X No |
| 1 | Are all produced fluids from all commin | agled zones compatible with each of | other? | Yes <u>X</u> No |
| I | Will commingling decrease the value of if this well is on, or communitized with, | state or federal lands, has either th | | YesNoX |
| | or the United States Bureau of Land Ma NMOCD Reference Case No. applicable | | | Yes <u>X</u> No |
| | Attachments: C-102 for each zone to be comming Production curve for each zone for a For zones with no production histor Data to support allocation method o Notification list of working, royalty Any additional statements, data or d | led showing its spacing unit and ac t least one year. (If not available, y, estimated production rates and s r formula. and overriding royalty interests fo | creage dedication. attach explanation.) upporting data. r uncommon interest cases. | |
| - | | PRE-APPRC | OVED POOLS | |
| | | | te following additional information wil | l be required: |
| L F | List of other orders approving downhole List of all operators within the proposed Proof that all operators within the propo Bottomhole pressure data. | Pre-Approved Pools | | |
| | hereby certify that the information | above is true and complete to t | he best of my knowledge and belie | |

TYPE OR PRINT NAME Thomas E. Mullins TELEPHONE NO. (505) 599-4905

:

E-MAIL ADDRESS tom.mullins@synergyoperating.com



July 24, 2009

PO Box 5513 Farmington, NM 87499 (505) 325-5449 Fax (505) 599-4900 RECEIVED OCD

2009 JUL 29 P 1:29,

Via Registered Mail RRR

NM Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

Ladies and Gentlemen:

Enclosed is a copy of Synergy Operating, LLC's New Mexico Oil Conservation Division ("NMOCD") Application For Down hole Commingling (Form C-107A). Be advised that Synergy is comingling the following three zones: the Aztec Fruitland Sand, the Basin Fruitland Coal and Fulcher Kurtz Pictured Cliffs. The Basin Fruitland Coal zone has been found to be incapable of production and as such will not be allocated any percentage of the resulting production from the White 29-11-19 #106 well. The Aztec Fruitland Sand, and Fulcher Kurtz Pictured Cliffs zones will be allocated 48.2% and 51.8% respectively of the production from said well. The SW4 of Section 19, Township 29 North, Range 11 West, N.M.P.M., San Juan County, New Mexico will be the proration unit for the White 29-11-19 #106 well.

The NMOCD requires that all Revenue Interest Owners be notified by certified mail, return receipt requested, of Synergy's intentions. Each interest Owner has (30) days to notify the NMOCD (1220 S. St. Francis Drive, Santa Fe New Mexico 87505) in writing if they have any objections to Synergy's proposed project.

The NMOCD may approve Synergy's application administratively, without hearing if no Interest Owner files an objection within said 30-day period. If any objections are received, the NMOCD will set a hearing date for the application Please see the attachments for more detailed information of this project application.

Thank you in advance for your comments.

Very truly yours,

Patrick Hegarty Principal Synergy Operating, LLC

Xc: NMOCD – Aztec, NM NMOCD – Santa Fe, NM

White 29-11-19 # 106

(155.50 acres – SW/4 – Fruitland Sand) – 48.2 % Allocation (314.97 acres – South Half FTC) – ZERO Allocation (155.50 acres – SW/4 – Pictured Cliffs) – 51.8 % Allocation

<u>Allocation Discussion for C-107A – Application</u>

Conversations with Steve Hayden at the NMOCD have determined that the appropriate gas pools involved for the commingle would include the Basin Fruitland Coal (71629), Aztec Fruitland Sand (71200) and the Fulcher Kutz Pictured Cliffs (77200). NMOCD form C-107A allows for the commingling of production through application. In our instance these named pools are not pre-approved, and the ownership in all three (3) zones is different, requiring certified mail, return receipt mailing of the application to all owners, including the BLM.

Fruitland Coal Discussion

The White # 106 was originally drilled through the Pictured Cliffs zone to a TD of 1770', 5-1/2" production casing was cemented to surface, and the well completed in twenty (20) feet of poor quality Fruitland Coal in May 2006 with a Halliburton Sandwedge frac with 107,600# of 20/40 brady & 10,500# of 20/40 SLC proppant. The well never recovered load fluid and has not produced as was anticipated. A pump jack and compressor were required to produce the well. Numerous attempts have been made to make this Fruitland Coal formation produced independently without success.

In May 2007, a remedial HES Coal Stim treatment was performed at 3.7 BPM 1050# ATP down the casing in the hope of removing a theorized fines blockage. The well has been unable to be produced, with zero water production and gas production. Maximum measured casing gas pressure has been recorded at 100#. Fluid levels have been taken without fluid entry into the well. It is believed that virgin reservoir pressure should be in the 400# BHP range. The original fracture stimulation was traced with radioactive isotopes and indicated that all coal perforations except the lower coal from 1643' to 1645' were adequately stimulated.

Synergy also has several Fruitland Coal wells offset this lease in Section 24 of T29NR12W, which have performed poorly to date. A ZERO allocation formula is requested for the Fruitland Coal formation in this commingle application.

Pictured Cliffs Discussion

Pictured Cliffs reserves in Section 19 have been produced through several non-standard spacing units in prior years. Following review and discussion both internally and with the NMOCD, a standard Southwest Quarter (SW/4) spacing unit has been platted. This spacing unit will include BLM acreage necessitating completion of a BLM Communitization agreement, whereby Royalties and reporting of production will occur to this approved number via the MMS.

White 29-11-19 # 106 C-107A – Application Support Information Page 1 of 2 06-23-2009 Original reservoir pressure within the PC was 400 to 450 psig. Surface shut-in pressures have been utilized as a proxy for bottom-hole gas pressures for many years within the San Juan Basin.

Pictured Cliffs reserves have been developed in the SW/4 via a previously drilled well, the Cozzens # 5, drilled in 1949, cumulative production 435 MMCF. This well was plugged and abandoned in 1992. Pseudo-Material Balance based upon 130# pressure indicates 168 MMCF remaining. The Cozzens # 2 (Sec 19), also has been abandoned in 1987 after producing 1,260 MMCF. A redrill, the Cozzens # 2R (Sec 19) replaced the original well and supports the material balance method of determining remaining reserves within the Pictured Cliffs in this area. Pseudo Material Balance indicates 182 MMCF remaining at 130# pressure.

Two (2) recent Pictured Cliffs re-drills have been performed by McElvain Oil and Gas on acreage previously held by Gerry Thames. The Cassidy # 1-R (Sec 19) is producing 65 MCFD, with cumulative PC production of 1,019 MMCF from its spacing unit. A pressure of 54# was recorded on the re-drill yielding remaining PC reserves of 109 MMCF. The second re-drill is the Salmon # 1-R (Sec 30) producing 40 MCFD, cumulative PC production 529 MMCF. A pressure of 75# was recorded on the re-drill yielding remaining PC reserves of 94 MMCF. These wells have performed relatively poorly when compared with other area re-drills with greater reservoir character and higher pressures.

It is anticipated that the White # 106 will have 130# pressure in the Pictured Cliffs formation and utilizing an average of these offset material balance figures indicates an expected PC recovery of 138 MMCF.

Fruitland Sand Discussion

The Fruitland Sand formation has few near by completions, but to the East of White # 106, several producers from the Aztec Fruitland Sand Pool exist. It should be noted that openhole and cased hole log characteristics and completion zones are quite variable within these shallow pools. Virgin reservoir pressure is estimated with a 0.38 psi/ft pressure gradient at approximately 600 psig. Log analysis assumes 16 feet of pay, with a 35% Sw, and 160 acre drainage. Therefore a reserve estimate is made for the White # 106 Fruitland Sand formation through a simplified volumetric calculation at a 90 percent recovery factor yielding 128 MMCF.

A marked section of the openhole well log is included with this application for your consideration.

These reserve estimates are utilized to complete the required NMOCD allocation formula and application form C-107A, which is to be sent to all affected owners.

White 29-11-19 # 106 C-107A – Application Support Information Page 2 of 2 06-23-2009 District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

| | | I | WELL LO | DCATIO | N AND ACR | EAGE DEDIC | ATION PLAT | Γ | | |
|-----------------------------|-----------|---------------------------------------|----------------------------|------------------------|-------------------------|---------------------------------------|---------------|---------------------------------------|------------------|--|
| API Number. | | | | Pool Code | | Pool Name | | | | |
| 30 - | 378 | | 71200 Aztec Fruitland Sand | | | d Sand | | | | |
| ⁴ Property | Code | | | | Property N | ame | | 6 | 6 Well Number | |
| 3537 | 2 | | | White 29 – 11 – 19 | | | | | 106 | |
| OGRID No. | | · · · · · · · · · · · · · · · · · · · | <u>.</u> | 8 Operator Name | | | | | 9 Elevation | |
| 163458 | | | | Synergy Operating, LLC | | | | 5 | 5566' GL | |
| | | | | | ¹⁰ Surface I | ocation | | · · · · · · · · · · · · · · · · · · · | | |
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | Count | |
| K | 19 | 29 N | 11 W | | 1670' | FSL | 1855' | FWL San Juan | | |
| | · · · | | ^{II} Bc | ottom Hol | e Location If | Different From | Surface | | | |
| JL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County | |
| | | | | | • • | | | | · . | |
| ² Dedicated Acre | s Joint o | r Infill | Consolidation | Code ¹⁵ Or | der No. | · · · · · · · · · · · · · · · · · · · | | | | |
| 155.50 Y | | | С | | | | , | | | |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

| 16 | | | · | ¹⁷ OPERATOR CERTIFICATION |
|---------|--|--------|---------|---|
| | | | | I hereby certify that the information contained herein is true and complete |
| · · . | | | | to the best of my knowledge and belief, and that this organization either |
| | | | | owns a working interest or unleased mineral interest in the land including |
| | | | | the proposed bottom hole location or has a right to drill this well at this |
| | | | | location pursuant to a contract with an owner of such a mineral or working |
| | | | | interest, or to a voluntary pooling agreement or a compulsory pooling |
| | | | | order heretofore entered by the division. |
| | | · · · | | Signature Date |
| · . | | | | Thomas E. Mullins |
| | | | . · · · | Printed Name |
| | | | | |
| | | | - | |
| fulle | 711120 | Sec 19 | | ¹⁸ SURVEYOR CERTIFICATION |
| | | | | I hereby certify that the well location shown on this |
| 2 | | | | plat was plotted from field notes of actual surveys |
| | | | | |
| 1 1855 | | | | made by me or under my supervision, and that the |
| 1 1055 | | | | same is true and correct to the best of my belief. |
| 1 | I I | l | | |
| ·/ | ······································ | | | Date of Survey |
| | | | | Signature and Seal of Professional Surveyor: |
| | | , (| | |
| Ń | jo / | | | Original Plat prepared by John A. Vukonich on 7-13-2005 |
| | | | | |
| | 16 | | | # 14831 - |
| | | | | |
| | | , | | Certificate Number |
| 11/1/1/ | 1/1/1/1/1 | | | |

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies. Fee Lease - 3 Copies

AMENDED REPORT

| | er | | ² Pool Cod | e | Pool Name | | | | | | |
|--------------------------------|---------|---------------|-----------------------|------------------------|------------------------------|------------------|---------------|--------------------|---------------|--|--|
| 30 - | 378 | | 77200 | | Fulcher Kutz Pictured Cliffs | | | | | | |
| ⁴ Property C | Code | Property Name | | | | | | | 6 Well Number | | |
| 35372 | : | | | | White 29 - | 11 – 19 | | | 106 | | |
| OGRID | No. | | B Operator Name | | | | | | 9 Elevation | | |
| 163458 | 8 | | | Synergy Operating, LLC | | | | | 566' GL | | |
| | <u></u> | | · | | ¹⁰ Surface | Location | | | | | |
| UL or lot no. | Section | Township | Range | Lot Idn | | North/South line | Feet from the | East/West line Cou | | | |
| K | 19 | 29 N | 11 W | | 1670' | FSL | 1855' | FWL San Juan | | | |
| | | | ¹¹ Bo | ttom Ho | le Location I | f Different Fron | n Surface | | | | |
| UL or lot no. Section | | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County | | |
| | | | | | | | | | | | |
| 12 Dedicated Acres Joint or In | | r Infill | Consolidation | Code 15 O | rder No. | | | | | | |
| 155.50 | | 2 | C | | | | | | | | |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

| 16 | | | ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is twe and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. |
|------|------|--------|---|
| | | | Signature Date Thomas E. Mullins Printed Name |
| 1855 | | Sec 19 | ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. |
| | 1670 | | Date of Survey Signature and Seal of Professional Surveyor: Original Plat prepared by John A. Vukonich on 7-13-2005 # 14831 - Certificate Number |

| 、 | | | | | | | | | | |
|-----------------------------------|------------------|------------------|------------------------------|------------------------|---------------------------------------|---------------------------------------|-------------------------------|-------------------|--|--|
| | | | | | Resources Departm | | , bit to Api | | Form C-102 d June 10, 2003 e District Office | |
| , 1301 W. Grand Av | e., Artesla, | N.M. 88210 | | | ONSERVAT 1220 South St | ION DIVISION | 00011 | | State Le | ase - 4 Copies |
| DISTRICT III 1000 Rio Brozos F | Rd., Aztec, | N.M. 87410 | | 1 | Santa Fe, N | IM 87505 | | | | ase - 3 Copies |
| DISTRICT IV 1220 South St. Fr | ancis Dr., 1 | Santa Fe, N | M 87505 | • • | | 2005 OCT 7 | ' AM 9 1 | 5 [| AME | NDED REPORT |
| | | | WELL LO | | N AND AC | | JEATION P | | | |
| 1 API | Number | | | ² Pool Code | | | MING POOL NOM | Coa | Ĺ_ | |
| ⁴ Property Cod | de | | | <u> </u> | Property I | Vame | | | * Well Number 106 | |
| 7 OGRID No. | | | | | WHITE 29-1 | · · · · · · · · · · · · · · · · · · · | | | | Elevation |
| | 58 | | | SY | NERGY OPERA | | | | | 5566 |
| | 00 | | | | ¹⁰ Surface | Location | | | | |
| UL or lot no. | Section 19 | Township 29-N | Range 11-W | Lot Idn | Feet from the 1670 | North/South line SOUTH | Feet from the 1855 | East/Wes | | County SAN JUAN |
| K | | 20 1 | | m Hole | · · · · · · · · · · · · · · · · · · · | If Different Er | om Surface | -t | | |
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South_line | Feet from the | East/Wes | st line . | County |
| ¹² Dedicated Acres | . <u></u> | <u></u> | ³ Joint or Infill | | ¹⁴ Consolidation Co | ode | ¹⁵ Order No. | | | - <u> </u> |
| S/2 | 2 31 | 4.91 | | | | · · · · | · · · · · | | | |
| NO ALLOW | ABLE W | VILL BE | ASSIGNED | TO THI | S COMPLETI | ON UNTIL ALL EEN APPROVEI | INTERESTS H | HAVE BI VISION | EEN CO | ONSOLIDA TED |
| 16 | | | | | | | · | | | RTIFICATION |
| | | | | | | | I hereby certify | that the Info | mation cont | |
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| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | 7 | A | - Pinn |
| | | | | | | | Signature | <u>X</u> | $\frac{1}{2}$ | Dal |
| | | | | | | | Printed No | <u>LEV</u> | 0. | <u>TAPP</u> |
| · | | | | | · | | Title | ERATI | ONS 1 | VIANAGER |
| FD 3 1/4" BC 1974 BLM | | | 1 | | | | Dote | 10- | 4 <u>-</u> C | 5 |
| XXXXXXX | | | | | | | н: | JRVEYO | R CER | TIFICATION |
| r K | | | | | | | was plotted fr | om field note | s of actual | shown on this plat surveys made by me |
| r. 4 | | | | | | | or under my correct to the | | | e same is true and |
| 185 /185 /ш | 5' | φ | LAT: 36-4 LONG: 108 | 2-31.7 N -02-07. | N. (NAD 83) 4 W. (NAD 8 | 3) . | 1 | AND | YUKOA | |
| \sim | | | | | | | Date of Su Signature of | S CAN | MEX | Juliveyord |
| 00-03-36 638.20' (M | | | | | | | 1 | | 5981) | To |
| 00-03- 638.20' | | | 670' | | | | 154 | ₹-X | Ĭ | C.B.V. |
| rz ^Ñ | | | τ- Ο | | | | | XES PD | | NAT |
| ¢ 4 | | | | | | | 1 | - A | STEDDIO | ····· |
| | 89–10 2568.50 | | | FD 3 1/4 1999 BLM | BC | 11111 | Certificate + | | | |

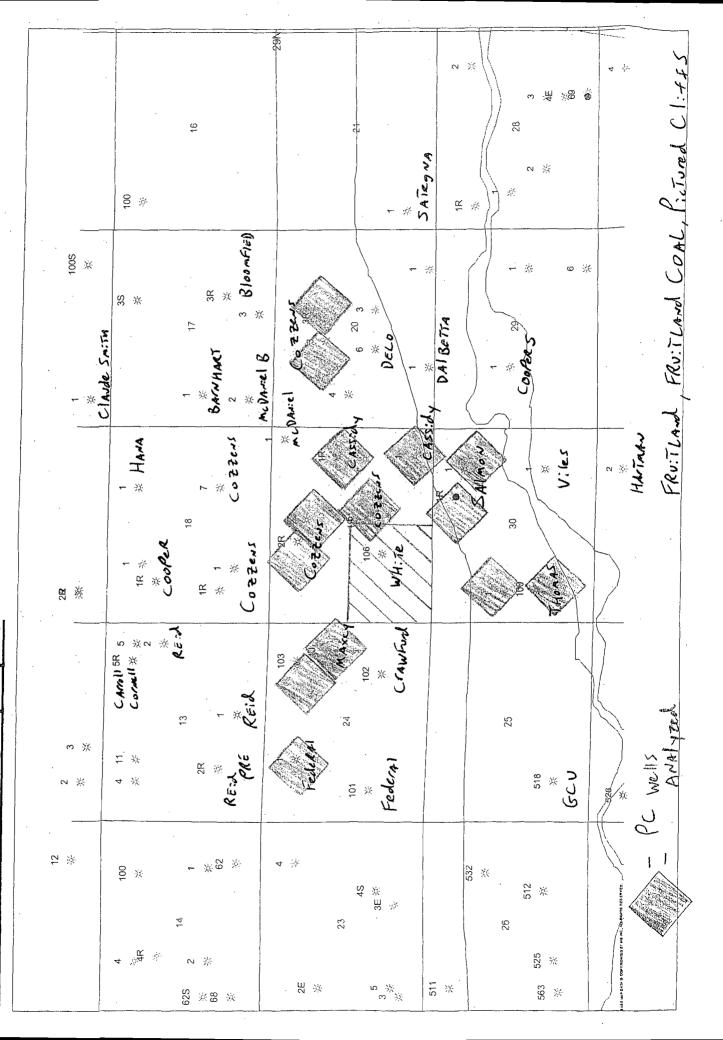
Reserve Calculation for White 29-11-19 # 106 Pictured Cliffs (1652' to 1660' Cased Hole Log Depths)

| Bg = 0.0253134 GIP = 143,173 MCF Recovery Factor = 90.0% EUR Fruitland Sand = 128,856 Proposed Fixed Allocation Percentages: Aztec Fruitland Sand White 29-11-19 # 106 48.2% | *. | |
|--|--|----------------|
| GIP =143,173 MCFRecovery Factor =90.0%EUR Fruitland Sand =128,856Proposed Fixed Allocation Percentages: | MCF Fruitland Sand Expected | |
| GIP = 143,173 MCF Recovery Factor = 90.0% | | Recovery |
| GIP = 143,173 MCF | | |
| | | |
| | | |
| Sw = 0.35 Phi = 0.05 | | |
| h = 16 ft | · · · · · | |
| z = 0.98 A(rea) = 160 acres | | |
| | ed from Hana # 1 (Fruitland Sand) | . [.] |
| | psi/ft gradient | · |
| GIP = (43,560 * A * h * (Phi) * (1 - Sw)) / Bg Bg = 0.0287 * z * (Tf + 460) / Pres | ۲ | |
| | | |
| Fruitland Sand (1572' to 1588' Cased Hole Log | | |
| | MMCF Pictured Cliffs Expected | Recovery |
| Remaining Gas to Recover 109 * Values based upon 54# current Reservoir Press | MMCF @ 25 psig abandonment | |
| Cumulative Gas Produced1019 | MMCF | |
| | MMCF @ 25 psig abandonment | |
| Cassidy # 1 & # 1R - Discussion (Sec 19) | 90.3% Rec Fact | |
| * Values based upon 75# current Reservoir Press | | |
| | MMCF @ 25 psig abandonment | |
| | B MMCF @ 25 psig abandonment | |
| Salmon # 1 & # 1R - Discussion (Sec 30) | 84.9% Rec Fact | |
| * Values based upon 130# current Reservoir Pres | sule | |
| | 3 MMCF @ 25 psig abandonment | |
| | 5 MMCF | |
| | 3 MMCF @ 25 psig abandonment | |
| Cozzens # 5 Discussion (Sec 19) | 72.1% Rec Fact | |
| * Values based upon 130# current Reservoir Pres | sure | |
| - | 2 MMCF @ 25 psig abandonment | |
| Remaining Gas to Recover 182 | | |
| Cumulative Gas Produced1533Remaining Gas to Recover182 | MMCE @ 25 peig abandonment | |
| Cumulative Gas Produced1533Remaining Gas to Recover182 | 89.4% Rec Fact 9 MMCF @ 25 psig abandonment | |

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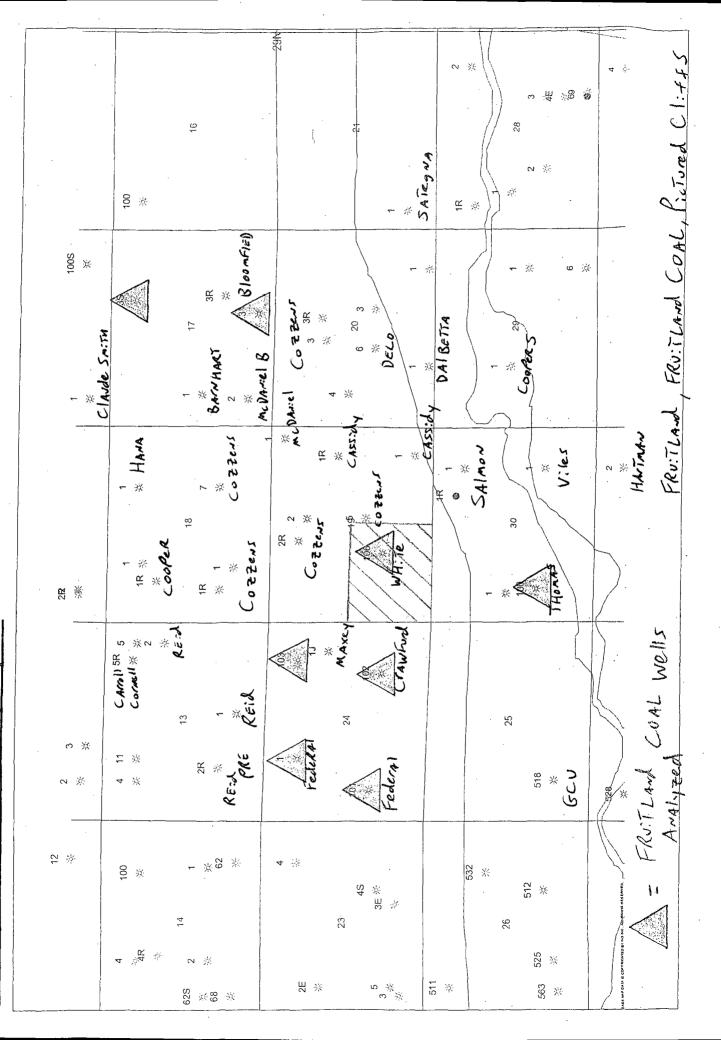
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PI/Dwights PLUS on CD Map Report



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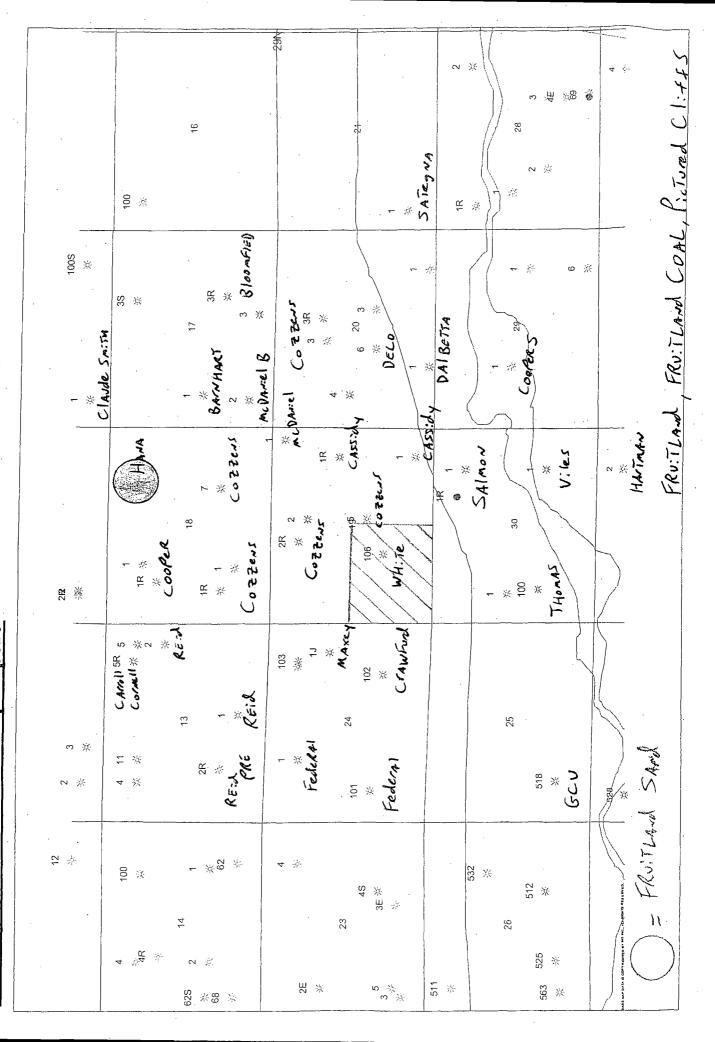
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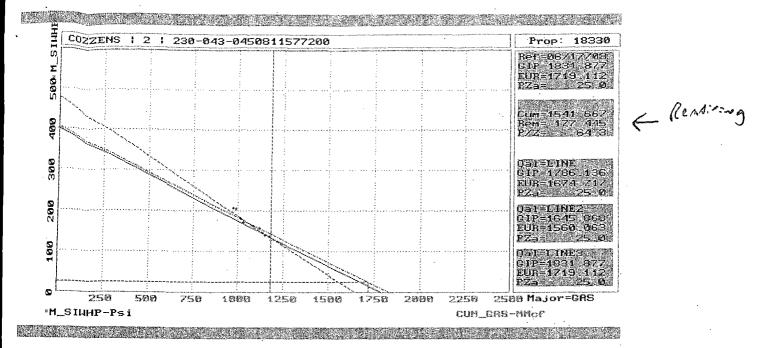


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PI/Dwights PLUS on CD Map Report

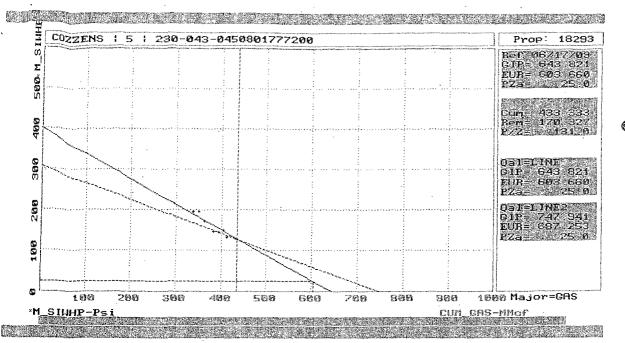




130th originual EST:mated current Pressure in Cozzers **F** 2 15 64#

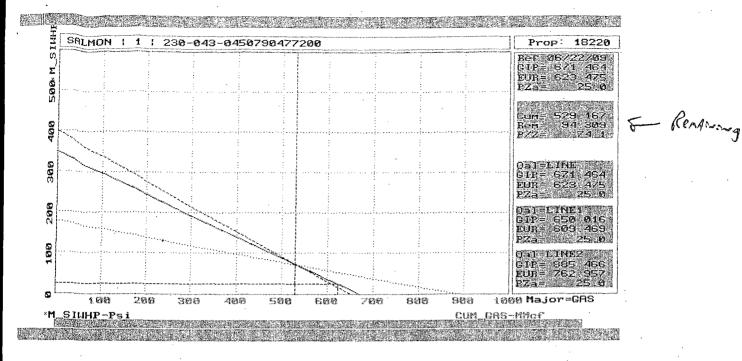
Given Current Production CumulaTive

11~



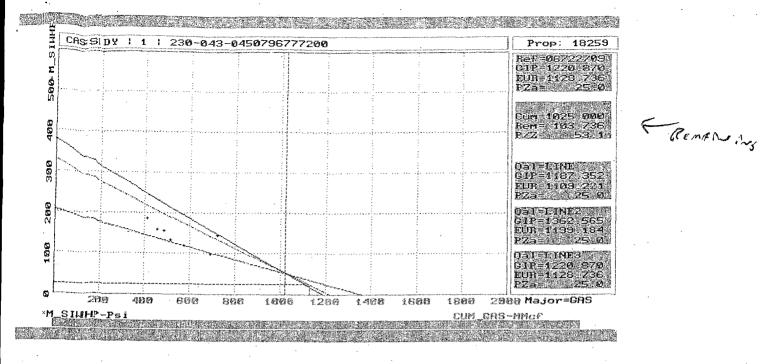
Remaining

Jun.



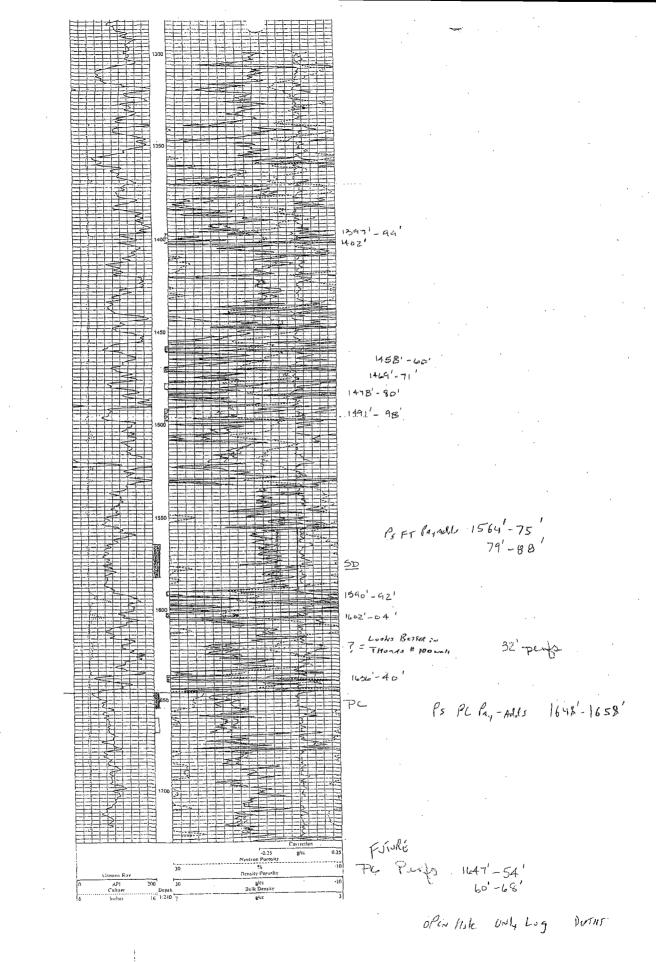
75#

Jun



54 Presture

1 hr



6.23.-0.9

Gerry Thames 2202 S 65th W Ave Tulsa, OK 74107 (918) 629-4493

August 6, 2009

Attn: Richard Ezeanyim New Mexico Oil Conservation Division 1220 S. St Francis Drive Santa Fe, NM 87505

2009 AUG 12 A 11: 21 ECEIVED OCL

Dear Sir:

I wish to be involved in the application hearing for the White 29-11-19 #106 well. I own a 50% WI in the existing well borehole and Synergy Operating, LLC owns the other 50%. I do not own any interest in the zones which this commingling application is being submitted.

30-045-33378

No alternative arrangement or offer has been made for this proposed project. I have objections and request that New Mexico Oil Conservation Division schedule a hearing date for interest owners on this project application. Please advise of hearing date for this application.

Respectfully submitted,

Henry Thamo

Gerry Thames

cc: Patrick Hegarty NMOCD – Aztec, NM

RICHard CONVELSEd with MR. THOMOS È WILL Seed out Admini ORDER after all

Jones, William V., EMNRD

| From: Sent: | Jones, William V., EMNRD Friday, August 14, 2009 10:32 AM |
|----------------|---|
| То: | 'tom.mullins@synergyoperating.com' |
| Cc: | Hayden, Steven, EMNRD; Perrin, Charlie, EMNRD; Dade, Randy, EMNRD; Hill, Larry, EMNRD; Ezeanyim, Richard, EMNRD; Reeves, Jacqueta, EMNRD; Kautz, Paul, EMNRD; Gray, Darold, EMNRD |
| Subject: | DHC application from Synergy for the White 29-11-19 #106 (30-045-33378) |

Hello Tom:

We received an objection to this application from Mr. Gerry Thomas, Esq., (918-629-4493). He copied Patrick Hegarty with his objection letter so you probably know about this.

Richard Ezeanyim called Gerry and discussed some of the issues and Richard has since given me permission to release the order after the wait period. Since you told your affected parties they have 30 days to object (instead of the normal 20 days), I must hold this until August 28, but we will be releasing it at that time – unless something else arises. I don't think we have yet a formal letter from Mr. Thomas withdrawing the objection, but Richard instructed me to release the permit anyway.

The order will be DHC-4203 dated 8/28/09 and will allow the Fruitland Sands and the Pictured Cliffs to be commingled with the fixed allocation you proposed. <u>Please note: the order requires Synergy to cement squeeze the inactive</u> <u>Fruitland Coal perforations prior to perforating and fracturing the new intervals</u>. This is consistent with what the Division requires all over the State for any interval that is non-productive. Non-productive intervals are not allowed to remain open in Down Hole Commingles, even if uphole. As always, you have the option to open an Examiner hearing case with the objective to obtain an exception to this stipulation.

Good luck with your well,

Regards,

William V. Jones PE New Mexico Oil Conservation Division 1220 South St. Francis Santa Fe, NM 87505 505-476-3448