

03/12/13	SUSPENSE	ENGINEER	7AG	03/13/13	LOGGED IN	TYPE	WFX	PPRG 1307249737	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



New Wells (3)
 30-025-39429
 MCA Unit 449
 30-025-39430
 MCA Unit 466
 30-025-39431
 MCA Unit 477

ADMINISTRATIVE APPLICATION CHECKLIST

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

Application Acronyms:

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

ConocoPhillips

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

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

Check One Only for [B] or [C]

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

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

[D] Other: Specify _____

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[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.

Susan B. Maunder Susan B. Maunder Sr. Regulatory Specialist 2/22/2013
 Print or Type Name Signature Title Date
 Susan.B.Maunder@conocophillips.com
 e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: ConocoPhillips Company
ADDRESS: P.O. Box 51810 Midland TX 79710-1810
CONTACT PARTY: Susan B. Maunder PHONE: (432)688-6913
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary. Please see the enclosed summary titled "Proposed Injection Well Activity"
- IV. Is this an expansion of an existing project? X Yes No
If yes, give the Division order number authorizing the project: Administrative Order R-2403, R-2403-B, WFX-855 & WFX-886
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. Attachment 2 & Attachment 3
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. Attachment 4 & Attachment 5
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. Attachment 6
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. Attachment 7 & WFX-855
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. Attachment 8 & Attachment 9.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Susan B. Maunder TITLE: Senior Regulatory Specialist
SIGNATURE: Susan B. Maunder DATE: 02/22/2013
E-MAIL ADDRESS: Susan.B.Maunder@conocophillips.com
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: WFX-855 April 2009

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Maljamar Cooperative Agreement (MCA) Unit

Proposed Injection Well Activity - Expansion

Operator: ConocoPhillips Company

Lease Numbers: NM LC 061841

NM LC 057210

Well Names: MCA 449

MCA 466

MCA 477

Potential Injection Interval: Unitized Interval

Current Schedule: These new wells are expected to be drilled March 2013.

Proposal Description:

ConocoPhillips Company currently has numerous operations in South East New Mexico and is in compliance with Rule 5.9. Our proposal is to expand the existing enhanced recovery operation within the Maljamar Cooperative Agreement (MCA) Unit. We are planning to drill three (3) new injection wells as part of this expansion. The planned wells are to enhance oil recovery in this part of the field. These wells are intended for waterflood injection.

The MCA Unit was discovered in 1926 and began commercial production in the early 1930's. The field was unitized in 1962 and has produced over 113 MMBO. Currently, the field produces around 1,000 BOPD with 180 active producers and 44 injectors. Since 2006, ConocoPhillips has been conducting an infill development program to re-develop the field on a 10-acre line-drive injection pattern. ConocoPhillips looks to continue this program which has the potential to add 10 MMBO of recoverable reserves to the Unit.

ConocoPhillips Company seeks administrative approval to expand waterflood operations within the MCA Unit per the 1962 order number R-2403 stating that this expansion can occur without a hearing. This information can be found on page six paragraph two of the order.

Previous orders that govern operations in this field include the following list.

R-2403

R-2403 a

R-2403 b

WFX-855

WFX-886

Enclosed in this application are the following supporting documents.

Well Data (as requested by Form C-108, Sec. III): Attachment 1

Existing Approvals (as requested by Form C-108, Sec. IV): Included on form.

Maps (as requested by Form C-108, Sec. V):

Attachment 2 – Wells and leases within two miles.

Attachment 3 – Wells within the 0.5 mile area of review

Tabulation of well data (as requested by Form C-108, Sec. VI):

Attachment 4 – Tabulation of well data

Attachment 5 – Well schematics for plugged wells

Injection Operations Description (as requested by Form C-108, Sec. VII):

- 1) Proposed average injection rate and Proposed maximum injection rate:
 - a. Average: 500 barrels of water per day
 - b. Maximum: 1500 barrels of water per day
- 2) System is closed/open: Open
- 3) Proposed average and maximum injection pressure psi at surface
 - a. Average: : 2100 psi
 - b. Maximum: 2150 psi
- 4) Source and an appropriate analysis of injection fluid
 - a. Produced water will be used as the injection fluid. A water analysis was submitted in conjunction with prior approval applications.
- 5) These wells will be utilized for enhanced recovery into producing formations.

Geologic Data (as requested by Form C-108, Sec. VIII): Attachment 6

Information regarding underground sources of drinking water (USDW) is required in addition to the geologic information presented in Attachment 6 for each well. Underground sources of fresh water occur between 200' and 300' below surface. The injection zone top depth to the bottom of fresh water zones is within a range of 2300 feet to 3500 feet. There are no water wells within 300'. There are no known drinking water sources immediately below the injection interval.

Stimulation Program (as requested by Form C-108, Sec. IX):

Injection wells will be acid stimulated in the San Andres formation with approximately 7,000 gallons of 15%-20% HCl. The Grayburg formation will be fracture stimulated with approximately 70,000 lbs of resin coated and white sand.

Logging Data (as requested by Form C-108, Sec. X):

Any logging and test data collected after drilling and completing these new wells will be submitted to the state of New Mexico. These submissions will be provided in a timely manner.

Chemical Analysis of Water (as requested by Form C-108, Sec. XI):

Fresh water samples were submitted in support of previous Administrative Orders governing waterflood activities at the Maljamar Cooperative Agreement (MCA) Unit. These samples were referenced in your August 14, 2009 decision document involving WFX-855.

Attachment 7 contains the previous submitted chemical analysis of water.

Examination of geologic and engineering data (as requested by Form C-108, Sec. XII):

These wells are to be used for enhanced hydrocarbon recovery. However, the following statement is provided. Geologist Staff has stated that: "We do not have

any evidence that there is any hydrologic connection or open faults between the injection zone and the underground sources of drinking water (USDW)."

Proof of Notice (as requested by Form C-108, Sec. XIII):

Attachment 8 contains a copy of the notarized newspaper publication.

Attachment 9 contains surface owner and working interest owner notifications.

Attachment 1
Maljamar Cooperative Agreement Well Data

The following data are provided for the new wells listed below:

- MCA Unit 449: API # 30-025-39429
 - C-102 Plat
 - Injection Well Data Sheet (2 pages)
 - Injection Well Schematic
 - Map Showing 0.5 mile radius

- MCA Unit 466: API # 30-025-39430
 - C-102 Plat
 - Injection Well Data Sheet (2 pages)
 - Injection Well Schematic
 - Map Showing 0.5 mile radius

- MCA Unit 477: API # 30-025-39431
 - C-102 Plat
 - Injection Well Data Sheet (2 pages)
 - Injection Well Schematic
 - Map Showing 0.5 mile radius

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 87003

RECEIVED

OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
Santa Fe, NM 87505

DISTRICT III
1000 Rio Bravo Rd., Aztec, NM 87410

MAY 27 2009

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

HOBBSOCD

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-39429	Pool Code 43329	Pool Name Maljamar; Grayburg-San Andres
Property Code 31422	Property Name MCA UNIT	Well Number 449
OGRI No. 217817	Operator Name CONOCOPHILLIPS	Elevation 3978'

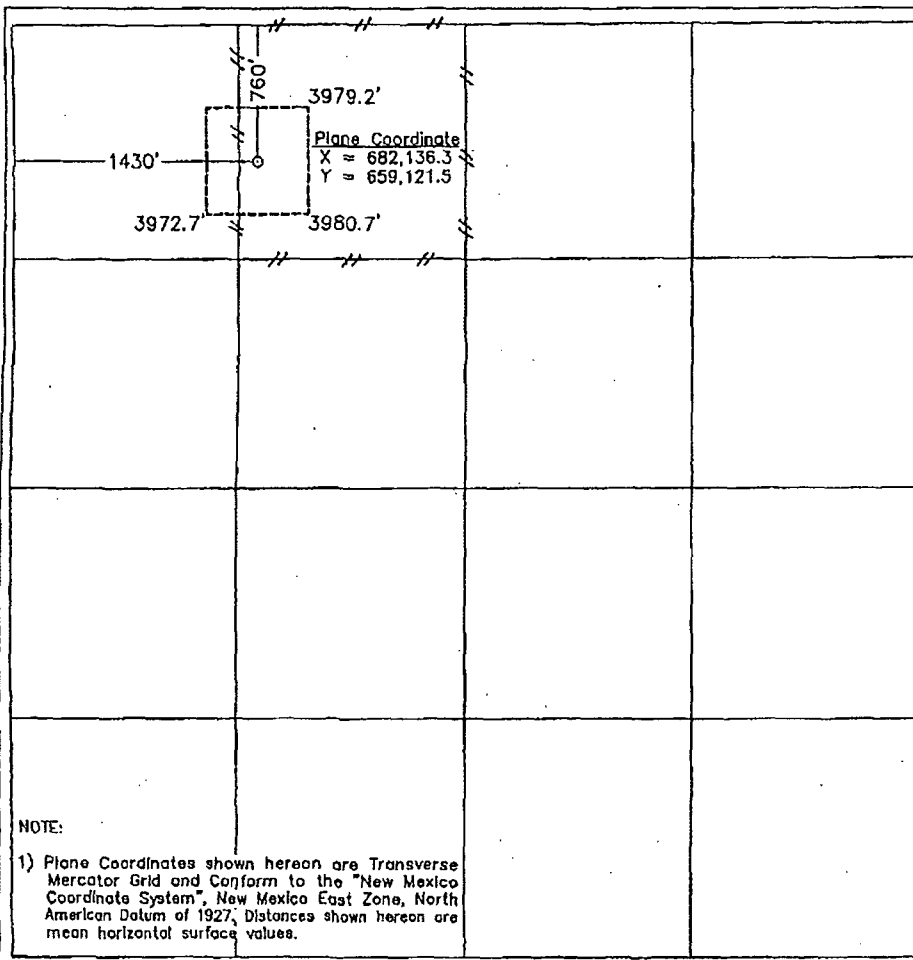
Surface Location

UL or lot No. C	Section 26	Township 17 S	Range 32 E	Lot Idn	Feet from the 760	North/South line NORTH	Feet from the 1430	East/West line WEST	County LEA
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Bottom Hole Location if Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40					Joint or Infill	Consolidation Code	Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

 <p>NOTE: 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this information shall serve as a working interest or 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 is a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Calyn N. Fiske</i> Date: <i>9/24/08</i></p> <p>Printed Name: Calyn N. Fiske</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>September 24, 2008</p> <p>Date of Survey: <i>September 24, 2008</i> LVA</p> <p>Signature & Seal: <i>W.O. McNamee</i> Surveyor</p> <p>NEW MEXICO 12185</p> <p>W.O. McNamee 2008-1113</p> <p>Certificate No. 2185</p>

ch

INJECTION WELL DATA SHEET

OPERATOR: ConocoPhillips Company

WELL NAME & NUMBER: Maljamar Cooperative Agreement (MCA) Unit 449 (New Drill)

API#30-025-39429

WELL LOCATION: 760' N & 1430' W

C

26

17S

32E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12.25"

Casing Size: 8.625"

Cemented with: 300sx Lead & 200sx

or _____ ft³

TailTop of Cement: Surface

Method Determined:

Intermediate Casing

Hole Size:

Casing Size:

Cemented with: SX.

or _____ ft³

Top of Cement:

Method Determined:

Production Casing

Hole Size: 7.875"

Casing Size: 5.5"

Cemented with: 400-500sx Lead &

or _____ ft³

300-400sx Tail

Top of Cement: Surface

Method Determined:

Total Depth: 4323'

Injection Interval

Perforated 3654' feet

to 4444'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875" Lining Material: Internal Plastic Coated (IPC)Type of Packer: 2.375" X 5.5" Weatherford 17# Nickel PlatePacker Setting Depth: 3600'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Grayburg/San Andres

3. Name of Field or Pool (if applicable): Maljamar

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

5. Give the name and depths of any oil and gas zones underlying or overlying the proposed injection zone in this area: Queen; Paddock

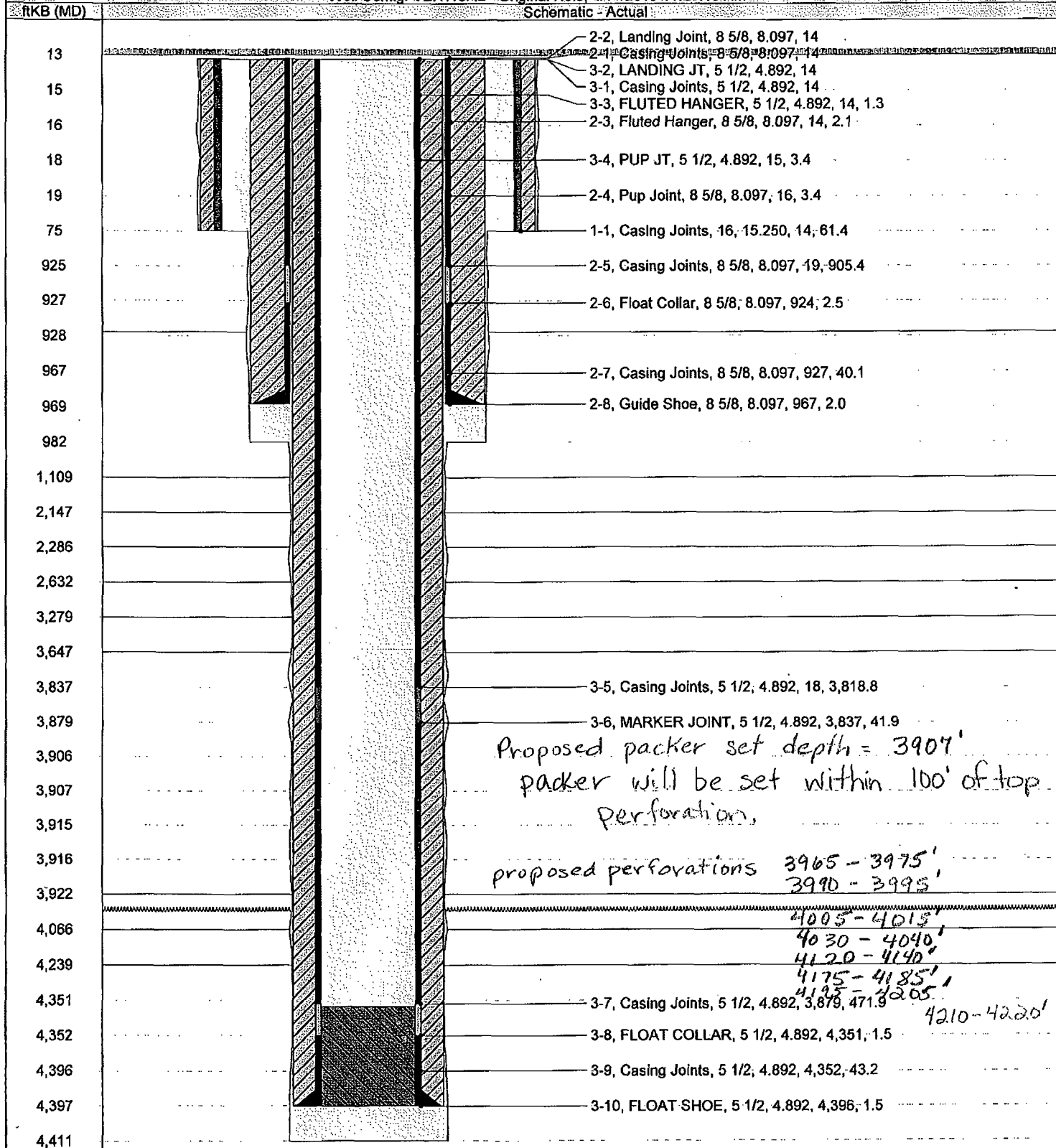


Schematic - Current

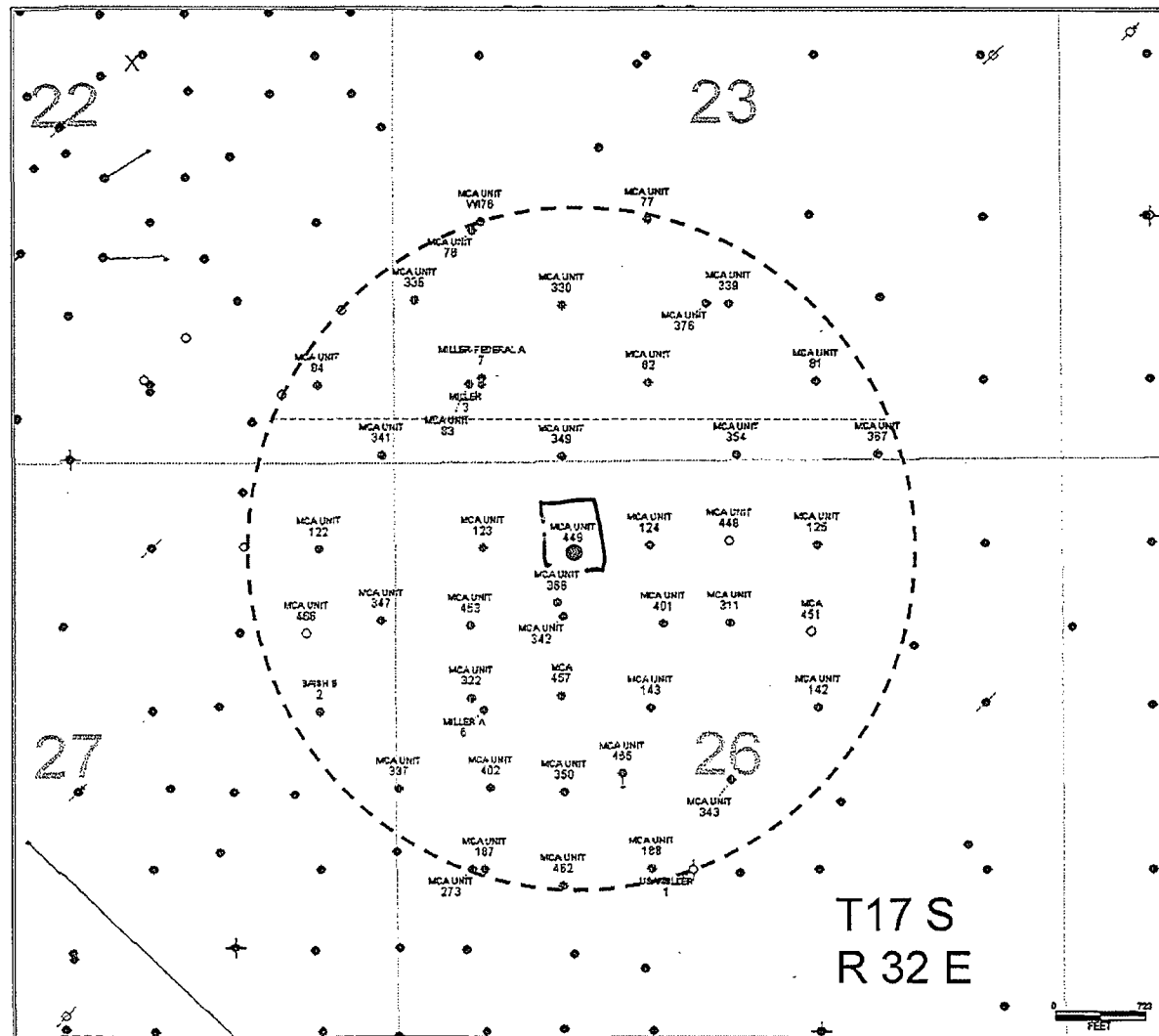
MCA 449

District PERMIAN	Field Name MALJAMAR	API / UWI 3002539429	County LEA	State/Province NEW MEXICO	
Original Spud Date 3/25/2013	Surface Legal Location Section 26, Township 17S, Range 32E	East/West Distance (ft) 1,430.00	East/West Reference FWL	North/South Distance (ft) 760.00	North/South Reference FNL

Well Config: VERTICAL - Original Hole, 4/11/2013 11:29:19 AM



Attachment 1



ConocoPhillips

MCA # 449
Lea County, New Mexico
0.5 Mile Radius Map

Well Symbols

- Location only
- OIL
- ☼ GAS
- ✱ O&G
- ⊕ DRY
- ⊗ INJ
- X ABDNLOC
- ⊗ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

ranch Dr., Hobbs, NM 88240

Grand Avenue, Artesia, NM 88210

DISTRICT III
00 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1820 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Frances 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 39430	Pool Code 4329	Pool Name Maljamar; Grayburg-San Andres
Property Code 31422	Property Name MCA UNIT	Well Number 466
OGRID No. 217817	Operator Name CONOCOPHILLIPS	Elevation 3974'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	27	17 S	32 E		680	NORTH	1210	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>NOTE:</p> <p>1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.</p>	<p>Plane Coordinates X = 679,498.0 Y = 659,191.7</p>	<p>3978.9'</p> <p>3978.1'</p> <p>1210'</p> <p>3969.3'</p> <p>3967.6'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief and that this information either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill the 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.</p> <p><i>Jalyn N. Fiske</i> 9/6/09 Signature Date Jalyn N. Fiske Printed Name</p>
			<p>SURVEYOR CERTIFICATION</p> <p>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.</p>
			<p>September 26, 2008</p> <p>Date of Survey</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>W. O. N...</i> W.O. N... 2008-11-15 Certificate No. 12185</p>
			<p>Ch</p>

INJECTION WELL DATA SHEET

OPERATOR: ConocoPhillips Company

WELL NAME & NUMBER: Majamar Cooperative Agreement (MCA) Unit 466 (New Drill)

API#30-025-39430

WELL LOCATION: 680' N & 1210' E

A

27

17S

32E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12.25"

Casing Size: 8.625"

Cemented with: 300sx Lead & 200sx

or _____ ft³

Tail

Top of Cement: Surface

Method Determined:

Intermediate Casing

Hole Size:

Casing Size:

Cemented with: SX.

or ft³

Top of Cement:

Method Determined:

Production Casing

Hole Size: 7.875"

Casing Size: 5.5"

Cemented with: 400-500sx Lead &

or ft³

300-400sx Tail

Top of Cement: Surface

Method Determined:

Total Depth: 4229'

Injection Interval

Perforated 3555' feet

to 4330'

(Perforated or Open Hole; indicate which).

INJECTION WELL DATA SHEETTubing Size: 2.875" Lining Material: Internal Plastic Coated (IPC)Type of Packer: 2.375" X 5.5" Weatherford 17# Nickel PlatePacker Setting Depth: 3550'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Grayburg/San Andres

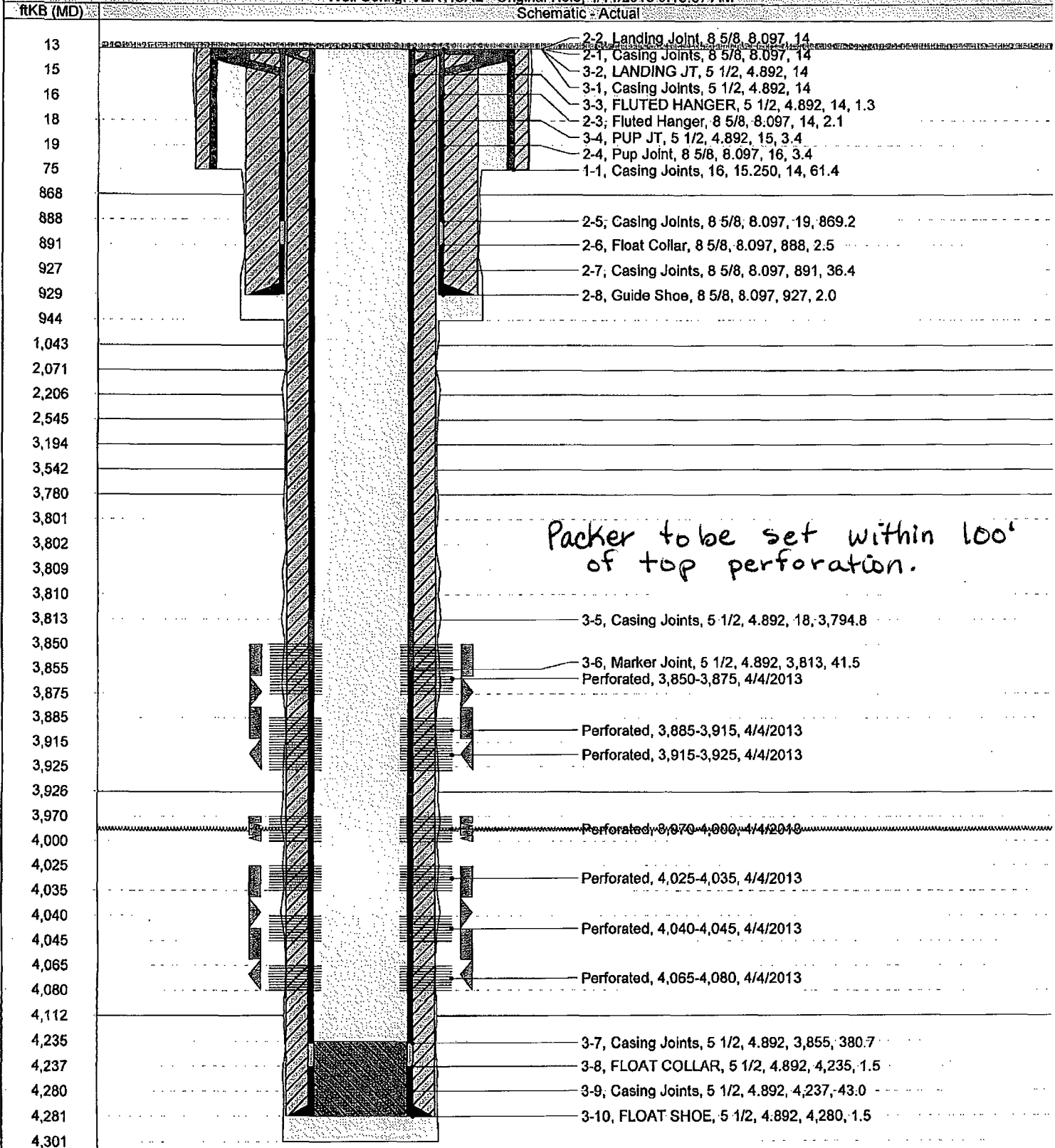
3. Name of Field or Pool (if applicable): Maljamar

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

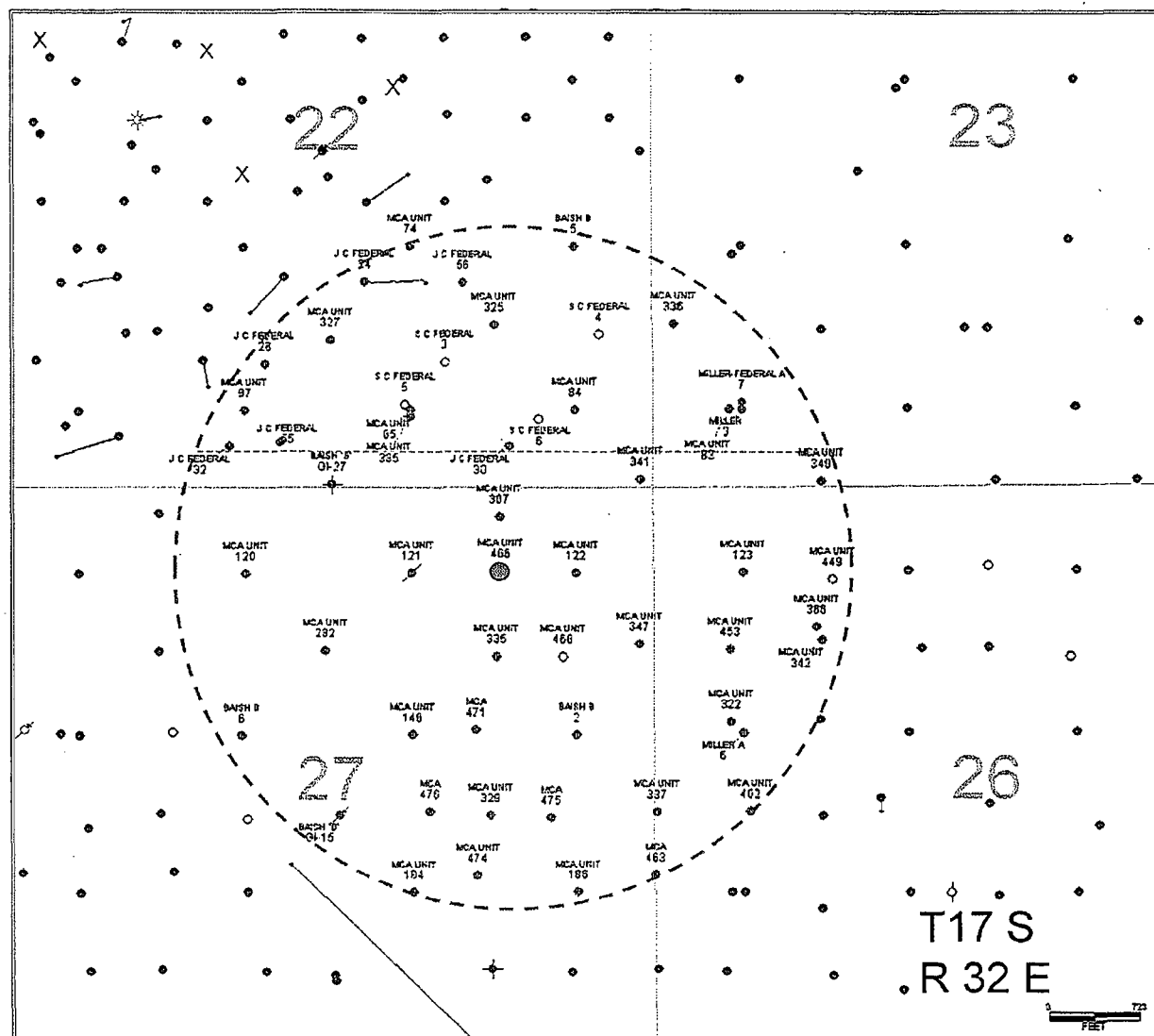
5. Give the name and depths of any oil and gas zones underlying or overlying the proposed injection zone in this area: Queen; Paddock

District PERMIAN	Field Name MALJAMAR	API / UWI 3002539430	County LEA	State/Province NEW MEXICO
Original Spud Date 3/19/2013	Surface Legal Location Section 27, Township 17S, Range 32E	East/West Distance (ft) 1,210.00	East/West Reference FEL	North/South Distance (ft) 680.00
				North/South Reference FNL

Well Config: VERTICAL - Original Hole, 4/11/2013 9:19:57 AM



Attachment 1



ConocoPhillips

MCA # 466
Lea County, New Mexico
0.5 Mile Radius Map

Well Symbols

- Location only
- OIL
- ☼ GAS
- ☼ O&G
- ☼ DRY
- ☼ INJ
- X ABDNLOC
- ☼ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

DISTRICT I
1025 1/2 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

Minerals & Natural Resources Department

RECEIVED

OIL CONSERVATION DIVISION

MAY 27 2009 220 South St. Frances Dr.

HOBBSOCD

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- 3943L	Pool Code 43 329	Pool Name Maljamar; Grayburg-San Andres
Property Code 31422	Property Name MCA UNIT	Well Number 477
OGRID No. 217817	Operator Name CONOCOPHILLIPS	Elevation 3974'

Surface Location

UL or lot No. K	Section 27	Township 17 S	Range 32 E	Lot Idn	Feet from the 2570	North/South line SOUTH	Feet from the 1920	East/West line WEST	County LEA
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Bottom Hole Location If Different From Surface

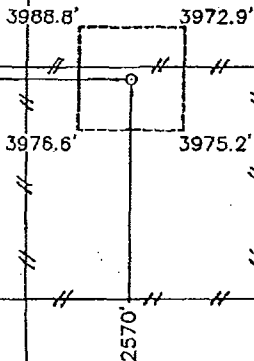
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

NOTE:

- 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927. Distances shown hereon are mean horizontal surface values.

Plane Coordinate
X = 677,366.5
Y = 657,153.6



OPERATOR CERTIFICATION

I hereby certify the information contained herein is true and complete to the best of my knowledge and belief, and that this information either owns a working interest or interest mineral interests 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

Jalyn N. Fiske

Printed Name

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.

October 8, 2008

Date of Survey

Signature & Seal of Professional Surveyor

MACON McDONALD LVA

NEW MEXICO

12185

W.O. Number 2008-11

Certificate No. MACON McDONALD 12185

Ch

INJECTION WELL DATA SHEET

OPERATOR: ConocoPhillips Company

WELL NAME & NUMBER: Maljamar Cooperative Agreement (MCA) Unit 477 (New Drill) API#30-025-39431

WELL LOCATION: 2570' S & 1920' W K 27 17S 32E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12.25"

Casing Size: 8.625"

Cemented with: 300sx Lead & 200sx

or _____ ft³

TailTop of Cement: Surface

Method Determined:

Intermediate Casing

Hole Size: _____

Casing Size: _____

Cemented with: _____ SX

or _____ ft³

Top of Cement: _____

Method Determined: _____

Production Casing

Hole Size: 7.875"

Casing Size: 5.5"

Cemented with: 400-500sx Lead &

or _____ ft³

300-400sx Tail

Top of Cement: Surface

Method Determined:

Total Depth: 4207'

Injection Interval

Perforated 3562' feet to 4295'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875" Lining Material: Internal Plastic Coated (IPC)Type of Packer: 2.375" X 5.5" Weatherford 17# Nickel PlatePacker Setting Depth: 3550'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Grayburg/San Andres

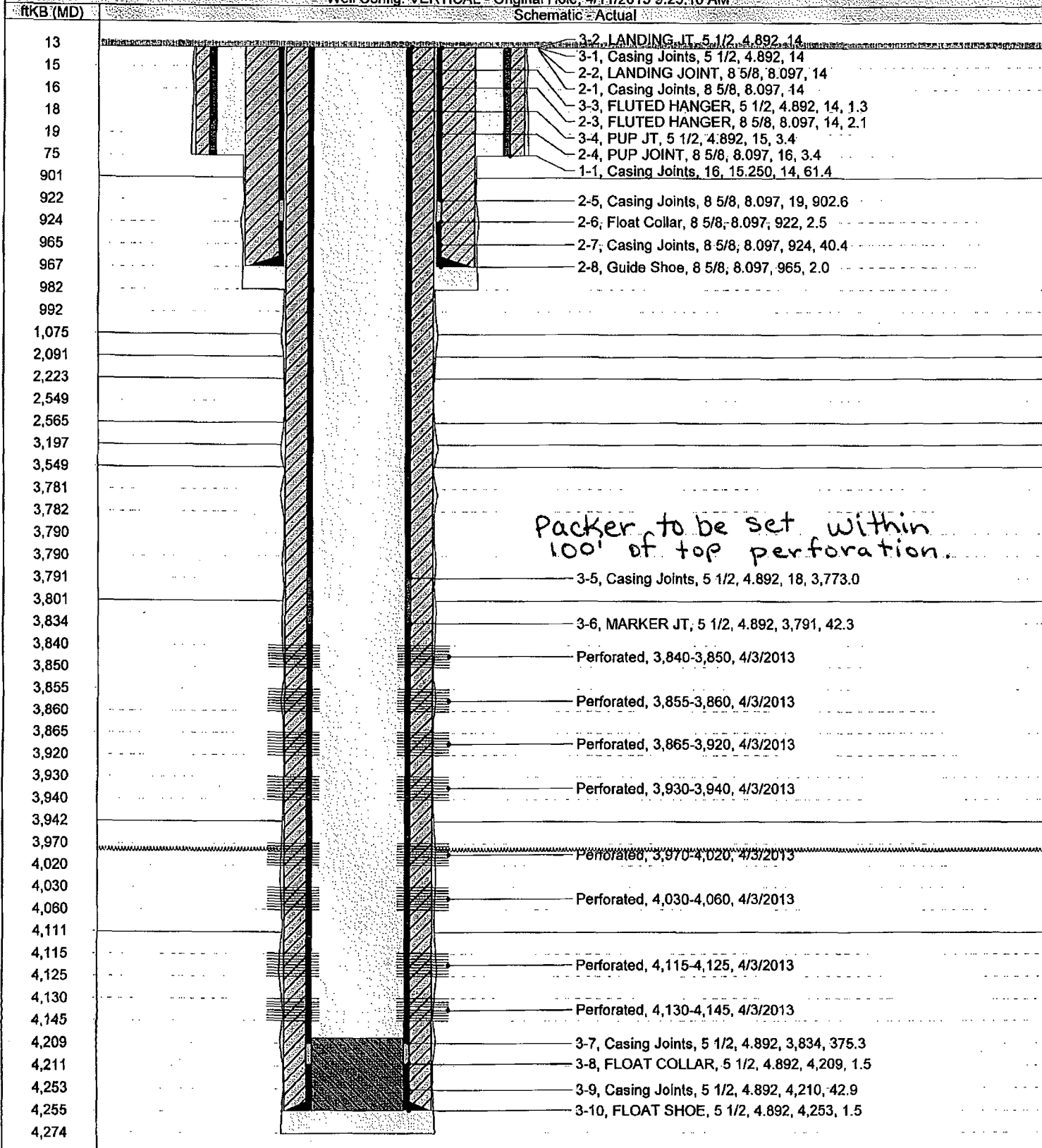
3. Name of Field or Pool (if applicable): Maljamar

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No

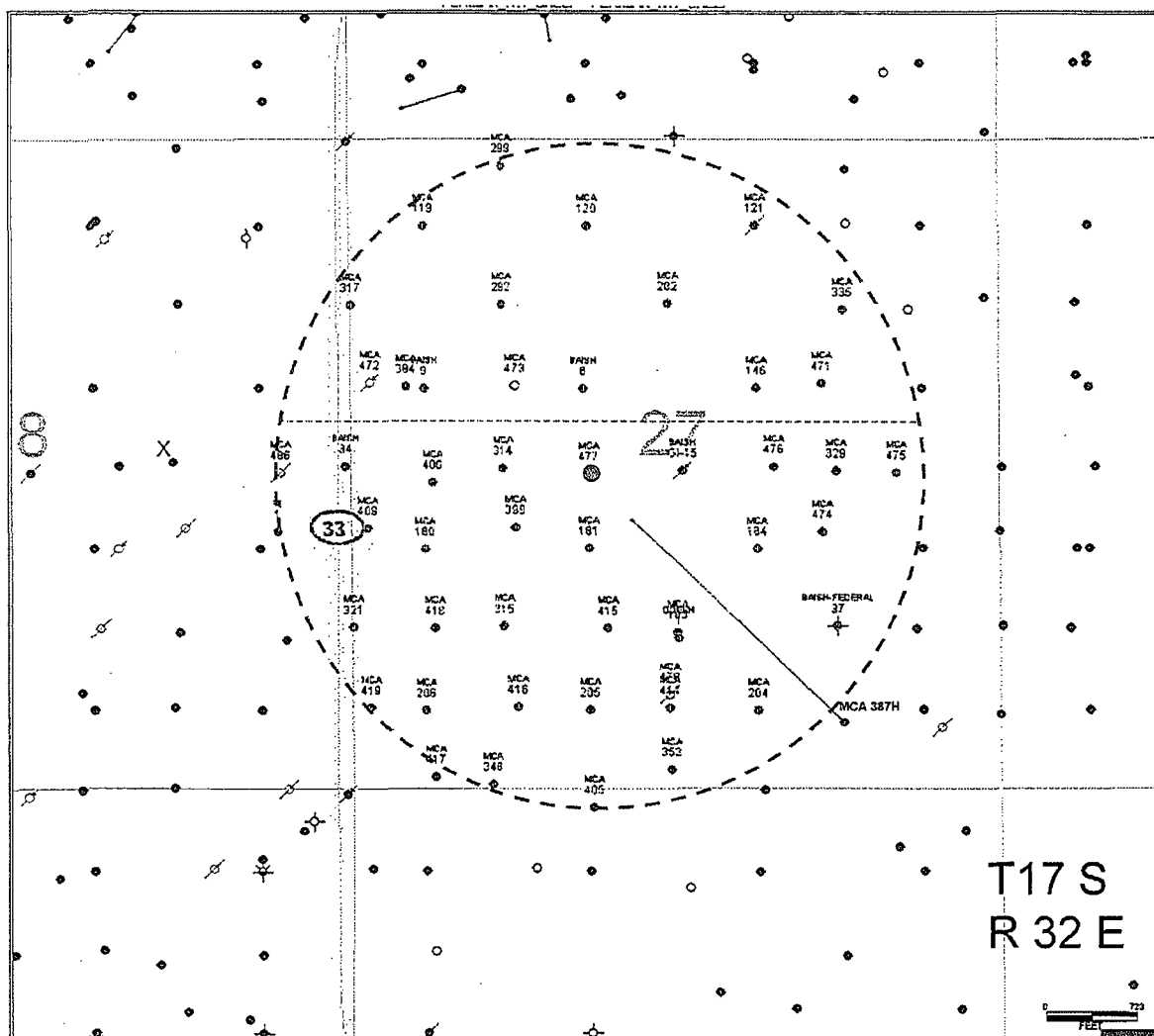
5. Give the name and depths of any oil and gas zones underlying or overlying the proposed injection zone in this area: Queen; Paddock

District PERMIAN	Field Name MALJAMAR	API / UWI 3002539431	County LEA	State/Province NEW MEXICO
Original Spud Date 3/14/2013	Surface Legal Location Section 27, Township 17S, Range 32E	East/West Distance (ft) 1,920.00	East/West Reference FWL	North/South Distance (ft) 2,570.00
				North/South Reference FSL

Well Config: VERTICAL - Original Hole: 4/11/2013 9:25:16 AM



Attachment 1



ConocoPhillips

MCA # 477
Lea County, New Mexico
0.5 Mile Radius Map

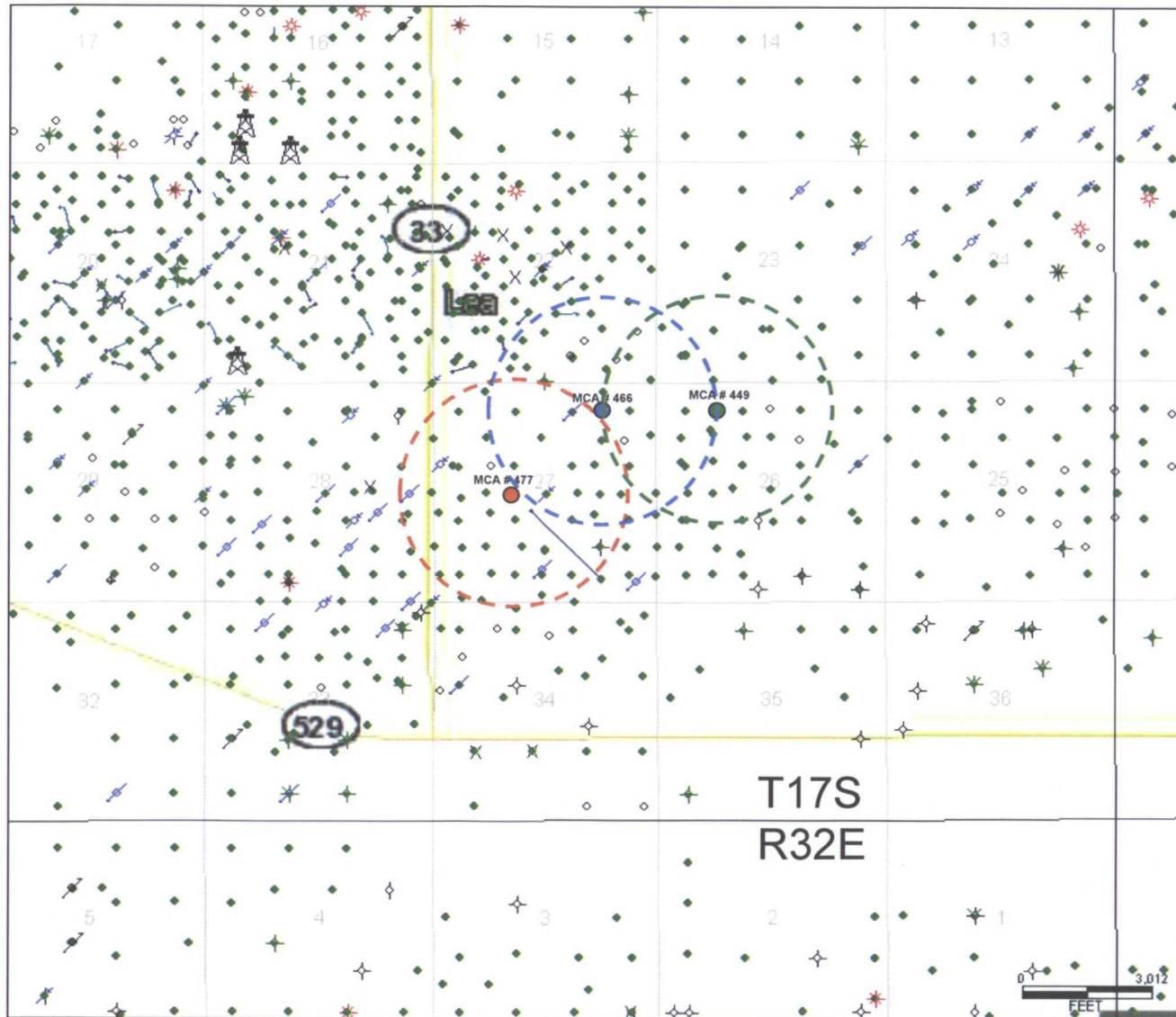
Well Symbols

- Location only
- OIL
- ☆ GAS
- ⊗ O&G
- ⊕ DRY
- ⊗ INJ
- X ABDNLOC
- ⊗ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

Attachment 2



ConocoPhillips

**MCA # 449, # 466, and # 477
Lea County, New Mexico
2 Mile Radius Map**

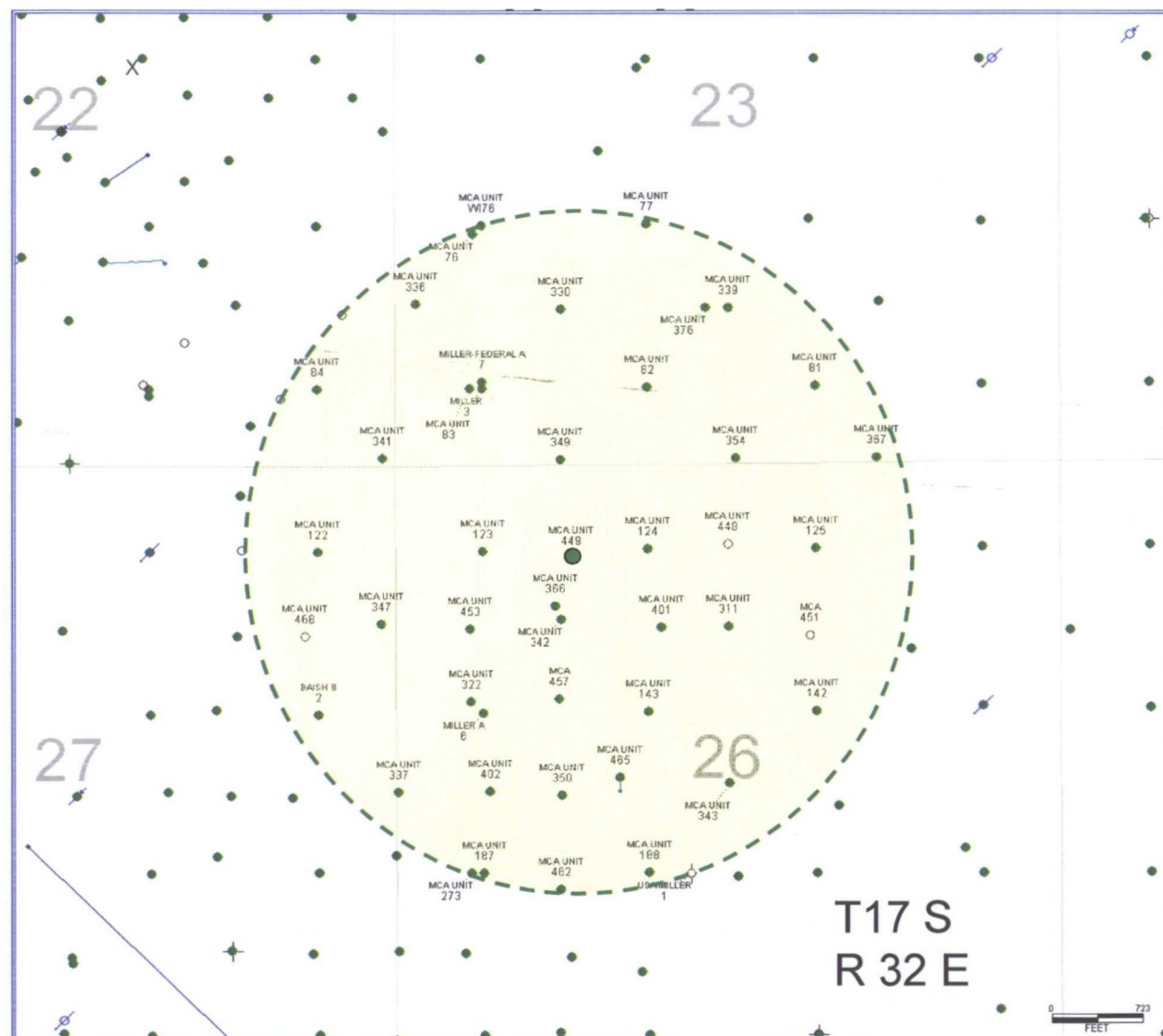
Well Symbols

- Location only
- OIL
- ★ GAS
- ✱ O&G
- ✧ DRY
- ✧ INJ
- X ABDNLOC
- SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

Attachment 3



MCA # 449
Lea County, New Mexico
0.5 Mile Radius Map

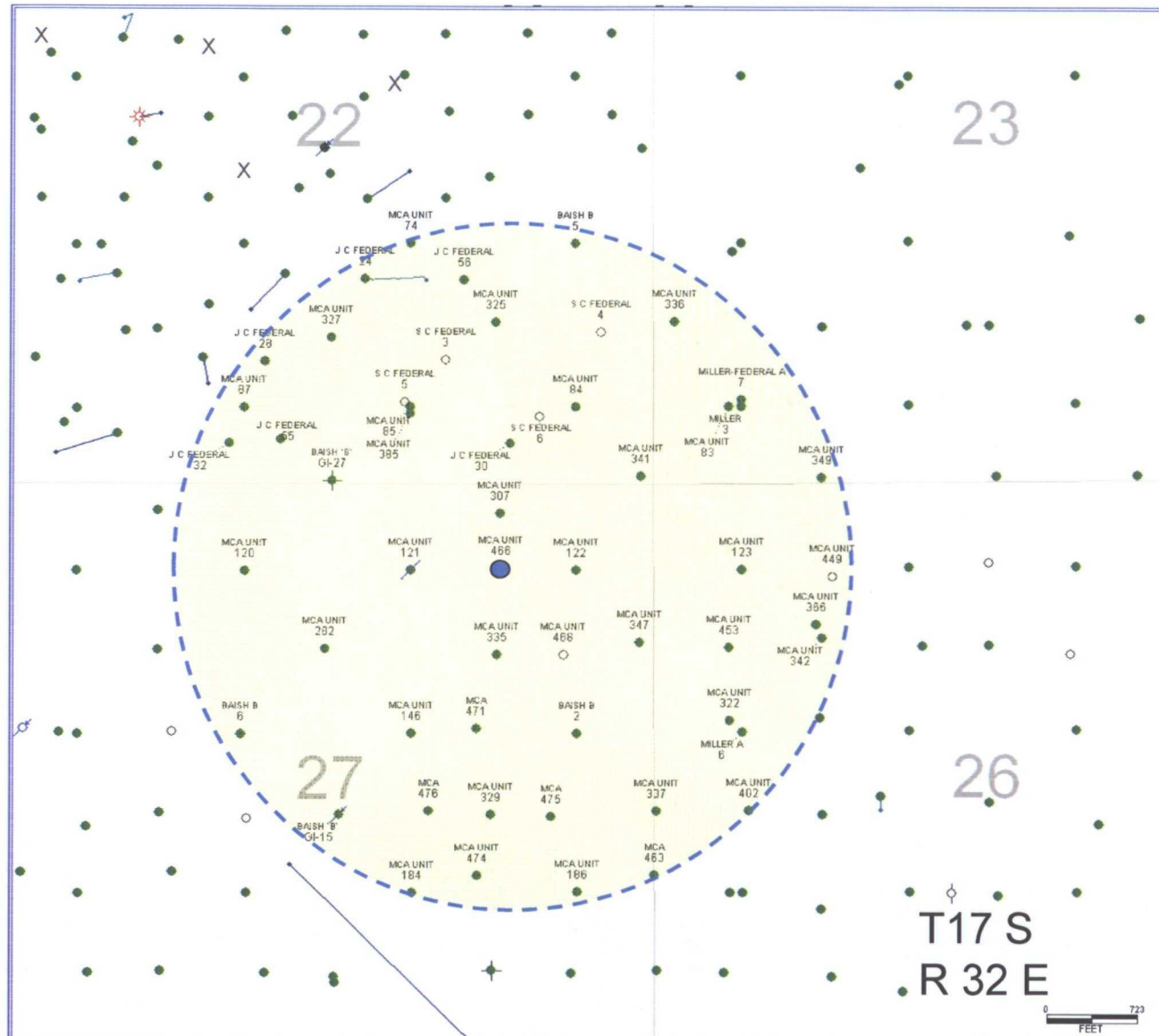
Well Symbols

- Location only
- OIL
- ☀ GAS
- ✱ O&G
- ✧ DRY
- ✎ INJ
- ✕ ABDNLOC
- ☹ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

Attachment 3



ConocoPhillips

**MCA # 466
Lea County, New Mexico
0.5 Mile Radius Map**

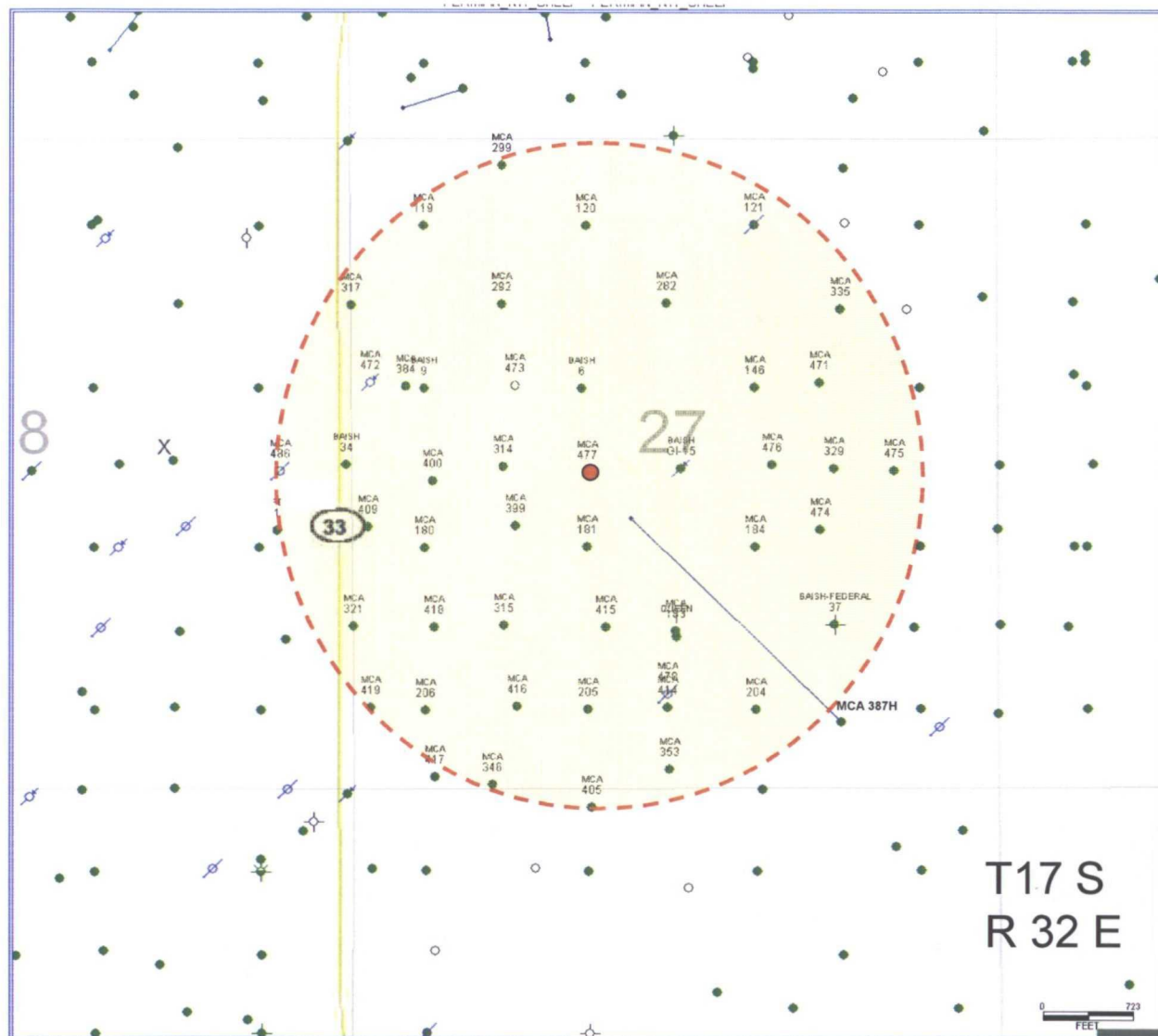
Well Symbols

- Location only
- OIL
- ☀ GAS
- ✱ O&G
- ⊕ DRY
- ⚡ INJ
- X ABDNLOC
- ⊗ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

Attachment 3



ConocoPhillips

MCA # 477
Lea County, New Mexico
0.5 Mile Radius Map

Well Symbols

- Location only
- OIL
- ★ GAS
- ★ O&G
- ⊕ DRY
- ⊗ INJ
- X ABDNLOC
- ⊙ SUS

By: Dewi Larasati - Staff Geologist

October 17, 2012

Attachment 4
MCA Grayburg-San Andres Unit
Tabulation of Well Data

This attachment includes two pages of data for wells within ½ mile radius of proposed injection wells.

Maljamar Cooperative Agreement Unit
List of Wells Within 1/2 Mile of Proposed Injection Wells
February 2013

	API	Lease	Well	Operator	Sec	Twp	Rng	FNL	FSL	FEL	FWL	Spud Date	Driller TD	Status	Surface Casing			Intermediate Casing/Liner			Intermediate Casing/Liner			Production Casing/Liner		
															Size: in.	Depth	TOC	Size: in.	Depth	TOC	Size: in.	Depth	TOC	Size: in.	Depth	TOC
1	30025392800000	S C FEDERAL	3	COG OPERATING LLC	22	17S	32E		1000	1650				Location												
2	30025392570000	S C FEDERAL	4	COG OPERATING LLC	22	17S	32E		1230	420				Location												
3	30025392580000	S C FEDERAL	5	COG OPERATING LLC	22	17S	32E		660	1980				Location												
4	30025392590000	S C FEDERAL	6	COG OPERATING LLC	22	17S	32E		545	900				Location												
5	30025405860000	SC FEDERAL	2	COG OPERATING LLC	22	17S	32E		1650	940				Location												
6	30025405830000	SC FEDERAL	8	COG OPERATING LLC	22	17S	32E		1650	300				Location												
7	30025405960000	SC FEDERAL	9	COG OPERATING LLC	22	17S	32E		1195	800				Location												
8	30025405870000	SC FEDERAL	10	COG OPERATING LLC	22	17S	32E		940	1880				Location												
9	30025405980000	SC FEDERAL	11	COG OPERATING LLC	22	17S	32E		400	255				Location												
10	30025405990000	SC FEDERAL	12	COG OPERATING LLC	22	17S	32E		536	1668				Location												
11	30025406830000	VC FEDERAL	4	COG OPERATING LLC	23	17S	32E		1620		190			Location												
12	30025391650000	J C FEDERAL	24	COG OPERATING LLC	22	17S	32E		1650	1810		11/10/09	7148	OIL	13.375	810	0	8.625	2065	0			5.500	7134	0	
13	30025391660000	J C FEDERAL	28	COG OPERATING LLC	22	17S	32E		990		2090	08/31/09	7123	OIL	13.375	803	0	8.625	2118	0			5.500	7123	0	
14	30025391700000	J C FEDERAL	32	COG OPERATING LLC	22	17S	32E		330		1800	02/07/09	7315	OIL	13.375	811	0	8.625	2222	0			5.500	7312	0	
15	30025398630000	J C FEDERAL	55	COG OPERATING LLC	22	17S	32E		270		1610	01/31/12	7130	OIL	13.375	876	0	8.625	2119	0			5.500	7119	0	
16	30025396270000	J C FEDERAL	56	COG OPERATING LLC	22	17S	32E		1650	1500		03/17/11	7110	OIL	13.375	888	0	8.625	2180	0			5.500	7100	0	
17	30025006570000	MCA UNIT	81	CONTINENTAL OIL CO	23	17S	32E		660	1980		10/19/43	4886	P&A	8.250	1177	0	7.000	3800	0			4.500	3918	0	
18	30025006440000	MCA UNIT	82	CONTINENTAL OIL CO	23	17S	32E		660		1980	12/21/39	4085	P&A	12.500	32	0						5.500	3585	0	
19	30025006490000	MCA UNIT	83	CONTINENTAL OIL CO	23	17S	32E		660		560	08/31/58	4163	Active: OIL	10.750	108	0						7.000	4151	1200	
20	30025006390000	MCA UNIT	84	CONTINENTAL OIL CO	22	17S	32E		660	660		11/07/39	4015	Active: OIL	12.500	20	0	7.000	3554	0	4.500	3775	0	2.750	3476-4087	3476
21	30025006400000	MCA UNIT	85	CONTINENTAL OIL CO	22	17S	32E		660	1980		02/23/40	3997	P&A	12.500	20	0						7.000	3535	0	
22	30025127650001	MCA UNIT	86	CONOCO INCORPORATED	22	17S	32E		25	2615	2615	05/20/71	4100	Active: OIL	8.250	143	0						5.500	4099	2000	
23	30025006260000	MCA UNIT	87	CONTINENTAL OIL CO	22	17S	32E		660		1980	04/24/40	3978	P&A	12.500	50	0	7.000	3606	0	4.500	3777	1800	2.875	3267-4154	3267
24	30025007260000	MCA UNIT	119	CONTINENTAL OIL CO	27	17S	32E	660		660		05/19/40	3994	P&A	12.500	23	0	5.500	3556	2200			4.000	3266-4069	3266	
25	30025007200000	MCA UNIT	120	CONTINENTAL OIL CO	27	17S	32E	660		1980		02/13/40	3955	Active: OIL	12.500	21	0	5.500	3536	2500			4.500	4119	0	
26	30025007150001	MCA UNIT	121	CONTINENTAL OIL CO	27	17S	32E	660		1980		08/11/69	4099	Active: WIW	13.250	21	0	7.000	3542	0	4.500	3765	1000	2.875	3331-4092	3331
27	30025007160000	MCA UNIT	122	CONTINENTAL OIL CO	27	17S	32E	660		660		01/14/39	4001	Active: OIL	12.500	30	0	7.000	2385	0			5.500	3547	845	
28	30025007050000	MCA UNIT	123	CONTINENTAL OIL CO	26	17S	32E	660		1980		08/18/39	4029	Active: WIW	12.000	20	0	5.750	3525	0			4.500	3891	0	
29	30025007080000	MCA UNIT	124	CONTINENTAL OIL CO	26	17S	32E	660		1980		04/18/40	4165	P&A	8.250	1017	0						5.750	3553	2200	
30	30025007000000	MCA UNIT	125	CONTINENTAL OIL CO	26	17S	32E	660		1980		12/24/42	4175	P&A	8.625	1179	0	7.000	3737	2437			4.500	4220	0	
31	30025006990002	MCA UNIT	142	CONOCO INCORPORATED	26	17S	32E	1980		1980		09/27/82	4280	Active: OIL	8.250	985	0	7.000	3636	2500			5.000	4081	0	
32	30025007120000	MCA UNIT	143	CONTINENTAL OIL CO	26	17S	32E	1980		1980		06/18/41	4095	P&A	8.625	21	0	5.500	3564	2690			4.000	3297-3900	3297	
33	30025007110001	MCA UNIT	144	CONTINENTAL OIL CO	26	17S	32E	1980		660		01/01/40	4112	P&A	12.500	20	0						5.500	3536	2500	
34	30025007140001	MCA UNIT	145	CONTINENTAL OIL CO	27	17S	32E	1980		660		01/01/40	4100	Active: WIW	12.500	40	0	7.000	3540	1530	4.500	3818	300	2.750	3298-4148	3298
35	30025007170000	MCA UNIT	146	CONTINENTAL OIL CO	27	17S	32E	1980		1980		10/01/39	3885	Active: OIL	12.500	21	0	5.500	3529	2300			4.500	3201-4105	3201	
36	30025007190001	MCA UNIT	147	CONTINENTAL OIL CO	27	17S	32E	1980			1940	05/19/42	4100	P&A	12.500	20	0	5.500	3543	2100			4.000	3337-4149	3337	
37	30025007220002	MCA UNIT	148	CONTINENTAL OIL CO	27	17S	32E	1980			660	07/29/69	4140	P&A	12.500	20	0						5.500	3543	2500	
38	30025127920000	MCA UNIT	149	KEWANEE OIL CO	27	17S	32E	2600			25	01/01/47	4100	Active: OIL	8.625	1020	0	7.000	3826	2000			5.500	3328-4200	3328	
39	30025007280000	MCA UNIT	180	CONTINENTAL OIL CO	27	17S	32E		1980		660	07/16/40	4170	Active: WIW	8.625	288	0	5.500	3539	2000			4.500	3822	300	
40	30025007240000	MCA UNIT	181	CONTINENTAL OIL CO	27	17S	32E		1980		1980	04/20/40	4011	Active: OIL	12.500	21	0	5.500	3582	1609			4.500	4181	0	
41	30025127930001	MCA UNIT	182	CONOCO INCORPORATED	27	17S	32E		2615	2570		12/20/69	4070	P&A	8.625	1085	0	7.000	3862	0			5.500	3564-4100	3900	
42	30025007300000	MCA UNIT	183	CONTINENTAL OIL CO	27	17S	32E		1295	2615		12/11/47	4205	Active: OIL	8.625	1132	0	7.000	3733	3000			5.500	3000-3745	3000	
43	30025007180000	MCA UNIT	184	CONTINENTAL OIL CO	27	17S	32E		1980	1980		12/12/39	4009	Active: WIW	12.500	20	0	5.500	3565	0	4.500	3835	296	2.875	3375-4165	3375
44	30025007320002	MCA UNIT	185	CONTINENTAL OIL CO	27	17S	32E	1345	1345			09/02/69	4274	Active: OIL	8.625	66	0						5.500	4265	0	
45	30025007090001	MCA UNIT	188	CONTINENTAL OIL CO	26	17S	32E		1980		1980	01/01/69	4311	P&A	8.000	21	0						5.500	3482	2300	
46	30025007230000	MCA UNIT	204	CONTINENTAL OIL CO	27	17S	32E		660	1980		05/19/40	4132	Active: OIL	12.500	30	0	5.500	3593	2802			4.500	3348-4329	3348	
47	30025007270000	MCA UNIT	205	CONTINENTAL OIL CO	27	17S	32E		660		1980	10/18/40	4195	P&A	8.625	307	0	5.500	3510	0			4.000	4195	0	
48	30025007290000	MCA UNIT	206	CONTINENTAL OIL CO	27	17S	32E		660		660	09/18/40	4002	Active: OIL	8.625	294	0	5.500	3562	2000			4.500	3615	0	
49	30025239460000	MCA UNIT	282	CONTINENTAL OIL CO	27	17S	32E	1295		2615		08/04/71	4185	Active: OIL	8.625	900	0						5.500	4185	2100	
50	30025239200000	MCA UNIT	292	CONTINENTAL OIL CO	27	17S	32E	1295		1295		11/06/71	4200	P&A	8.625	916										

Maljamar Cooperative Agreement Unit
List of Wells Within 1/2 Mile of Proposed Injection Wells
February 2013

60	30025242740000	MCA UNIT	327	CONTINENTAL OIL CO	22	17S	32E		1225	2615		11/14/72	4200	Active: OIL	8.625	850	0									5.500	4200	1770
61	30025242750000	MCA UNIT	329	CONTINENTAL OIL CO	27	17S	32E		2615	1345		11/06/72	4215	Active: OIL	8.625	940	0									5.500	4215	2300
62	30025242710000	MCA UNIT	330	CONTINENTAL OIL CO	23	17S	32E		1295		1295	10/22/72	4200	Active: OIL	8.625	928	0									5.500	4200	2100
63	30025243690000	MCA UNIT	335	CONTINENTAL OIL CO	27	17S	32E	1345		1296		02/13/73	4136	Active: OIL	8.625	893	0									5.500	4136	2100
64	30025243700000	MCA UNIT	336	CONTINENTAL OIL CO	23	17S	32E		1345		125	02/22/73	4200	P&A	8.625	904	0									5.500	4200	0
65	30025243750000	MCA UNIT	337	CONTINENTAL OIL CO	27	17S	32E	2615		25		03/02/73	4280	Active: OIL	8.625	900	0									5.500	4200	2300
66	30025243770000	MCA UNIT	339	CONTINENTAL OIL CO	23	17S	32E		1296		2615	03/18/73	4225	P&A	8.625	970	0									5.500	4225	0
67	30025244620000	MCA UNIT	341	CONTINENTAL OIL CO	22	17S	32E		100	150		07/17/73	4150	Active: OIL	8.625	846	0									5.500	4150	2300
68	30025244630000	MCA UNIT	342	CONTINENTAL OIL CO	26	17S	32E	1226			1295	07/26/73	4240	P&A	8.625	927	0									5.500	4240	2250
69	30025244830000	MCA UNIT	343	CONTINENTAL OIL CO	26	17S	32E	2565			2615	08/04/73	4375	Active: OIL	8.625	930	0									5.500	4375	3106
70	30025245130000	MCA UNIT	346	CONTINENTAL OIL CO	27	17S	32E		55		1200	06/07/73	4425	Active: OIL	8.625	1010	0									5.500	4425	2525
71	30025245150000	MCA UNIT	347	CONTINENTAL OIL CO	27	17S	32E	1245		160		09/16/73	4175	Active: OIL	8.625	916	0									5.500	4175	2350
72	30025245450000	MCA UNIT	349	CONTINENTAL OIL CO	23	17S	32E		75		1295	10/04/73	4250	Active: OIL	8.625	880	0									5.500	4250	2903
73	30025245460000	MCA UNIT	350	CONTINENTAL OIL CO	26	17S	32E		2615		1295	10/13/73	4350	P&A	8.625	920	0									5.500	4350	2500
74	30025245830000	MCA UNIT	353	CONTINENTAL OIL CO	27	17S	32E		175		2615	11/08/73	4350	Active: OIL	8.625	980	0									5.500	4350	2440
75	30025245990000	MCA UNIT	354	CONTINENTAL OIL CO	23	17S	32E		75	2615		11/24/73	4275	Active: OIL	8.625	963	0									5.500	4275	2500
76	30025294270000	MCA UNIT	366	CONOCO INCORPORATED	26	17S	32E	1117			1245	10/23/85	4260	Active: OIL	13.375	827	0	8.625	2406	0						5.500	4260	0
77	30025298550000	MCA UNIT	367	CONOCO INCORPORATED	23	17S	32E		75	1495		03/27/87	4353	Active: OIL	13.375	397	0	8.625	2363	0	7.000	2033-3800	2033			5.500	4353	0
78	30025301270000	MCA UNIT	376	CONOCO INCORPORATED	23	17S	32E		1300		2440	11/07/87	4350	Active: OIL	13.375	860	0	8.625	2136	0						5.500	4350	2250
79	30025007450001	MCA UNIT	382	CONOCO INCORPORATED	28	17S	32E		2120	519		07/25/88	9680	Active: OIL	13.375	360	0									8.625	4576	40
80	30025304910000	MCA UNIT	384	CONOCO INCORPORATED	27	17S	32E	1963			511	07/21/89	4200	Active: OIL	9.625	906	0									5.500	4200	0
81	30025307310000	MCA UNIT	385	CONOCO INCORPORATED	22	17S	32E		610	1980		12/09/89	4420	P&A	9.625	915	0									5.500	4420	0
82	30025351420000	MCA UNIT	387	CONOCO INCORPORATED	27	17S	32E		2197		2255	06/06/00	3988	P&A	11.750	1037	0	8.625	2187	0						5.500	3944	0
83	30025389720000	MCA UNIT	399	CONOCOPHILLIPS CO	27	17S	32E		2130		1330	12/05/08	4348	Active: WIW	8.625	959	0									5.500	4338	0
84	30025389730000	MCA UNIT	400	CONOCOPHILLIPS CO	27	17S	32E		2505		660	11/30/08	4285	Active: OIL	8.625	960	0									5.500	4275	0
85	30025389740000	MCA UNIT	401	CONOCOPHILLIPS CO	26	17S	32E	1330			2134	03/06/09	4417	Active: OIL	8.625	1017	0									5.500	4407	0
86	30025388560000	MCA UNIT	402	CONOCOPHILLIPS CO	26	17S	32E		2630		781	06/05/06	4477	Active: OIL	8.625	975	0									5.500	4466	0
87	30025389780000	MCA UNIT	409	CONOCOPHILLIPS CO	27	17S	32E		2130		130	11/23/06	4320	Active: OIL	8.625	960	0									5.500	4310	0
88	30025389820000	MCA UNIT	414	CONOCOPHILLIPS CO	27	17S	32E		660	2630		01/04/09	4510	Active: WIW	8.625	1025	0									5.500	4449	0
89	30025389830000	MCA UNIT	415	CONOCOPHILLIPS CO	27	17S	32E		1310		2055	01/09/09	4412	Active: OIL	8.625	1029	0									5.500	4402	0
90	30025389840000	MCA UNIT	416	CONOCOPHILLIPS CO	27	17S	32E		660		1330	06/02/08	4465	Active: OIL	8.625	1014	0									5.500	4455	0
91	30025389860000	MCA UNIT	418	CONOCOPHILLIPS CO	27	17S	32E		1310		660	12/15/08	4380	Active: WIW	8.625	970	0									5.500	4364	0
92	30025389870000	MCA UNIT	419	CONOCOPHILLIPS CO	27	17S	32E		660		145	12/23/08	4375	Active: WIW	8.625	1007	0									5.500	4360	0
93	30025389806000	MCA UNIT	453	CONOCOPHILLIPS CO	26	17S	32E	1330			610	03/27/09	4407	Active: WIW	8.625	1004	0									5.500	4385	0
94	30025393140000	MCA UNIT	457	CONOCOPHILLIPS CO	26	17S	32E	1905			1330	05/16/09	4454	Active: OIL	8.625	1000	0									5.500	4444	0
95	30025393240000	MCA UNIT	465	CONOCOPHILLIPS CO	26	17S	32E		2630		1805	03/12/09	4480	Active: OIL	8.625	1008	0									5.500	4454	0
96	30025393460000	MCA UNIT	471	CONOCOPHILLIPS CO	27	17S	32E	1980		1410		10/02/10	4260	Active: OIL	8.625	938	0									5.500	4247	0
97	30025394090000	MCA UNIT	472	CONOCOPHILLIPS CO	27	17S	32E	1980			180	06/16/10	4180	Active: WIW	8.625	944	0									5.500	4164	0
98	30025393200000	MCA UNIT	474	CONOCOPHILLIPS CO	27	17S	32E		2100	1180		05/21/09	4390	Active: OIL	8.625	1010	0									5.500	4379	0
99	30025393490000	MCA UNIT	475	CONOCOPHILLIPS CO	27	17S	32E		2580	810		04/03/09	4405	Active: WIW	8.625	1000	0									5.500	4400	0
100	30025393500000	MCA UNIT	476	CONOCOPHILLIPS CO	27	17S	32E		2630	2180		06/25/10	4270	Active: OIL	8.625	942	0									5.500	4254	0
101	30025393550000	MCA UNIT	486	CONOCOPHILLIPS CO	28	17S	32E		2580	580		09/27/09	4206	Active: WIW	8.625	917	0									5.500	4194	0
102	30025006430000	MILLER	3	WILLIAMS&COCKBURN	23	17S	32E		660		680	05/21/36	3900	P&A	8.000	880	0	6.625	2550	0						4.000	2406-3950	2406
103	30025006460000	MILLER-FEDERAL	7	KEWANEE OIL CO	23	17S	32E		710		660	10/14/40	4035	P&A	8.625	1123	0									5.500	1480-4035	NA
104	30025007310000	QUEEN B	1	CONTINENTAL OIL CO	27	17S	32E		1249	2608		06/02/48	3357	P&A	8.625	1128	0									5.500	3240	0

P&A: 27

WIW: 13

Oil: 47-Maljamar G-SA-Pool

5-Maljamar-Yeso
(27100 ft)

Attachment 5
MCA Grayburg-San Andres Unit
Well Schematics of Plugged and Abandoned Wells

Well bore diagrams for plugged and abandoned wells included in this submittal are listed below.

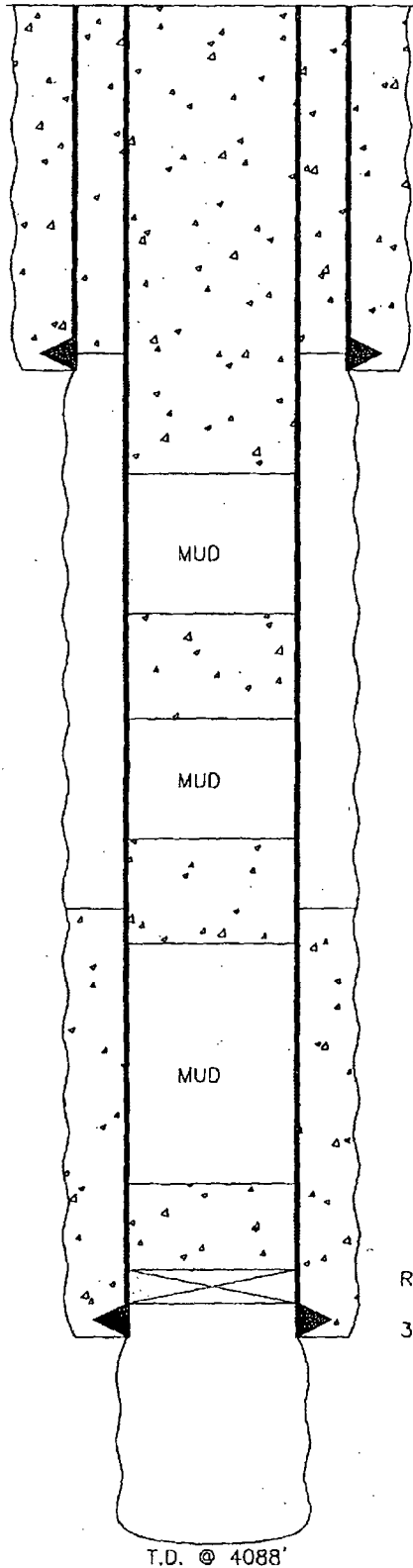
Well Name and Number	API Number
MCA Unit 49	30-025-08056
MCA Unit 81	30-025-00657
MCA Unit 82	30-025-00644
MCA Unit 85	30-025-00640
MCA Unit 87	30-025-00626
MCA Unit 119	30-025-00726
MCA Unit 124	30-025-00706
MCA Unit 125	30-025-00700
MCA Unit 143	30-025-00712
MCA Unit 144	30-025-00711
MCA Unit 147	30-025-00719
MCA Unit 148	30-025-00722
MCA Unit 182	30-025-12793
MCA Unit 188	30-025-00709
MCA Unit 205	30-025-00727
MCA Unit 292	30-025-23920
MCA Unit 307	30-025-24058
MCA Unit 311	30-025-24101
MCA Unit 315	30-025-24128
MCA Unit 336	30-025-24370
MCA Unit 339	30-025-24377
MCA Unit 342	30-025-24463
MCA Unit 350	30-025-24546
MCA Unit 385	30-025-30731
MCA Unit 387	30-025-35142
Miller Federal A-7	30-025-00645
Miller #3	30-025-00643

27 wells

PROPOSED P & A

1/29/96

Elev. = 4008'



SPOT 10 SXS SURFACE PLUG

FILL 12 1/2" SURFACE CASING

20' ~ 12 1/2" Casing. Cemented w/25 sxs.

MUD

SPOT 20 SXS 880'-1000'

MUD

T.O.C. @ 2000' (Est.)

SPOT 20 SXS 1930'-2050'

MUD

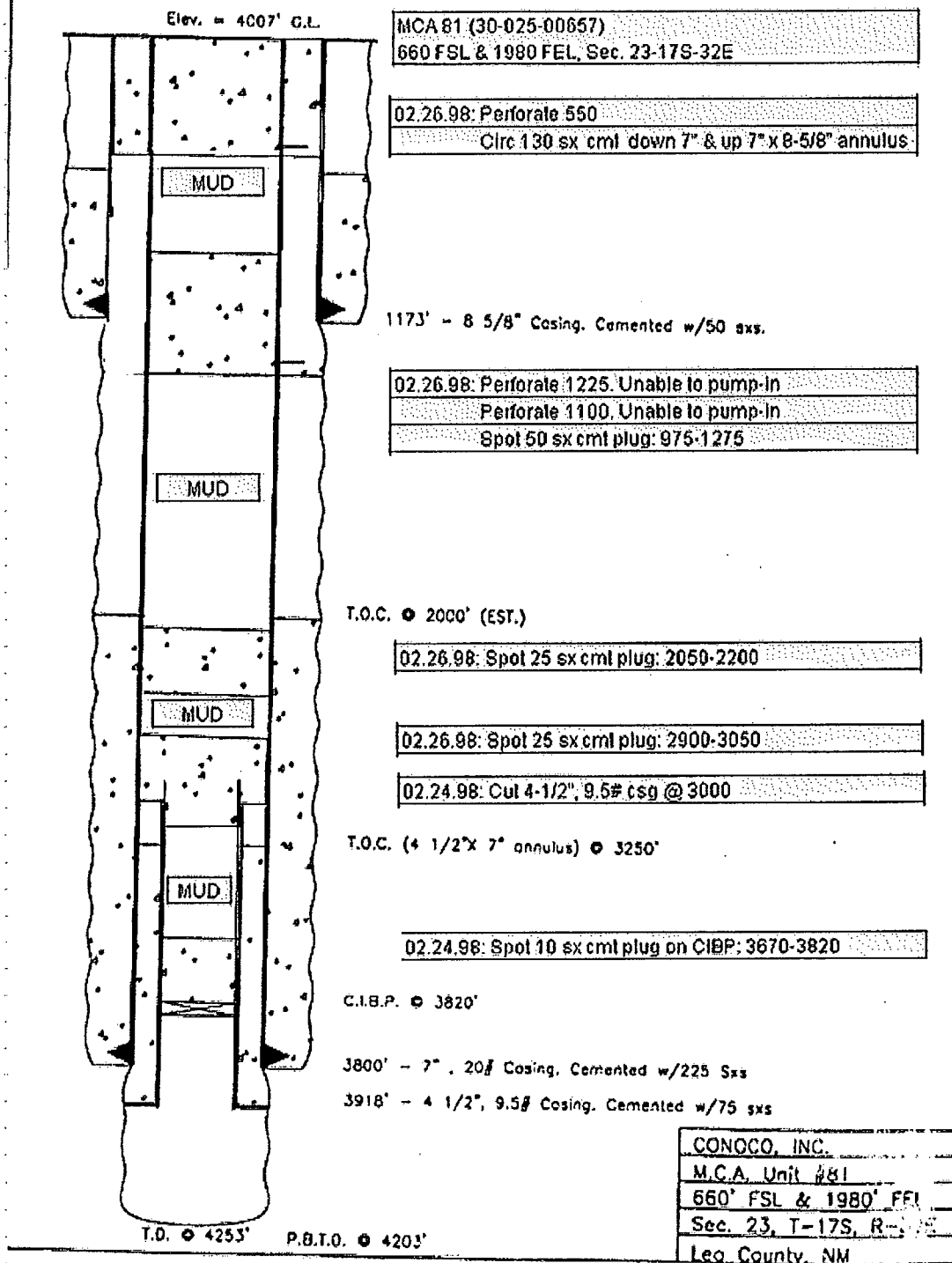
SPOT 20 SXS ON TOP OF R.B.P. @ 3501'

R.B.P. @ 3501'

3598' - 7", 22#, Casing. Cemented w/500 sxs

T.D. @ 4088'

CONOCO, INC.
M.C.A. Unit #49
1980' FNL & FEL
Sec. 20, T-17S, R-32E
Lea County, NM



PLUGGED WELLBORE SKETCH ConocoPhillips Company - Permian Basin Business Unit

Date: 20-Sep-04

HKB @ 3988'
DF @ 3987'
GL @ 3981'

12-1/2" 32# SS @ 21' w/75 sk
25 sk C cmt squeezed 60' - surface
Csg leak 62'-120' sqzd w/150 sacks
Cmt sqt 66'-102' w/400 sk

60 sk C cmt 838 - 266' TAGGED

35 sk C cmt squeezed under packer
2,015 - 1,007' TAGGED

TOC @ 2,061' By Calc

25 sk C cmt on existing CCR, 3,350 - 3,109'
Cement Retainer @ 3350' (12/94)

5-1/2" 14# SS CO @ 3565' w/200 sk

4-3/4" Open Hole

On 3545' - 4160'

PBTD 3350'
OTD 4050'
NID 4160'

Subarea: Matamor
Lease & Well No.: MCA Unit No. 82
Legal Description: 600 F&L & 1980 F&L, Sec. 23, T-17-S, R-32-E
County: Lea State: New Mexico
Field: Matamor (GB/SA)
Date Spudded: December 31, 1939 IFF:
API Number: 30-025-00844
Status: PLUGGED 09/06/04
Drilled as Miller-A No. 5

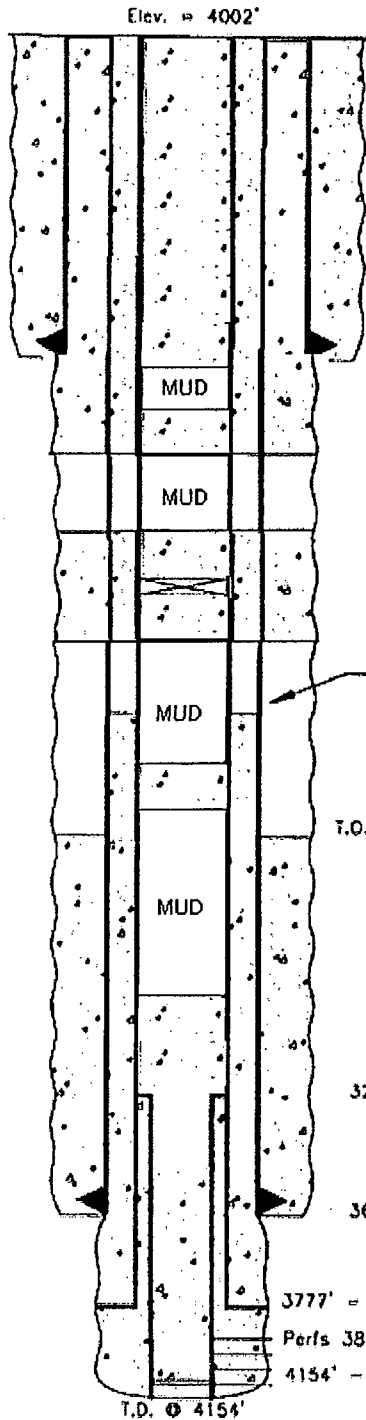
8/22/47 Deepen from 4063' to 4146'
5/15/56 Cement plug 4058-4110 w/40 sk
5/17/58 Cmt 30 sk 4098
5/19/58 Cmt 40 sk 4083; TOC 4043
6/20/59 CO and deepen 4-3/4" hole 4146-4160'
6/23/59 Convert to water injection, Baker AD-1 @ 3562'
Inject 750 BWPD @ 1300 psi
2/28/65 Cmt squeeze 66'-102' w/400 sk, run PC log
7/20/69 Casing leak 62' - 120' squeezed w/150 sacks
Set cement retainer @ 3350', circ pkr bld, press up to 700#
on csg, no leaks.
TEMPORARILY ABANDON
6/16/04 Recommend evaluating Queen for uphole potential or
plug and abandonment. Sundry Notice expires 12/31/04.

ACTUAL PLUGGING PROCEDURE

- 1) 25 sk C cmt on existing CCR, 3,350 - 3,109'
- 2) 35 sk C cmt squeezed under packer 2,015 - 1,007' TAGGED
- 3) 60 sk C cmt 838 - 266' TAGGED
- 4) 25 sk C cmt squeezed 60' - surface

	MCA 85 (API: 32-025-00640)	
	750 F&L & 1978 FEL (re-surveyed 2009), Sec. 22-17S-32E	
	12-1/2" csg @ 20. Cmt w/ 20 sx	
	12-1/2" csg @ 20. Cmt w/ 20 sx	
	08.22.89: Pump 236 sx cmt plug.: surface-1512 Closed 7" csg valve. Sq 89 sx behind 7" (8" drl hole) @ 600# (7" csg leak intervals: 30-90 & 1326-1390)	
	TOC (7") : 2600 (CBL)	
	08.22.89: Spot 200 sx cmt plug: 3002 (tagged)-3824	
	4-1/2", 9.5# csg: 3504-3526	
	4-12" x 7" Larkin Hookwall csg PKR @ 3526	
	7", 20# csg @ 3535. Cmt w/ 400 sx. TOC: 2600 (CBL)	
	TD 4093	

Well Bore Schematic
MCA Unit #87



04.18.01: Spot 5 sx cmt plug: surface-60

53' = 12 3/4" Casing. Cemented w/25sxs.

04.17.01: Perforate @ 300'

Sq beneath PKR w/125 sx.

Tag cmt @ 170.

04.17.01: Perforate @ 900.

Sq beneath cmt retainer @ 793 w/30 sx.

Spot 10 sx cmt plug: 648-793

T.O.C. @ 1800'

04.17.01: Spot 25 sx cmt plug: 2904-3267

T.O.C. @ 2500'

04.16.01: Sq beneath PKR w/70 sx

Displace to 3420. ISIP: 2500#.

3275' = Top of 3" Fiberglass Liner

3606' = 7", 20#, Casing. Cemented w/250 sxs

3777' = 4 1/2", 9.5#, CEMENTED W/275 SXS

Perfs 3830'-4110'

4154' = 3" Fiberglass Liner
Cemented with 140 sxs
Shoe squeezed with 100 sxs

T.D. @ 4154'

CONOCO, INC.

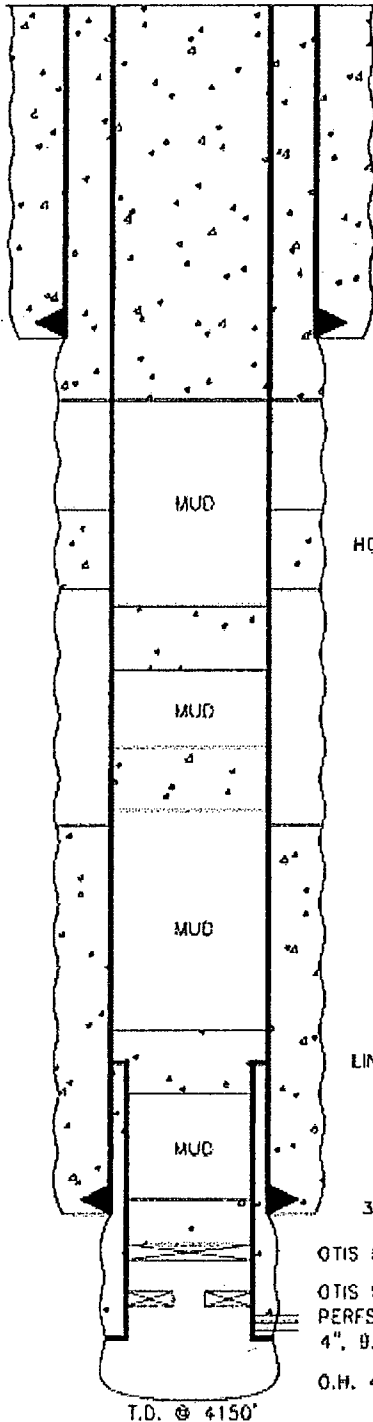
MCA Unit #87

660' FSL & 1980' FWL

Sec. 22, T-17S, R-32E

Lea County, NM

Elev. = 4033'



FILL 12 1/2" FROM TOP

23' - 12 1/2" Casing. Cemented w/25 sxs.

08.06.96: Spot 10 sx cmt plug: surface-100

HOLE IN CASING @900' SQZ'D W/65 SXS

08.06.96: Spot 30 sx cmt plug: 850-1150

08.06.96: Spot 30 sx cmt plug: 1850-2250

T.O.C. @ 2260'

08.06.96: Spot 35 sx cmt plug: 3200-3700

LINER TOP SQZ'D W/550 SXS

3556' - 5 1/2", 14#, Casing. Cemented w/200 sxs

OTIS PAKER W/PLUG @ 3706'

OTIS PAKER @ 3760'

PERFS 3845'-4039'

4", 9.5#, LINER 3268'-4089', CEMENTED W/400 SXS

O.H. 4094'-4150'

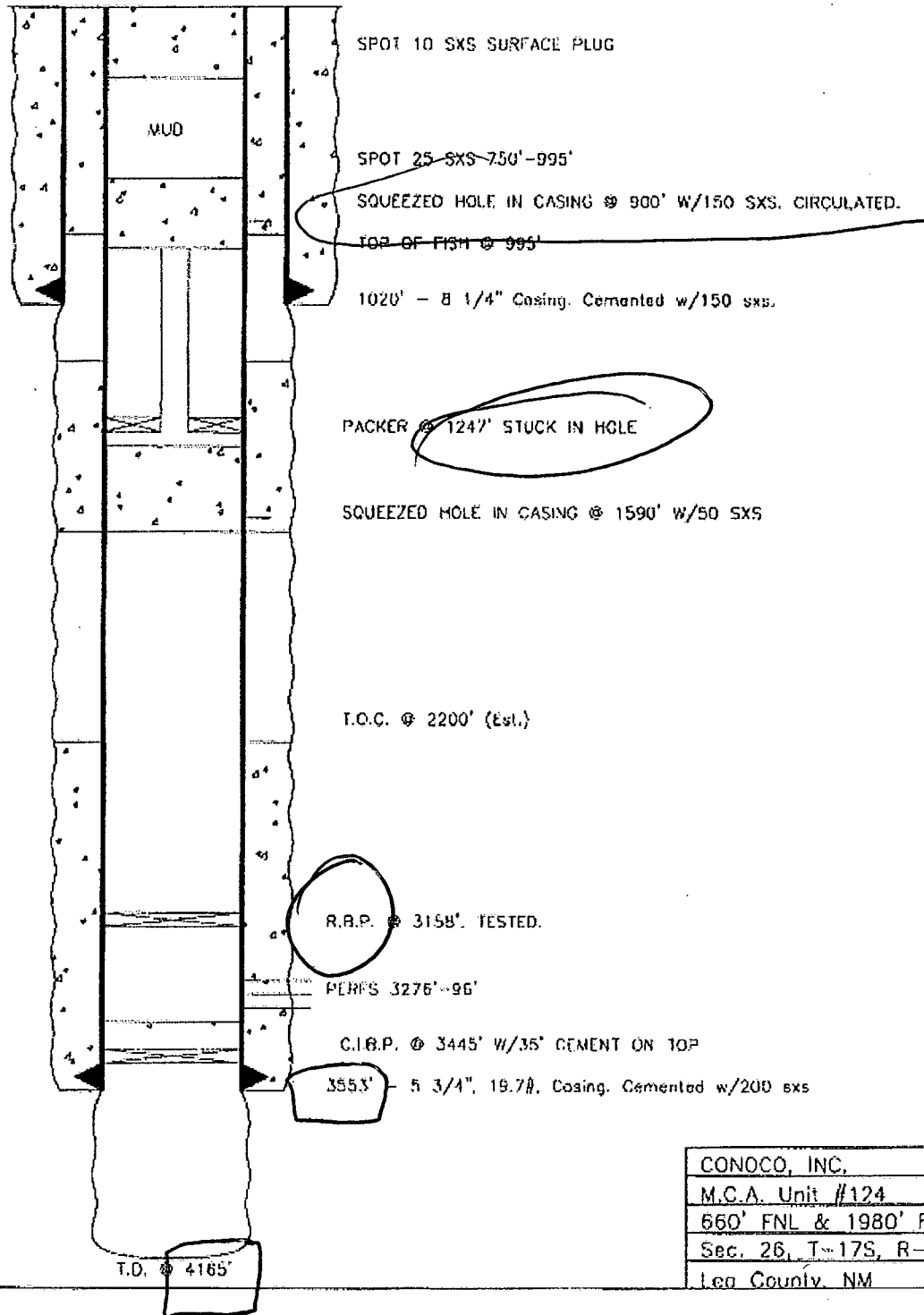
T.D. @ 4150'

CGNOCO, INC.
M.C.A. Unit #119
119' FNL & 660' FWL
Sec. 27, T-17S, R-32E
Lea County, NM

MCA 124 (API: 30-025-00706)

660 FNL & 1980 FWL, Section 26, 17S-32E

Elev. = 3990'



CONOCO, INC.
M.C.A. Unit #124
660' FNL & 1980' FWL
Sec. 26, T-17S, R-32E
Lea County, NM

Elev. = 3990'

MCA 125 (API: 30-025-00700)

660 FNL & 1980 FEL, Section 26, 17S-32E

08.01.96: Spot 10 sx cmt plug: surface-60

HOLE IN 7" @ 450' SQZ'D W/200 SXS CIRCULATED TO SURFACE

1129' - 8 5/8" Casing, Cemented w/50 sxs.

08.01.96: Spot 25 sx cmt plug: 1105-1250

08.01.96: Spot 25 sx cmt plug: 2005-2150

T.O.C. @ 2437' (EST.)

08.01.96: Spot 15 sx cmt plug on RBP (3830): 3745-3830

3737' - 7" Casing, Cemented w/100 SXS

R.B.P. @ 3830'

PERFS 4006'-4198'

T.D. @ 4220'

4220' - 4 1/2", 10.5 #. CASING, CEMENTED
W/350 SXS CIRC.

CONOCO, INC.

M.C.A. Unit #125

660' FNL & 1980' FEL

Sec. 26, T-17S, R-32E

Lea County, NM

Elev. = 3971' GR +8' KB

MCA 143 (API: 30-025-00712)
1980 FNL & 1980 FWL, Section 26, 17S-32-E

05.26.99: Spot 70 sx cmt plug: surface-732
POOH w/ tbq. NU well
Sq 430 sx down 5-1/2" to 450#.

Hole(s) in 5 1/2" csg. between 178' and 1500'

05.24.99: Pump 110 sx cmt: 753 (tagged)-2000

05.24.99: Spot 25 sx cmt plug: 2510-2750

T.O.C. @ 2590'

05.24.99: Spot 55 sx cmt plug: 2873 (tagged)-3710

3554' - 5 1/2", 14# Casing. Cemented w/200 Sxs

O.H. 3900'-
4077'

PXR. @ 3711'

4" LINER 3297'-3900' CEMENTED
W/50 SXS

T.D. @ 4083'

CONOCO, INC.
M.C.A. Unit #143
1980' FNL & 1980' FWL
Sec. 26, T-17S, R-32E

	MCA 144 (API: 32-025-00711)
	1980 FNL & 660 FWL, Section 26, 17S-32E
	08.1987: Spot 26 sx surplus plug in 5-1/2' csg
	12-1/2" @ 20. Cmt w/ 25 sx.
	08.1987: Sq down 5-1/2" x 12-1/2" w/ 45 sx cmt.
	08.1987: Perforate @ 850-854. Unable to pump-in
RETAINER	Perforate @ 700-704
MUD	Set cmt retainer @ 628. Pump 75 sx below retainer.
	Sq csg perforations: 700-704 w/ 75 sx below retainer
	Spot 75 sx cmt plug above retainer (628): surface-628
RETAINER	08.1987: Cmt Retainer: 2032. Pump 75 sx below retainer.
MUD	Sq csg leak interval: 2165-2190 w/ 75 sx below retainer
	Spot 25 sx cmt plug above retainer (2032): 1790-2032
	08.1987: Cmt Plug (5-1/2" csg): 2395-2716
RETAINER	08.1987: Set Cmt Retainer @ 2716
	10.1972: Spot 160 sx cmt plug : 3496 (tagged)- 4139
	Perforate 2810-2815 & 3475-3490
	12.1971: Sq csg leak (collapse) interval 3471-3529 w/ 350 sx
	5-1/2", 14# @ 3536. Cmt w/ 200 sx.
	TD @ 4139

PLUGGED WELLBORE SKETCH ConocoPhillips Company - Permian Basin Business Unit

Date: September 26, 2004

AKB @
DF @ 3905'
GL @



12-1/2" OD @ 20' w/ 25 ex
4) 25 ex C cmt 50' - Surface
Perf & Sgs
25 ex C cmt 465 - 235' TAGGED
(perforated at 400', no rate at 1,500 psi)
35 ex C cmt perforated & squeezed
under packer 1,000 - 885' TAGGED

35 ex C cmt perforated & squeezed
under packer 1,830 - 1,800' TAGGED

TOC of 5-1/2" Csg @ 2600'

Tagged existing CIBP @ 3,130', pumped
25 ex C cmt 3,130 - 2,885'

CIBP @ 3130' (400)

Queen

3170-3204 - 2 JSPF (6-95)

Cmt Ret @ 3335' w/57 ex below & 35 ex above
Top Liner @ 3337'

5-1/2" OD @ 3543'
Cemented w/250 ex cement
TOC @ 2500'

3760' eq: w/200 ex; TOC 3564'
3800' Sgs w/118 ex cmt
4-3/4" Hole
OH 3543' - 4160'
Grayburn 8th
3850-3864 3912-3966
San Andres 7th
3912-3966 3980-3992
3993-4002 4010-4030 (266 holes) 1088'

Spot 30 ex cmt 4150'-4037'

CIBP @ 4088' pushed down from 3000'
Rtn of Liner @ 4148'

4" Liner 10.466 FL 46 set 3337'-4148' w/250 ex

PRD: 3130'
QTD: 3905'
NTD: 4160'

Subarea: McFarmer
Lease & Well No.: Queen-B No. 6 / (MCA Unit No. 147)
Legal Description: 1080 FNL & 1980 FWL, SE4 NW4 Sec. 27,
T-17-S, R-32-E N14 P.M. Meridian
County: Lea State: New Mexico
Field: McFarmer (GB/SA)
Date Spudded: May 19, 1942 (IPP)
API Number: 30-025-00719 403 BO, B HW
Status: PLUGGED
Drilled as Balish "B" No. 6

827288 Located leak in csg between 60 and 80' from surface
Cut casing @ 120', ran 107 5-1/2" 14N J-55 csg w/Bowen
csg bowl, latch onto csg @ 108', sat w/750W OK. Welded band
on 5-1/2" csg.

ACTUAL PLUGGING PROCEDURE

- 1) Tagged existing CIBP @ 3,130', pumped 25 ex C cmt 3,130 - 2,885'
- 2) 35 ex C cmt perforated & squeezed under packer 1,830 - 1,800' TAGGED
- 3) 35 ex C cmt perforated & squeezed under packer 1,000 - 885' TAGGED
- 4) 25 ex C cmt 465 - 235' TAGGED (perforated at 400', no rate at 1,500 psi)
- 5) 30 ex C cmt perforated & squeezed 50' - surface

1980 FNL & 660 FWL, Section 27, 17S-32E

12-1/2" @ 20. Cmt w/ 25 sx.

07.13.89: Spot 25 sx cmt plug: 900-1150

5-1/2" @ 3543. Cmt w/ 250 sx.

TD @ 4140

PLUGGED WELLBORE SKETCH
ConocoPhillips Company - Pennlan Basin Business Unit

Date: October 18, 2004

RKB @
DF @ 3968.3'
GL @



100 ex C cmt sqz'd 400' - surface

9-5/8" 28# H-40 csg @ 1,095'
Cmt'd w/100 ex; circ 9 ex
Top of Salt @ 1,100'
40 ex C cmt sqz'd 1,185 - 945' - TAGGED
perforated @ 1,135', unable to sqz @ 1,000 psi

Base of Salt @ 2,070'
30 ex C cmt 2,170 - 1,991'

TOP of 5-1/2" Liner @ 3,564'

45 ex C cmt on C1CR 3,788 - 3,520'
sqz'd 40 ex C cmt under C1CR @ 3,788'

Retainer @ 3,835' (3/99)

7-7/8" Hole
7" 23# J-55 @ 3,862'
Cmt'd w/230 ex TOC @ 772' (Est.)

8th Zone (1 J8PF)

3885' - 3930'

11th Zone S.A.

3964' - 3991'

3960' - 3985'

12th Zone S.A.

4042' - 4060'

4060' - 4065'

4065' - 4065'

6-1/4" Hole

6-1/2" 18.5# J-55 flush joint liner @ 4100'
cmt'd w/175 ex cmt. TOC @ 3900'

PBTD: 3835'
OTD: 4070'
NTD: 4100'

Subarea: Mojave
Lease & Well No.: MCA Unit No. 182
Legal Description: 2815' FSL & 2570' FEL, NW/4 SE/4 Section 27, T-17-S, R-32-E, NMPM
County: Lee State: New Mexico
Field: Mojave (GB-SA)
Date Spudded: 11/18/47 IPP:
API Number: 30-025-12783
Status: PLUGGED 10/12/04
Drilled as Balish-B No. 18 LP.

Stimulation History:

Interval	Date	Days	Gels	Lbs. Sand	Max Press	ISIP	Max Rate
3850-3894	11/19/47	Drilled with cable tools					
	1/26/48	Nitro	220 Quarts				
		Dump 4 ex Calseal 3887'					
		Dump 4 ex Calseal 3838'					
	1/31/48	Drill out Calseal to 4070'					
	3/2/48	Gas Injection commenced					
	1/1/50	Changed from Balish-B No. 15 IP to Queen-B IP 15					
	9/26/51	Change name from Queen B No. IP 15 to Queen B No. 40.					
	5/1/53	Effective with unitization renumbered MCA Unit No. 102.					
	12/22/59	Converted from gas injection to producer					
	10/2/71	Clean out fill 4050'-4070'					
		Jet shot hole 3850-3900'					
	10/3/71	Jet shot hole 3892-3838'					
	10/4/71	Jet shot hole 3939-3970, 3850-3970					
OH 4004-4070	10/10/71	15% HCl NE	4,000		3200	2000	8.88
OH 3862-3960	10/11/71	Produced w/	20,000	30,000	3800	1125	20.0
OH 3862-4070	9/17/75	15% HCl NE	750	300# RS	2100	1300	3.4
	6/18/78	Set 7" CIBP @ 3790'					
	6/18/79	Drill out CIBP @ 3790'; deepen to 4100'					
	6/30/80	Set 5-1/2" liner, btm @ 4100' w/175 ex. Top liner @ 3564' (538')					
		CBL showed good cement 4009-3900';					
		Poor cement 3900'-3584'					
	6/6/89	Part 1 JSPF 4089'-3954' (28 parts)	3930-3885 (23 parts)				
3885-4060	6/6/89	15% NEFE HCl	2,250	25 BS	3500	2100	2.5
	6/7/89	X-Link	2,880	800# RS			
		20# Gel	23,800	58,000	4900	2100	20.0
	6/18/90	Pump landed up in btm tubing joint					
3885-4060	1/8/91	15% NEFE HCl	5,400	2250# RS		1000	
3885-4060	1/10/91	Scale squeeze TH-7789	9,900	2500# RS	2850	1800	5.0
	1/22/91	Run production log - gas entry @ 3860-3892, fluid entry 3918-3900. No cross flow indicated during shut in.					
3885-4060	10/29/93	15% NEFE HCl	3,000	1500# RS	2260	1850	3.0
	12/29/93	60' of fill covering bottom parts					
	3/2/99	Set cement retainer @ 3835' OD 4.75 in.					
		Evaluate for Queen potential.					
	4/29/04	BLM Sundry Notice expires 8/28/04					
		6 previous TA's on file. Advised to recomp, perform MiT or submit plugging procedure by expiration date.					
	8/1/04	Prepare Application for Abandonment of Well					



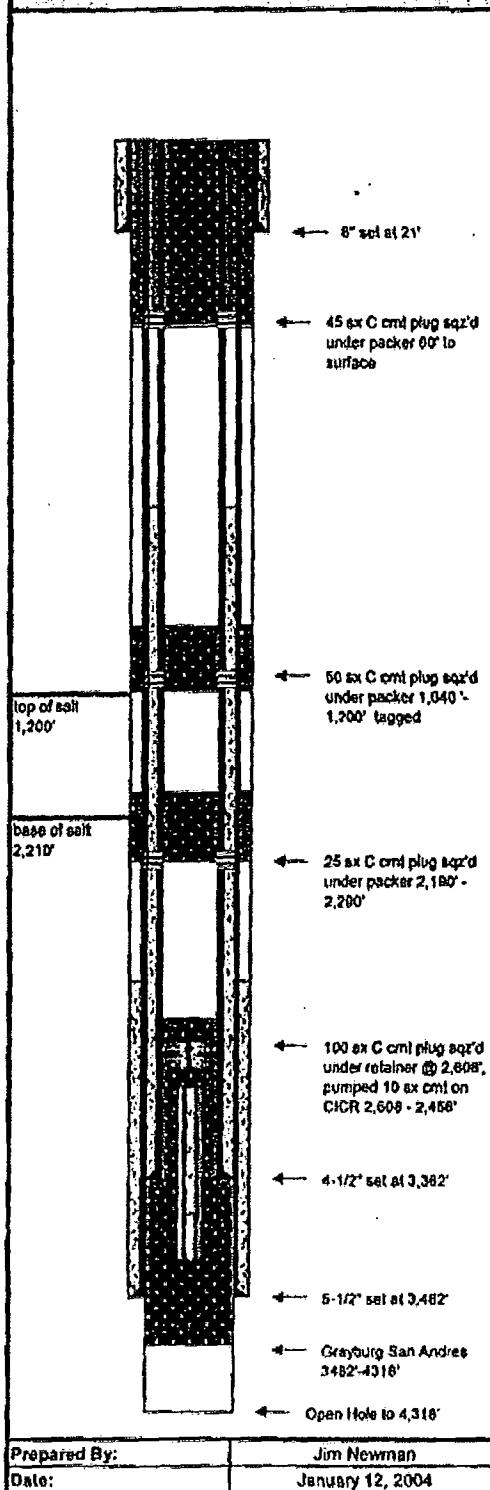
ACTUAL PLUGGING PROCEDURE

- 1) sqz'd 40 ex C cmt under C1CR @ 3,788'
- 2) 45 ex C cmt on C1CR 3,788 - 3,520'
- 3) 30 ex C cmt 2,170 - 1,991'
- 4) 40 ex C cmt sqz'd 1,185 - 945' - TAGGED perforated @ 1,135', unable to sqz @ 1,000 psi
- 5) 100 ex C cmt sqz'd 400' - surface

ConocoPhillips

Plugged Wellbore

MCA Unit #181



Field Name:	Maljama/Grayburg/San Andres		
County:	Lee	Well Type:	Oil
State:	New Mexico	Depth:	4,318
RRC District:		Drilling Commenced:	December 8, 1940
Section:	26	Drilling Completed:	February 22, 1941
Block:		Date Well Plugged:	January 6, 2004
Survey:	T-17-S, R-32-E	Longitude:	
		Latitude:	
		Freshwater Depths:	
API #:	30-025-00709	Salt Section:	1,200 - 2,210'
Lease or ID:	LC 058699Y		

Casing					
Description	Size (inches)	Depth (feet)	TOC (feet)	Cement (sacks)	Hole Size (inches)
Surface:	8"	21	Surface	25	
Production:	5-1/2"	3,462	2,300	250	
Liner (1):	4-1/2"	3,362	920	50	

Existing Plugs					
Description	Top (feet)	Depth (feet)	Volume (sacks)	Volume (cu ft)	
1 class C cmt, sqz'd under retainer	2,608	2,810	100	132	
2 class C cmt, balanced	2,456	2,608	10	13	
3 class C cmt, sqz'd under packer	2,190	2,290	25	33	
4 class C cmt, sqz'd under packer	1,040 (tag'd)	1,200	50	66	
5 class C cmt, sqz'd under packer	surface	60	45	59	

Perforations			
Formation	Top (feet)	Depth (feet)	
Grayburg San Andres	3,482	4,318	

Formations		
Name	Top of Formation	
top of salt	1,200	
base of salt	2,210	

Comments: Unable to recover fish, left tubing and rods in hole, top of fish @ 2,645'.

TRIPLE N
SERVICES INC.
ANDAL, TX

MCA 205 (API: 32-025-00727)

660 FSL & 1980 FWL, Section 27, 178-32E

12.17.98: Spot 25 sx cmt plug: surface-250

05.79: Sq 5-1/2" x 8-5/8" Interval: 467-527 w/ 372 sx

< 8-5/8", 28# csg @ 307. Cmt w/ 50 sx

MUD

12.17.98: Spot 25 sx cmt plug: 2150-2400

MUD

< 5-1/2" TOC: 2320

< 4" x 5-1/2" Liner PKR @ 3159

12.16.98: Spot 25 sx cmt above retainer (3603): 3225 (tagged)-3603

12.16.98: Cement Retainer @ 3603. Pump 40 sx below retainer

RETAINER

< 2-3/8" x 4" PKR @ 3793

< 5-1/2", 15.5#, J-55 csg @ 3510. Cmt w/ 250 sx

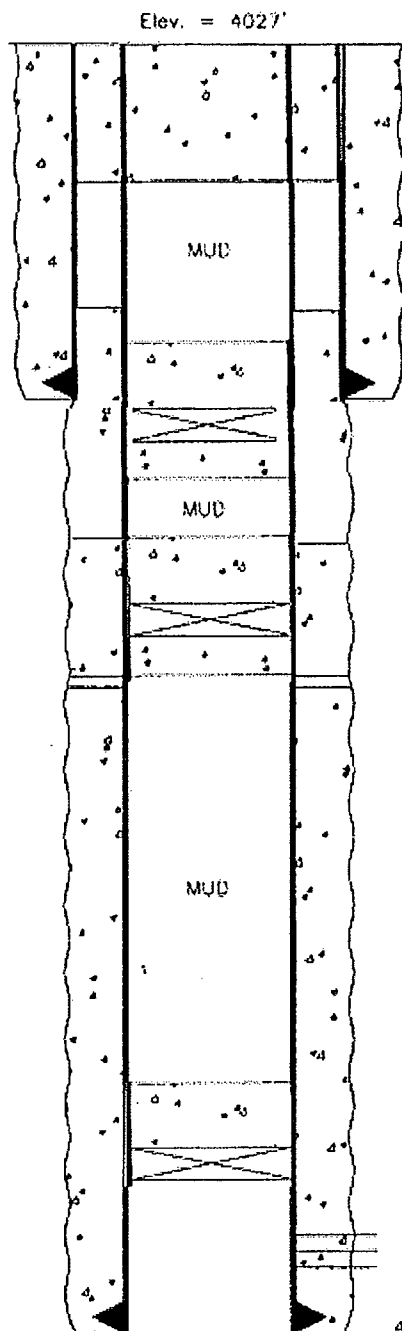
< 2-3/8" tbg: 3793-3954

< 2-3/8" x 4" PKR @ 3954

Completion Interval : 3960-4078

: 4110-4142

< 4", 11.6#, J-55 liner: 3159-4195. Cmt w/ 55 sx.



T.D. @ 4200'

MCA 292 (API: 30-025-23920)

1295 FNL & 1295 FWL, Sec. 27 -17S-32E

07.02.97: Perforate csg @ 350

Pump 100 sx cmt down 5-1/2"

Circ cmt up 5-1/2" x 8-5" csg annulus : surface-350

Spot 20 sx cmt plug above cmt retainer: 750-950

07.01.97: Perforate csg @ 1000

07.02.97: Set Cmt Retainer @ 950.

Squeeze 25 sx below cmt retainer

Spot 20 sx cmt plug above cmt retainer: 750-950

07.01.97: Perforate csg @ 2450

Set Cmt Retainer @ 2400.

Squeeze 25 sx below cmt retainer

Spot 25 sx cmt plug above cmt retainer: 2160-2400

T.O.C. @ 2675' (Temp. Survey)

07.01.97: Set 5-1/2", 14# CIBP @ 3736

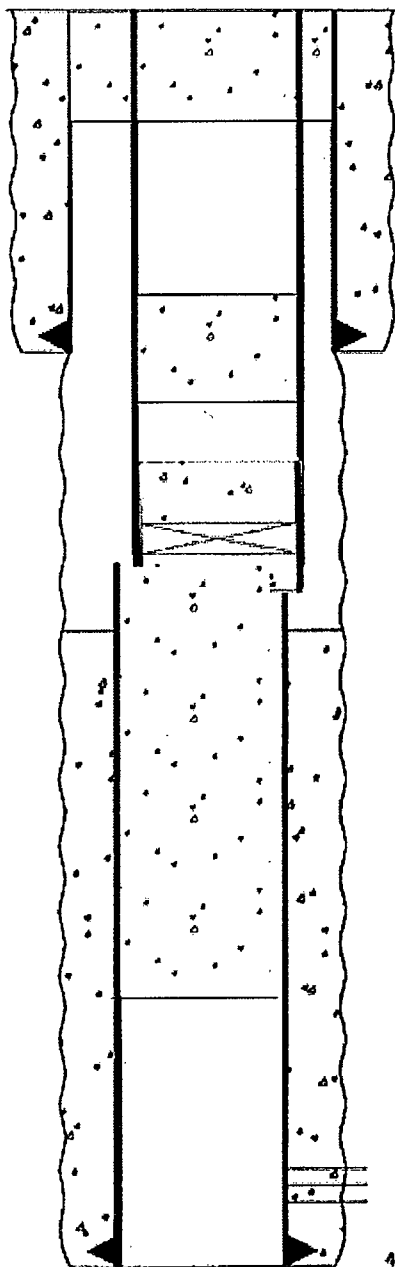
Circ well w/ mud

Spot 25 sx cmt plug above CIBP: 3495-3736

					MCA 307 (API: 32-025-24058)
					199FNL & 1270 FEL, Sec. 27-17S-32E
					09.11.01: Spot 10 sx cmt plug: surface-60
					MUD
					8-5/8", 20# csg @ 850. Cmt w/ 425 sx
					09.11.01: Spot 25 sx cmt plug: 654-901
					10.07.82: Squeeze 200 sx down 5-1/2" x 8-5/8" annulus
					MUD
					09.11.01: Spot 25 sx cmt plug: 1705 (tagged)-1919
					5-1/5" csg TOC: 1850 (Temperature Survey)
					MUD
					Junk-In-Hole: 11 jts 2-3/8" tbg w/ mud-anchor
					14 sucker rods & 2 sinker bars & pump
					top: 3490; btm: 3838
					09.10.01: Set CICR @ 3404
					Circ well w/ mud
					Unable to pump below retainer @ 2000#
					Spot 25 sx cmt plug: 3167 (tagged)-3404
					Completion Interval:
					Grayburg: 3832-3897 (gross)
					San Andres: 3994-4042 (gross)
					5-1/2", 14# csg @ 4140. Cmt w/ 300 sx
					RETAINER

					MCA 311 (API: 32-025-24101)
					1295 FNL & 2615 FWL, Sec. 26-178-32E
					09.12.02: Spot 10 sx cmt plug: surface-60
					MUD
					09.12.02: Spot 25 sx cmt plug: 229-450
					8-5/8", 20# csg @ 1000. Cmt w/ 500 sx. Cmt circ to surface
					09.12.02: Spot 25 sx cmt plug: 940-1159
					01.1978: Perforate 1150-1152.
					Cmt 5-1/2" x 8-5/8" annulus to surface w/ 300 sx
					MUD
					08.15.02: Perforate @ 2025
					09.11.02: Squeeze 2025 w/ 90 sx. to 900#. SION.
					Cmt plug: 1850 (tagged)-2025
					01.1978: Sq 5-1/2" csg leak interval 2858-2873 w/ 525 sx
					5-1/2" csg TOC: 2860 (05.1972)
					01.1978: Sq 5-1/2" csg leak interval 3370-3385 to 3100# w/ 175 sx
					MUD
					08.15.02: Set CIBP @ 3919
					Circ well w/ mud
					Spot 25 sx cmt plug: 3678-3919
					CIBP
					Completion Interval:
					Grayburg: 3979-4065 (gross)
					San Andres: 4121-3190 (gross)
PBD: 4310					
TD: 4325					
					5-1/2", 14# csg @ 4325. Cmt w/ 350 sx.

Elev. \approx 3985' G.L. +10' K.B.



MCA 315 (API: 30-025-24128)
1345 FSL & 1295 FWL, Sec. 27-17S-32E

12.08.98: Perforate 5-1/2" csg @ 300.
12.09.98: Circ 80 sx cmt down 5-1/2" & up 5-1/2"x 8-5/8" annulus.

995' - 8 5/8" Casing. Cemented w/475 sx. Circulated to surface.

12.08.98: Perforate 5-1/2" csg @ 1050. Unable to pump-in @ 1500#
Spot 25 sx cmt plug: 900 (tagged)-1100.

5 1/2" Casing Ported @ 1939'

T.O.C. @ 2140' (Temp. Survey)

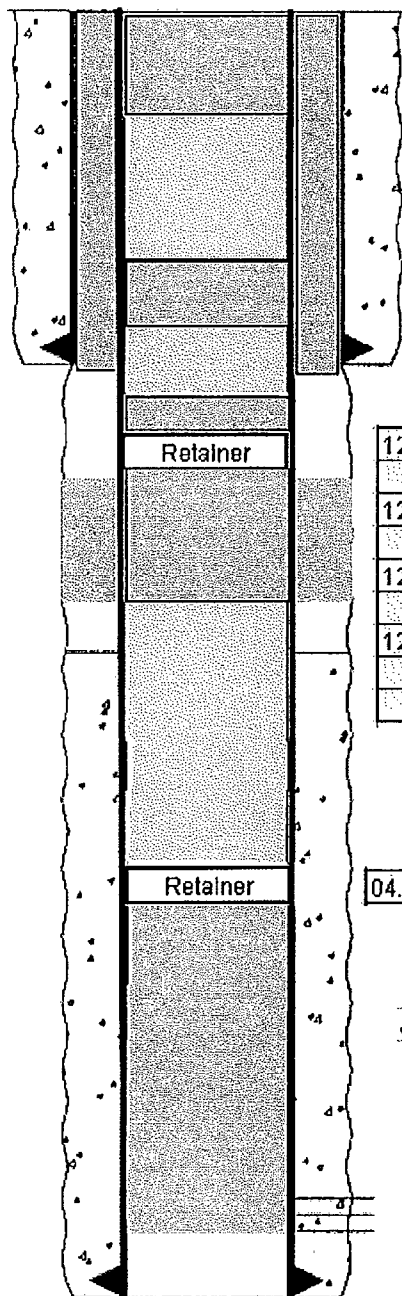
12.08.98: Set 5-1/2" cmt retainer @ 1828
Circ well w/ mud
Pump 100 sx cmt below retainer. Sq to 1000#.
Spot 10 sx cmt plug above retainer: 1728-1828

Perfs 3962'-4190'

4260' - 5 1/2", 14#, Casing. Cemented w/300 sx

T.O. @ 4260'

CONOCO, INC.
M.C.A. Unit #315
1345' FSL & 1295' FWL
Sec. 27, T-17S, R-32E



MCA 336 (API: 30-025-24370)

1345 FSL & 125 FWL, Sec. 23-17S-32E

8-5/8", 20# csg @ 904. Cmt w/ 400 sx

Retainer

12.02.87: Perforate 4 sq holes @ 2400

Set cmt retainer @ 1210. Sq 200 sx below retainer

12.03.87: Tag cmt @ 1195 (15 ft cmt: 1195-1210)

Perforate sq holes @ 800. Sq perf holes @ 800.

12.04.87: Run temp survey: 5-1/2 x 8-5/8" TOC 675; Tag @ 5-1/2" TOC 693

Perforate 4 sq holes @ 350

12.05.87: Perforate 4 sq holes @ 300

Perforate 4 sq holes @ 250

Pump 150 sx cmt down 5-1/2" csg

Retainer

04.02.81: Set cmt retainer @ 3300. Sq 100 sx below retainer.

Junk-In-Hole: Approx. 653' 2-7/8" tbg below csg collapse 3424.

Completion Intervals:

Grayburg: 3877-3943 (gross)

San Andres: 4032-4043 (gross)

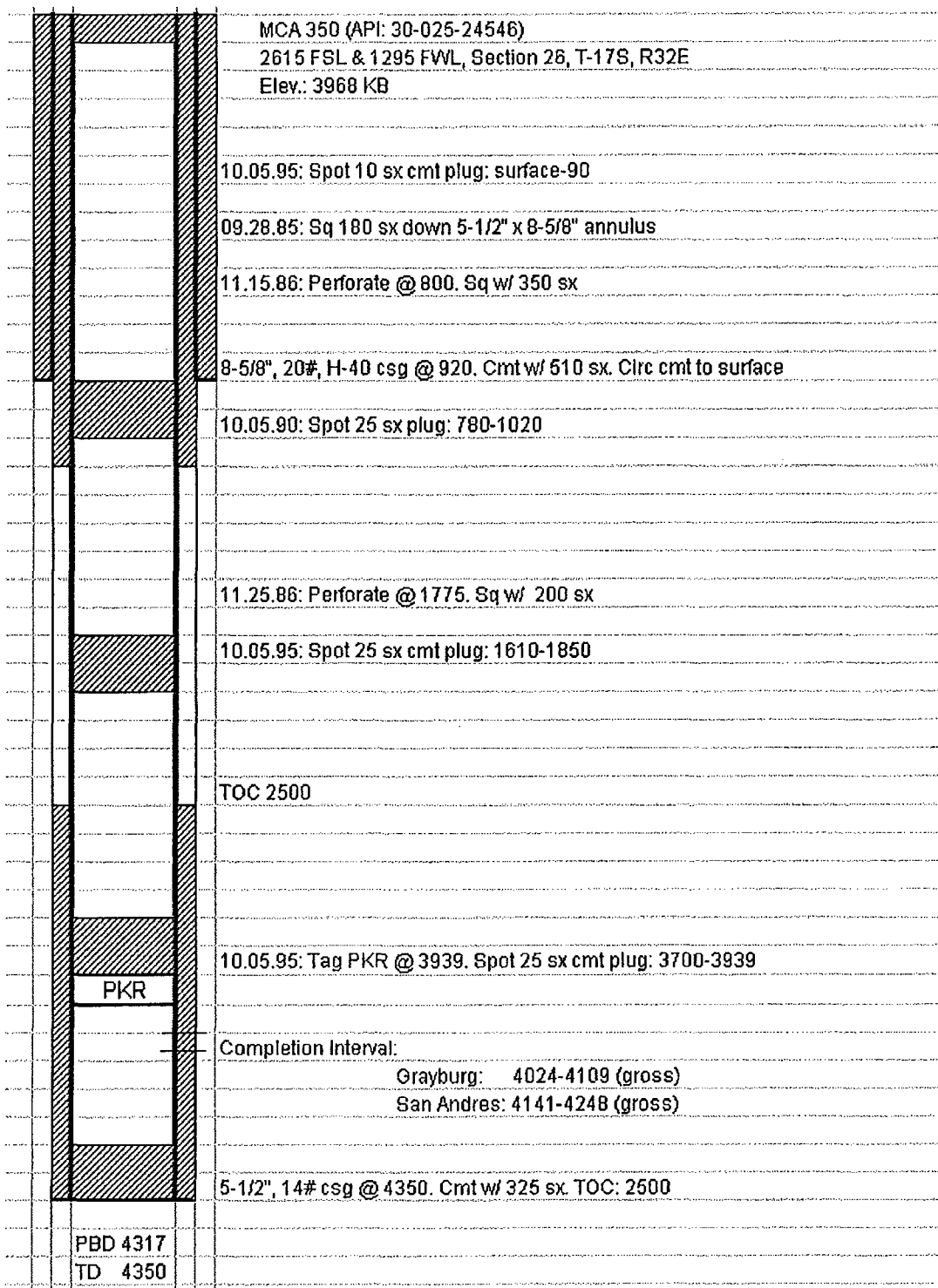
5-1/2", 14# csg @ 4200. Cmt w/ 500 sx. TOC: 2720

PBD: 4103

TD: 4200

	MCA 339 (API: 30-025-24377) 1295 FSL & 2615 FWL, Sec. 23 T-17S, R-32E Elev.: 4004 GL
	8-5/8", 20#, H-40 csg @ 970. Cmt w/ 500 sx. Clrc cmt to surface
	10-11.1977: RIH w/ tbg & PKR. Set PKR @ 899 Perforate 5-1/2" csg (w/ tbg gun): 1050-1052 @ 2 spf Pump 300 sx cmt down 5-1/2" x 8-5/8" csg annulus Pump 200 sx cmt down tbg below PKR. POOH w/ tbg & PKR. Spot 10 sx cmt plug (5-1/2" csg): surface -96
Retainer	10-11.1977: Set Cmt retainer @ 2104. Sq 250 sx cmt below retainer (5-1/2" csg leak interval: 2807-2820) Left-In-Hole: 2-3/8" tbg @ 2372 w/ PKR @ 2382
	TOC 2750
RBP	08.1975: Set RBP @ 3926. Cap w/ 12' sand. Completion Interval: 3964-4071 (gross)
	5-1/2", 14# csg @ 4225. Cmt w/ 450 sx
PBD 4186	
TD 4225	

		MCA 342 (API: 30-025-24463) 1225 FNL & 1295 FWL, Sec. 26 T-17S, R-32E Elev.: 3986 KB
		8-5/8", 20#, H-40 csg @ 927. Cmt w/ 500 sx. Circ cmt to surface
		05.1977: RIH w/ tbg & PKR. Set PKR @ 899 Perforate 5-1/2" csg (w/ tbg gun): 918-920 @ 2 spf Pump 100 sx cmt. Displace to 850. Spot 10 sx cmt plug (5-1/2" csg): surface -96
		02.1980: Drl out surface plug: 0-30 Drl out cmt plug: 900-930 Spot 15 sx cmt plug (5-1/2" csg): 1000-1150 Perforate @ 900 & 870. Unable to pump-in. Perforate @ 500. Pump 160 sx down 5-1/2" csg. Circ 40 sx to surface up 5-1/2" x 8-5/8" annuls
		05.1977: Set cmt retainer @ 2144. Sq 350 sx cmt below retainer
		02.1980: Drl out cmt retainer. Drl out cmt to 2155 Spot 20 sx cmt plug: 2000-2150
		TOC 2250
		1976: 5-1/2" csg leak @ 2710. Sq w/ 48 sx.
		08.1975: Set RBP @ 3926. Cap w/ 12' sand.
		Completion Interval: 3953-4043 (gross) 4099-4124 (gross)
		5-1/2", 14# csg @ 4240. Cmt w/ 430 sx. TOC: 2250
PBD 4190		
TD 4240		



RKS @ 3881'
DF @ 3980'
CL @ 3989'

Subarea: Buckeye
Lease & Well No: MOA Unit No. 387
Legal Description: 2197 FSL & 2265 FWA, Sec 27, T17S, R32E, UL 71
County: Lea State: New Mexico
Field: Maljamar (Grayburg-San Andres)
Date Spudded: 8/8/00 Rig Released: 01/17/00
API Number: 30-025-35142
Status: Proposed Plugged State Lease No. LC-067210

Stimulation History

Interval	Date	Type	Gels	Lbs. Sand	Max Press	ISIP	Max Rate	Down
----------	------	------	------	-----------	-----------	------	----------	------

PKR @ 910'
Top Salt @ 910'
11-3/4" @ 1037'
Cm'd w/525 ex Class C, csg 130 ex to pk
TOC @ Surface
csg window from 1,029 - 1,033'

TOC 6-1/2" Csg @ 1300' (Calculated)

11/6/09 Notify BLM of MERU.
11/10/09 Est circ down 5 1/2" casing and up 8 5/8". Shut 3 1/2" & 5 5/8" pressure to 1400 psi. OK by BLM to set PKR @ 950'. Set 1,029' to surface out of the 8 5/8" csg - disp w/ 6 1/2" bbl. Cal TOC @ 990' - Tag @ 980'.
11/11/09 - Tbg @ 980', pump 1 bbl cmt from 980' to surface of the 5 1/2" csg. Lay down tbg & pump 20 sk cmt to leave 5 1/2" full of

11" Hole
8-5/8" 240 J-85 @ 2167'
Cm'd w/ 615 ex, csg 130 ex to pk
TOC @ Surface

Base Salt @

Accepted as to plugging of the well bore.
Liability under bond is retained until
Surface restoration is completed.

ACCEPTED FOR R

NOV 27 2009

BUREAU OF LAND MANAGEMENT

Left-In-Hole:

Quantity	Length: ft.	Description	OD: in.	ID: in.	Depth RKB	ft/m
1	9.57	PBR (OD: 4.250 in.; ID: 3.000 in.)	4.5	3	1040	1040
1	5.84	HyFlo II Liner Hanger (OD: 4.5 in.; ID: 3.000 in.)	4.5	3	1049	1055
1	1.82	XO: 3-1/2" (NU 10 rd box) x 3-1/2" (CSH pin)	4.2	3	1055	1057
74.6	2325	3-1/2", 8.30 CSH Tbg (liner): chemical cut @ 3580	3.8	3	1057	3580

Following is below 3800 ft:

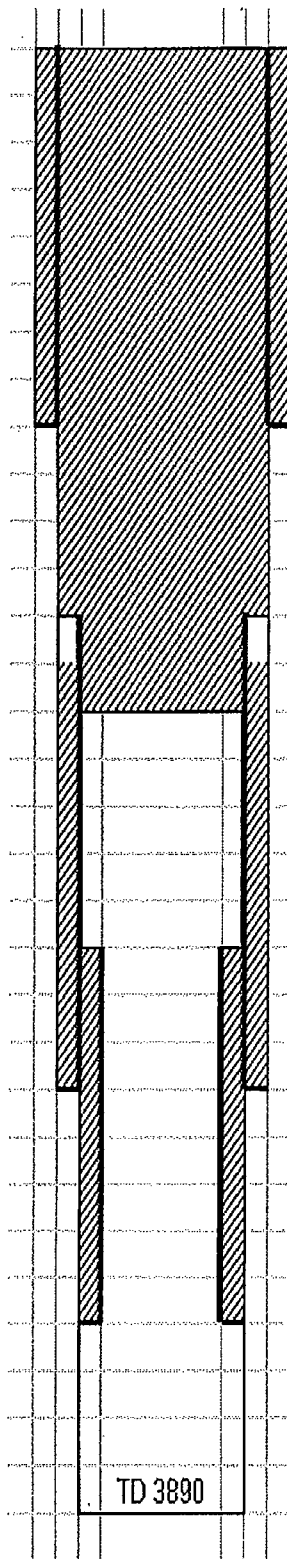
Quantity	Length: ft.	Description	OD: in.	ID: in.	Footage
14.5	435	3-1/2", 8.34 CSH Tbg (liner)	3.8	3	435
1	16	Longleg Collar: 3-1/2" OD Type 2	3.8	3	437
1	31.28	3-1/2", 8.34 CSH Tbg (liner)	3.8	3	468
1	1.1	3-1/2" OO Single-Valve Float Collar	3.9	3	489
1	31.29	3-1/2", 8.34 CSH Tbg (liner)	3.8	3	500
1	1.65	3-1/2" OO Double-Valve Float Shoe	3.8	3	502

Kick-Off Pt: 3550'
Max DLS 17.6 Deg

7-7/8" Hole
6-1/2" 179 K-66 LT&C @ 3945' (MD) 3989' (TVD)
Cm'd w/ 360 ex
TOC @ 1300' (Calculated)
Angle @ Shoe 69.71 Deg

4-3/4" Hole

HORIZONTAL HOLE from 3522' to 4493'



Miller-3 (API: 30-025-00643)

660 FSL & 660 FWL, Section 23, 179-32E

Elev.: 3974 GL

10-11.1979: Spot 240 sx cmt plug: surface-797

8-1/4" @ 880

10-11.1979: Spot 240 sx cmt plug: surface-797

Spot 150 sx cmt plug from 1140

Spot 150 sx cmt plug from 1320

Spot 150 sx cmt plug: 1320-1497

6-5/8" @ 2550. Cmt w/ 250 sx. Cut & Recovered @ 1320

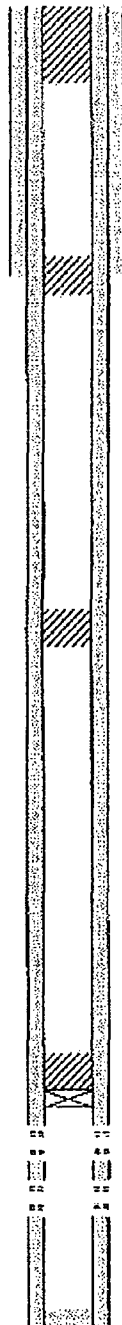
4" LIner: 2406-3650. Cmt w/ 150 sx.

TD 3890

PLUGGED WELLBORE SKETCH ConocoPhillips Company -- Mid-Continent BU / Odessa

Date April 2, 2007

RKB @ 3950'
 OF @ 3900'
 QL @ 3900'



45 ex C cmt 412' to surface, circ cmt
 12-1/4" Hole

8-5/8" 26# K-55 ST&C @ 915'
 Cmt w/400 ex, circ 128 ex
 Top Salt @ 952'
 25 ex C cmt 652 - 650' TAGGED

Base Salt @ 2030'
 25 ex C cmt 2,127 - 1,900' TAGGED

7-7/8" Hole

Set CIBP @ 3,778', 25 ex C cmt 3,778 - 3,501'

Grayburg 5th
 3826-3890 3802-3878
 3805-3891 3912-3938 - 2 jsp
San Andres 7th
 3978-4000 4040-4042
 4047-4050 4068-4074 - 4 jsp

Subarea: Euckeye
 Lease & Well No: MCA Unit No. 385
 Legal Description: 610' FSL & 1080' FEL, Sec 22, T-17S, R-32E
 Loc: Lea State: New Mexico
 County: Maljamar (Grayburg-San Andres)
 Date Spudded: Dec. 9, 1909 Reg. Released: Dec. 22, 1989
 API Number: 30-026-53711
 Status: PLUGGED 03/23/07 State Lease No. LC-0583950

Stimulation History:

Interval	Date	Type	Gels	Sand	Lbs.	Max Press	ISIP	Max Rate
3978-4074	1/10/90	Perforate 3978-4074 - 4 jsp (select fire)						
	1/10/90	15% NEFE HCl	3,360	240 BS			2400	
	1/11/90	Perforate 3826-3938 - 2 jsp (select fire)						
3826-3938	1/12/90	15% NEFE HCl	3,360	240 BS			2300	
3925-3938	1/15/90	Frac	19,000	32,000			2500	
	Aug 2005	Shut-In						

TRIPLE N
 LUBRICANTS INC.
 AND AMT IV

PLUG SET 03/21/07 thru 03/23/07

- 1) Set CIBP @ 3,778', 25 ex C cmt 3,778 - 3,501'
- 2) 25 ex C cmt 2,127 - 1,900' TAGGED
- 3) 25 ex C cmt 952 - 650' TAGGED
- 4) 45 ex C cmt 412' to surface, circ cmt

Casing / Openhole Capacities

4 1/2" D 58 csg:	10.988	ft/h	0.0912	ft/m
5 1/2" 17# csg:	7.651	ft/h	0.1305	ft/m
7" 20# csg:	4.390	ft/h	0.2273	ft/m
7" 26# csg:	4.655	ft/h	0.2148	ft/m
7 1/2" 24# csg:	3.715	ft/h	0.2691	ft/m
8 1/2" 20# csg:	2.733	ft/h	0.3059	ft/m
8 1/2" 24# csg:	2.797	ft/h	0.3575	ft/m
8 1/2" 28# csg:	2.853	ft/h	0.3505	ft/m
6 1/2" openhole:	4.074	ft/h	0.2485	ft/m
7 1/2" openhole:	2.957	ft/h	0.3382	ft/m
8 1/2" openhole:	2.032	ft/h	0.4922	ft/m
10" openhole:	1.034	ft/h	0.5454	ft/m
12 1/4" openhole:	1.222	ft/h	0.8185	ft/m

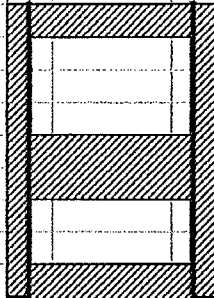
Formation Tops:

Grayburg	
Rustler	
Top Salt	
Tens#	
Yates	
Seven Rivers	
Queen	
Grayburg	
Grayburg 5th	3749'
San Andres	
San Andres 7th	3938'
San Andres 8th	4082'
San Andres 9th	4130'
5th Marquette	4200'

8-1/2" 17# K-55 LT&C @ 4420', cmt'd w/ 2,100 ex, circulated 25 ex

PBTD @ 4374'
 TD @ 4420'

Miller Federal A-7 (30-025-00645)
710 FSL & 660 FWL, Section 23, 17S-32E
Elev.: 3990 GL

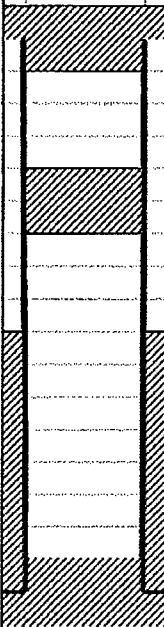


05.1957: Spot 10 sx cmt plug: surface-27

05.1957: Spot 30 sx cmt plug: 776-866

8-5/8" @ 1159. Cmt w/ 150 sx.

05.1957: Spot 15 sx cmt plug: 1123-1175



05.1957: Cut & pull 5-1/2" csg @ 1480.
Spot 10 sx cmt plug: 1440-1494

05.1957: Spot cmt plug: 2508-2600

5-1/2" @ 3590. Cmt w/ 150 sx.

TD 4035

Attachment 6
Geological Information - Formation Tops per Well

WELL NAME	FORMATION CALL POINTS	TOP (ft MD)
MCA UNIT 449	RUSTLER	938'
MCA UNIT 449	SALADO	1111'
MCA UNIT 449	TANSILL	2142'
MCA UNIT 449	YATES	2285'
MCA UNIT 449	SEVEN RIVERS	2651'
MCA UNIT 449	QUEEN	3276'
MCA UNIT 449	GRAYBURG	3654'
MCA UNIT 449	GRAYBURG-6	3938'
MCA UNIT 449	SAN ANDRES-7	4067'
MCA UNIT 449	SAN ANDRES-9	4217'
MCA UNIT 449	GLORIETA	5558'
MCA UNIT 449	PADDOCK	5682'

Proposed
Injection
Interval
4351

WELL NAME	FORMATION CALL POINTS	TOP (ft MD)
MCA UNIT 466	RUSTLER	798'
MCA UNIT 466	SALADO	975'
MCA UNIT 466	TANSILL	2062'
MCA UNIT 466	YATES	2148'
MCA UNIT 466	SEVEN RIVERS	2489'
MCA UNIT 466	QUEEN	3120'
MCA UNIT 466	GRAYBURG	3555'
MCA UNIT 466	GRAYBURG-6	3799'
MCA UNIT 466	SAN ANDRES-7	3953'
MCA UNIT 466	SAN ANDRES-9	4130'
MCA UNIT 466	GLORIETA	5471'
MCA UNIT 466	PADDOCK	5595'

1st
Perfs

Proposed
Injection Interval

WELL NAME	FORMATION CALL POINTS	TOP (ft MD)
MCA UNIT 477	RUSTLER	901'
MCA UNIT 477	SALADO	1082'
MCA UNIT 477	TANSILL	2081'
MCA UNIT 477	YATES	2220'
MCA UNIT 477	SEVEN RIVERS	2567'
MCA UNIT 477	QUEEN	3205'
MCA UNIT 477	GRAYBURG	3562'
MCA UNIT 477	GRAYBURG-6	3797'
MCA UNIT 477	SAN ANDRES-7	3936'
MCA UNIT 477	SAN ANDRES-9	4095'
MCA UNIT 477	GLORIETA	5436'
MCA UNIT 477	PADDOCK	5560'

1st Perfs
Proposed Injection Interval

XII - Affirmation Statement

PPRG 13072 49 737

MCA Unit 449 / 466 / 477

I have examined the available geologic and engineering data and have found no evidence of open faults or any other hydrologic connection between any underground sources of drinking water and the injection zone for the proposed injection wells: MCA 449, MCA 466, and MCA 477.

Dewi Larasati

Dewi Larasati, ConocoPhillips Company
Petroleum Geologist

3/15/2013

Date

Attachment 7
Injection Water Chemical Analysis

An injection water chemical analysis has been submitted previously with prior expansion requests.



Water Analysis Report

4/14/2009

Address:

Lease: MCA

Customer: Conoco Phillips

Formation:

Attention: Dennis Ross

Salesman: Corey Hodnett

CC:

Target Name: MCA 238

Sample Point: MCA 238

Sample Date: 04/13/2009

Test Date: 04/14/2009

Water Analysis(mg/L)

Calcium	128
Magnesium	34
Barium	
Strontium	
Sodium(calc.)	89
Bicarbonate Alkalinity	
Sulfate	52
Chloride	424
Resistivity	

Appended Data(mg/L)

CO2	
H2S	
Iron	0
Oxygen	

Physical Properties

Ionc Strength(calc.)	0.02
pH(calc.)	
Temperature(°F)	70
Pressure(psi)	200
Density	

Additional Data

Specific Gravity		Dew Poin	
Total Dissolved Solids(Mg/L)		Lead	
Total Hardness(CaCO3 Eq Mg)	459	Zinc	

Calcite Calculation Information

Calculation Method	Value
CO2 in Brine(mg/L)	

Remarks:

--

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)		
Gypsum (Calcium Sulfate)	-2.47	
Hemihydrate (Calcium Sulfate)	-2.17	
Anhydrite (Calcium Sulfate)	-2.86	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Attachment 8
Proof of Publication of Notice

December 13, 2012 Legal Notice is included on the following page.

Affidavit of Publication

State of New Mexico,
County of Lea.

I, GUSSIE BLACK
ADMINISTRATIVE ASSISTANT
of the Hobbs News-Sun, a
newspaper published at Hobbs, New
Mexico, do solemnly swear that the
clipping attached hereto was
published in the regular and entire
issue of said newspaper, and not a
supplement thereof for a period

of 1 issue(s).

Beginning with the issue dated
December 13, 2012
and ending with the issue dated
December 13, 2012

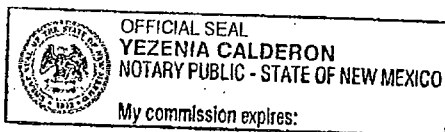
Gussie Black

ADMINISTRATIVE ASSISTANT
Sworn and subscribed to before me
this 13th day of
December, 2012

Yezenia Calderon

Notary Public

My commission expires
February 28, 2016
(Seal)



This newspaper is duly qualified to
publish legal notices or
advertisements within the meaning of
Section 3, Chapter 167, Laws of
1937 and payment of fees for said
publication has been made.

Legal Notice December 13, 2012

ConocoPhillips Company, P.O. Box 51810, Midland, TX 79710-1810. Contact: Susan B. Maunder (432) 688-6919. Is seeking administrative approval from the New Mexico Oil Conservation Division to inject produced water into three new wells in the Maljamar Cooperative Agreement (MCA) Unit in the Grayburg and San Andres formations.

The wells are all located in Township 17S, Range 35E, Lea County, NM.

MCA #449, Sec. 26, 760' FNL and 1430' FWL, Injection interval 3250' to 4565' TVD; MCA #466, Sec. 27, 680' FNL and 1210' FEL, Injection interval 3250' to 4565' TVD; and MCA #477, Sec. 27, 2570' FSL and 1920' FWL, Injection interval 3250' to 4565' TVD.

The maximum injection rate will be 1500 barrels of produced water per day. Maximum injection pressure will be 2150 psi at the surface for the wells mentioned above. Interested parties must file objections or request for hearing with the New Mexico Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87504 within 15 days of this notice.

#27763

49101647

00105836

SUSAN MAUNDER
CONOCOPHILLIPS COMPANY (MIDLAND)
PO BOX 51810
MIDLAND, TX 79710

✓ Burnett Oil, et. al
801 Cherry Street, Unit 9
Fort Worth, Texas 76102

✓ Hudson Oil Company of Texas
616 Texas Street
Fort Worth, Texas 76102

✓ COG Operating LLC
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

✓ Concho Oil & Gas LLC
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

✓ Chase Oil Corporation
Post Office Box 1767
Artesia, New Mexico 88211

✓ Robert C. Chase
Post Office Box 297
Artesia, New Mexico 88211

✓ Richard L. Chase
Post Office Box 359
Artesia, New Mexico 88211

✓ Gerene Dianne Chase Ferguson
Post Office Box 693
Artesia, New Mexico 88211

✓ Mack Energy Corporation
Post Office Box 960
Artesia, New Mexico 88211

✓ Linn Energy Holdings, LLC
& Linn Operating, Inc.
600 Travis Street, Suite 5100
Houston, Texas 77002

✓ MAR Oil & Gas Corporation
Post Office Box 5155
Santa Fe, New Mexico 87502

✓ Continental Land
Resources, LLC
Post Office Box 2691
Roswell, New Mexico 88202

✓ Devon Energy Production
Company, LP
333 W. Sheridan Avenue
Oklahoma City, OK 73102

✓ Chisos Ltd.
670 Dona Ana Road SW
Deming, New Mexico 88030

✓ Apache Corp.
2000 Post Oak Blvd.,
Suite 100
Houston, Texas 77056

✓ Fair Oil Ltd.
Post Office Box 698
Tyler, Texas 75710

✓ Cross Borders Resources, Inc.
22610 US Hwy 281 N,
Suite 218
San Antonio, Texas 78258

✓ Endurance Resources, LLC
15455 Dallas Parkway
Suite 600
Addison, Texas 75234

✓ Aron H. Hover
c/o Wade Hover
Post Office Box 1248
Fredericksburg, Texas 78624

✓ Yates Petroleum Corporation
105 South 4th Street
Artesia, New Mexico 88210

✓ Penroc Oil Corporation
Post Office Box 2769
Hobbs, New Mexico 88241

✓ Forest Oil Corporation
707 17th Street,
Suite 3600
Denver, Colorado 80202

✓ Halcon Holding, Inc.
1000 LA Street, Suite 6700
Houston, Texas 77090

✓ The Blanco Company
Post Office Box 25968
Albuquerque, New Mexico
87125

✓ XTO Energy, Inc.
810 Houston Street,
Suite 2000
Fort Worth, Texas 76102

✓ OXY USA WTP Limited Partnership
c/o Occidental Permian Ltd.
5 Greenway Plaza, Suite 110
Houston, TX 77046

✓ Carlsbad Field Office
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

Attachment 9
Surface Owner and Working Interest Owner Notice List

7006 2760 0001 6376 1062

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL COPY

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97



Sent To Carlsbad Field Office
Bureau of Land Management
Street, Apt. 620 E. Greene St.
or PO Box
City, State, Carlsbad, NM 88220

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0263

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only - No Insurance Coverage Provided)	
For delivery information: AGR/COP/MCA	
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To: XTO Energy, Inc. Street, Apt or PO Box: 810 Houston Street, City, State: Suite 2000 Fort Worth, Texas 76102	
PS Form 3800, August 2006 See Reverse for Instructions	



7006 2760 0001 6376 0270

U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only - No Insurance Coverage Provided)	
For delivery information: AGR/COP/MCA	
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To: OXY USA WTP Limited Partnership Street, Apt or PO Box: c/o Occidental Permian Ltd. City, State: 5 Greenway Plaza, Suite 110 Houston, TX 77046	
PS Form 3800, August 2006 See Reverse for Instructions	



7006 0100 0005 5769 5720

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OFFICE AGR/COP/MCA	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
MAR 12 2013
DENVER, CO POST OFFICE

Sent To
Burnett Oil, et. al
801 Cherry Street, Unit 9
Fort Worth, Texas 76102

PS Form 3800, June 2002 See Reverse for Instructions

7006 2760 0001 6376 0034

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
MAR 12 2013
DENVER, CO POST OFFICE

Sent To
Hudson Oil Company of Texas
616 Texas Street
Fort Worth, Texas 76102

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0041

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	COG Operating LLC
Street, Apt. or PO Box	One Concho Center
City, State	600 W. Illinois Avenue Midland, Texas 79701
PS Form 3800, August 2008 See reverse for instructions	



7006 2760 0001 6376 0058

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	Concho Oil & Gas LLC
Street, Apt. or PO Box	One Concho Center
City, State	600 W. Illinois Avenue Midland, Texas 79701
PS Form 3800, August 2008 See reverse for instructions	



5900 2760 0001 6376 0065

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only, No Inland)

For delivery information visit **AGR/COP/MCA**
OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here MAR 1 2 2013

Sent To
Chase Oil Corporation
Post Office Box 1767
City, St
Artesia, New Mexico 88211

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0072

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only, No Inland)

For delivery information visit **AGR/COP/MCA**
OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here MAR 1 2 2013

Sent
Robert C. Chase
Post Office Box 297
City, St
Artesia, New Mexico 88211

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0065

SENDER: COMPLETE THIS SECTION
PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

1. Article Addressed to:
Chase Oil Corporation
Post Office Box 1767
Artesia, New Mexico 88211

2. Article Number
(Transfer from service) 7006 2760 0001 6376 0065

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

3. Service Type
☐ Certified Mail ☒ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

A. Signature
Kathy Donaghe Agent ☐ Addressee

B. Received by (Printed Name)
KATHY DONAGHE

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

7006 2760 0001 6376 0072

SENDER: COMPLETE THIS SECTION
PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

1. Article Addressed to:
Robert C. Chase
Post Office Box 297
Artesia, New Mexico 88211

2. Article Number
(Transfer from service) 7006 2760 0001 6376 0072

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

3. Service Type
☐ Certified Mail ☒ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

A. Signature
Kathy Donaghe Agent ☐ Addressee

B. Received by (Printed Name)
KATHY DONAGHE

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

7006 2760 0001 6376 0089

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit **AGR/COP/MCA**

OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
 MAR 12 2013
 USPS SANTA FE NM 87101
 ARTESIA POST OFFICE

Sent To
 Street, Apt. or PO Box
 City, State

Richard L. Chase
 Post Office Box 359
 Artesia, New Mexico 88211

PS Form 3800, August 2006 See Reverse for Instructions

CERTIFIED MAIL
 SENDER: COMPLETE ITEMS 1, 2, AND 3. ALSO COMPLETE ITEM 4 IF RESTRICTED DELIVERY IS DESIRED.
 PRINT YOUR NAME AND ADDRESS ON THE REVERSE SO THAT WE CAN RETURN THE CARD TO YOU.
 ATTACH THIS CARD TO THE BACK OF THE MAILPIECE, OR ON THE FRONT IF SPACE PERMITS.

1. Article Addressed to:
 Richard L. Chase
 Post Office Box 359
 Artesia, New Mexico 88211

2. Article Number
 (Transfer from serial) 7006 2760 0001 6376 0089

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

A. Signature
 Kathy Donaghe
 B. Received by (Printed Name) Kathy Donaghe
 C. Date of Delivery
 D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

USPS SANTA FE NM
 MAR 13 2013
 ARTESIA POST OFFICE

7006 2760 0001 6376 0096

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit **AGR/COP/MCA**

OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
 MAR 12 2013
 USPS SANTA FE NM 87101
 ARTESIA POST OFFICE

Sent To
 Street, Apt. or PO Box
 City, State

Gerene Dianne Chase Ferguson
 Post Office Box 693
 Artesia, New Mexico 88211

PS Form 3800, August 2006 See Reverse for Instructions

CERTIFIED MAIL
 SENDER: COMPLETE ITEMS 1, 2, AND 3. ALSO COMPLETE ITEM 4 IF RESTRICTED DELIVERY IS DESIRED.
 PRINT YOUR NAME AND ADDRESS ON THE REVERSE SO THAT WE CAN RETURN THE CARD TO YOU.
 ATTACH THIS CARD TO THE BACK OF THE MAILPIECE, OR ON THE FRONT IF SPACE PERMITS.

1. Article Addressed to:
 Gerene Dianne Chase Ferguson
 Post Office Box 693
 Artesia, New Mexico 88211

2. Article Number
 (Transfer from service) 7006 2760 0001 6376 0096

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

A. Signature
 X
 B. Received by (Printed Name) Kathy Donaghe
 C. Date of Delivery
 D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

USPS SANTA FE NM
 MAR 13 2013
 ARTESIA POST OFFICE

7006 2760 0001 6376 0102

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	
Mack Energy Corporation	
Post Office Box 960	
Artesia, New Mexico 88211	
PS Form 3800, August 2006 See Reverse for Instructions	

SEND CERTIFIED MAIL		IS SECTION ON DELIVERY	
<p>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p>Print your name and address on the reverse so that we can return the card to you.</p> <p>Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>A. Signature <i>Kathy Donaghe</i></p> <p>B. Received by (Printed Name) KATHY DONAGHE</p> <p>C. Date of Delivery MAR 13 2013</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If YES, enter delivery address below: <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
1. Article Addressed to:		3. Service Type	
Mack Energy Corporation		<input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
Post Office Box 960		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
Artesia, New Mexico 88211			
2. Article Number		7006 2760 0001 6376 0102	
(Transfer from service label)			
PS Form 3811, February 2004		Domestic Return Receipt 102595-02-M-1540	

7006 2760 0001 6376 0119

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	
Linn Energy Holdings, LLC	
& Linn Operating, Inc.	
600 Travis Street, Suite 5100	
Houston, Texas 77002	
PS Form 3800, August 2006 See Reverse for Instructions	

7006 2760 0001 6376 0126

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information	AGR/COP/MCA
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark
MAR 12 2013
USPS SANTA FE, NM 87501
DELIVERY POST OFFICE

Sent To
Street, or PO
City, St
MAR Oil & Gas Corporation
Post Office Box 5155
Santa Fe, New Mexico 87502

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0133

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information	AGR/COP/MCA
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark
MAR 12 2013
USPS SANTA FE, NM 87501
DELIVERY POST OFFICE

Sent To
Street, or PO
City, St
Continental Land Resources, LLC
Post Office Box 2691
Roswell, New Mexico 88202

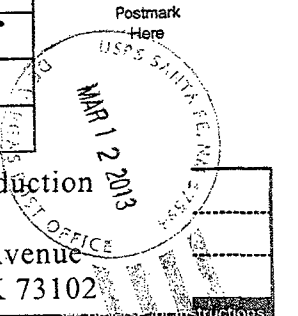
PS Form 3800, August 2006 See Reverse for Instructions

SENT		IS SECTION ON DELIVERY	
<p>PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE</p> <p>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</p> <p>■ Print your name and address on the reverse so that we can return the card to you.</p> <p>■ Attach this card to the back of the mailpiece, or on the front if space permits.</p>		<p>Received by (Printed Name) <u>Heather Box</u> <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>Date of Delivery <u>MAR 12 2013</u></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If YES, enter delivery address below:</p>	
<p>1. Article Addressed to:</p> <p>Continental Land Resources, LLC Post Office Box 2691 Roswell, New Mexico 88202</p>		<p>3. Service Type</p> <p><input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>	
<p>2. Article Number <u>7006 2760 0001 6376 0133</u></p> <p>(Transfer from serv)</p>		<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

7006 2760 0001 6376 0140

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit usps.com	AGR/COP/MCA
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	Devon Energy Production Company, LP 333 W. Sheridan Avenue Oklahoma City, OK 73102
Street, Apt. or PO Box	
City, State, ZIP+4®	
PS Form 3800, August 2008 (PSN 7530-01-000-9000) See instructions.	



7006 2760 0001 6376 0157

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit usps.com	AGR/COP/MCA
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	Chisos Ltd. 670 Dona Ana Road SW Deming, New Mexico 88030
Street, Apt. or PO Box	
City, State, ZIP+4®	
PS Form 3800, August 2008 (PSN 7530-01-000-9000) See instructions.	



7006 2760 0001 6376 0164

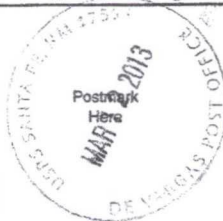
U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT

(Domestic Mail Only; No Insurance Coverage)

For delivery information visit **AGR/COP/MCA**

OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97



Sent To: Apache Corp.
 Street, 2000 Post Oak Blvd.,
 or PO Suite 100
 City, & Houston, Texas 77056

PS Form 3800, August 2006

See Reverse for Instructions

7006 2760 0001 6376 0171

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT

(Domestic Mail Only; No Insurance Coverage)

For delivery information visit **AGR/COP/MCA**

OFFICE

Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97



Sent To: Fair Oil Ltd.
 Street, Post Office Box 698
 or PO Tyler, Texas 75710
 City,

PS Form 3800, August 2006

See Reverse for Instructions

7006 2760 0001 6376 0188

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
MAR 1 2006
SAN ANTONIO, TEXAS

Sent To	Cross Borders Resources, Inc.
Street, Apt. or PO Box	22610 US Hwy 281 N,
City, State	Suite 218 San Antonio, Texas 78258

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0195

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97

Postmark Here
MAR 1 2006
SAN ANTONIO, TEXAS

Sent To	Endurance Resources, LLC
Street, Apt. or PO Box	15455 Dallas Parkway
City, State	Suite 600 Addison, Texas 75234

PS Form 3800, August 2006 See Reverse for Instructions

7006 2760 0001 6376 0201

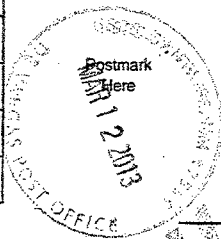
U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No International Service Provided)	
For delivery information visit usps.com	
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
<p>Sent To: Aron H. Hover c/o Wade Hover Post Office Box 1248 Fredericksburg, Texas 78624</p>	
<p>PS Form 3800, August 2006 See Reverse for Instructions</p>	

7006 2760 0001 6376 0218

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No International Service Provided)	
For delivery information visit usps.com	
OFFICIAL	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
<p>Sent To: Yates Petroleum Corporation 105 South 4th Street Artesia, New Mexico 88210</p>	
<p>PS Form 3800, August 2006 See Reverse for Instructions</p>	

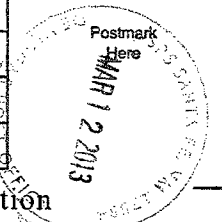
7006 2760 0001 6376 0225

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit usps.com	AGR/COP/MCA
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
<p>Sent To</p> <p>Penroc Oil Corporation</p> <p>Post Office Box 2769</p> <p>Hobbs, New Mexico 88241</p>	
<p>PS Form 3800, August 2006 See Reverse for Instructions</p>	



7006 2760 0001 6376 0232

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit usps.com	AGR/COP/MCA
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
<p>Sent To</p> <p>Forest Oil Corporation</p> <p>707 17th Street,</p> <p>Suite 3600</p> <p>Denver, Colorado 80202</p>	
<p>PS Form 3800, August 2006 See Reverse for Instructions</p>	



7006 2760 0001 6376 0249

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	
Halcon Holding, Inc.	
1000 LA Street, Suite 6700	
Houston, Texas 77090	
PS Form 3800, August 2006 See Reverse for Instructions	

7006 2760 0001 6376 0256

U.S. Postal Service™	
CERTIFIED MAIL™ RECEIPT	
(Domestic Mail Only; No Insurance Coverage Provided)	
For delivery information visit AGR/COP/MCA	
OFFICE	
Postage	\$ 3.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 8.97
Sent To	
The Blanco Company	
Post Office Box 25968	
Albuquerque, New Mexico	
87125	
PS Form 3800, August 2006 See Reverse for Instructions	

CERTIFIED MAIL PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.	
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits.	
1. Article Addressed to:	
The Blanco Company Post Office Box 25968 Albuquerque, New Mexico 87125	
2. Article Number	
(Transfer from service) 7006 2760 0001 6376 0256	
COMPLETE THIS SECTION ON DELIVERY A. Signature <input checked="" type="checkbox"/> Agent <input type="checkbox"/> Addressee X Phil White B. Received by (Printed Name) C. Date of Delivery Phil White D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540	

Jones, William V., EMNRD

From: Adam Rankin <AGRankin@hollandhart.com>
Sent: Friday, March 15, 2013 2:49 PM
To: Adam Rankin; Jones, William V., EMNRD
Cc: Ezeanyim, Richard, EMNRD; Lisamarie Ortiz
Subject: RE: ConocoPhillips MCA Unit Administrative Application
Attachments: 3151_001.pdf

Will,

Attached is a supplement to the above-referenced application providing proof of notice of the application.

Best,
Adam

From: Adam Rankin
Sent: Friday, March 15, 2013 11:18 AM
To: 'Jones, William V., EMNRD'
Cc: 'Ezeanyim, Richard, EMNRD'
Subject: ConocoPhillips MCA Unit Administrative Application

Will,

Attached is an updated geologist's statement for the referenced application. Let me know, Will, if you see any issues or have any questions about this application.

Best,
Adam

Adam G. Rankin
Holland & Hart LLP
110 North Guadalupe Suite 1
P.O. Box 2208
Santa Fe, NM 87504
Office: (505) 988-4421
Direct: (505) 954-7294
Cell: (505) 570-0377
Fax (505) 983-6043
E-mail: agrankin@hollandhart.com
[Download vCard](#)
[Web Bio](#)

HOLLAND&HART 

CONFIDENTIALITY NOTICE: This message is confidential and may be privileged. If you believe that this email has been sent to you in error, please reply to the sender that you received the message in error; then please delete this e-mail. Thank you.

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING THE:**

**APPLICATION OF CONOCOPHILLIPS FOR AMENDMENT OF DIVISION
ORDER NO. R-2403, AS AMENDED, TO INCREASE THE AUTHORIZED
INJECTION PRESSURE IN ITS MCA UNIT AREA, LEA COUNTY, NEW
MEXICO.**

**CASE NO. 14421
ORDER NO. R-2403-B**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 4 and April 1, 2010, at Santa Fe, New Mexico, before Examiners William V. Jones and David K. Brooks.

NOW, on this 8th day of June, 2010, the Division Director, having considered the testimony, the record and the recommendations of the Examiners,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.

(2) The Applicant, ConocoPhillips, seeks to establish an authorized surface injection pressure for water of 2150 psi within its previously approved secondary recovery project within the MCA Unit Area, Lea County, New Mexico.

(3) Pursuant to the Maljamar Cooperative Repressuring Agreement, approved by Oil Conservation Commission Order No. 485 in Case No. 36, dated November 14, 1942, pressure maintenance operations through cooperative gas injection by various operators began in the Maljamar Cooperative Area. The original gas injection area was expanded and pilot waterflood project operations were initiated over a twenty year period pursuant to various Oil Conservation Commission orders such as Orders No. 595, R-841, and R-1075.

(4) On October 30, 1979 in Order No. R-6157, the Oil Conservation Division approved the creation of the "Maljamar CO2 Injection Project", subsequently expanded by Order PMX-153 and clarified as to allowed injection fluids in Order No. R-6157-A.

(5) On September 24, 1962, the Maljamar Cooperative Agreement project area was unitized for waterflood operations and Continental Oil Company was named unit operator.

(6) By Order No. R-2403, issued on December 31, 1962, the Division granted the application of Continental Oil Company for, among other things, (a) approval of a Supplemental Cooperative Agreement ("Supplement 5") unitizing oil and gas by agreement within certain leases and (b) adoption of the initial Plan of Operation for expansion of the pressure maintenance program by gas and water injection in the Cooperative Area.

(7) The Maljamar Cooperative Agreement Area ("MCA Unit") heretofore approved by the Oil Conservation Commission for pressure maintenance of the Grayburg-San Andres formations includes the following Federal, State and Fee acreage in Lea County, New Mexico:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, N.M.P.M.

Sections 14 to 23: All
Sections 25 to 35: All

TOWNSHIP 17 SOUTH, RANGE 33 EAST, N.M.P.M.

Section 30: W/2

(8) The MCA Unit Operator, from time to time, has received authorization to expand this project by adding injection wells as provided in Supplement 5 and on receipt of Division approval as required by Order No. R-2403.

(9) Orders approving additional injection wells in the project area have limited initial maximum injection pressures to approximately 775 psi. These orders have provided that increases in injection pressures may be authorized by the Division Director "upon a proper showing by the operator that higher pressure will not result in migration of the injected fluid from the permitted injection interval or harmful formation fracturing".

(10) ConocoPhillips presented geological and engineering evidence as follows:

- a. The unitized interval in the MCA Unit is comprised of portions of the Grayburg-San Andres formation, Maljamar-Grayburg-San Andres Pool, which is a well defined reservoir into which water has been injected for enhanced recovery operations for over 65 years. The injection interval is approximately 1278 feet thick. Tight zones in the Queen formation, above

the unitized interval and low porosity zones in the San Andres below this interval assure that injected fluids do not migrate out of zone.

- b. ConocoPhillips is currently injecting in 28 wells in the MCA Unit and plans to add additional injection wells within the southeastern portion of the waterflood in the configuration of 10 acre well density, line drive patterns.
- c. Some producers in this MCA Unit are shut in because of high water production and no place to dispose of the water. Higher injection pressures would enable this water to be re-injected.
- d. New wells to be converted will have adequate casing and cement to prevent migration of injection fluids out of the intended injection interval.
- e. ConocoPhillips indicated no current problems with vertical movement of fluids within the MCA Unit and stated some older wells had been repaired with liners. The older wells have had internal fiberglass liners installed and cemented in order to best confine injection fluid to the intended water flooding interval.
- f. Current injection wells are located throughout the MCA Unit and each was originally either not limited in pressure (for the older wells) or authorized to inject at a surface pressure of 775 psi (0.2psi per foot of depth to the top of the injection interval) and subsequently each has been authorized to inject at a surface pressure of 2150 psi which was approved by the Division.
- g. ConocoPhillips presented step-rate tests on three wells (#223, #273, and #301) as well as initial shut in pressure (ISIP) data from stimulation treatments showing that the most likely formation parting pressure is above 2150 psi.
- h. Approval of a surface injection pressure of 2150 psi for all new injection wells in the MCA Unit will result in operational and administrative efficiencies for ConocoPhillips.

(11) No person other than ConocoPhillips appeared at the hearing, and except for the comments noted below, no person indicated any objection to the application.

(12) This waterflood is one of several older projects in Lea County with some occurrences of water flows while drilling new wells and consequentially with required annual bradenhead surveys. Many of the older wells were drilled in the 1940's and therefore have old casing and cement and are open hole completions stimulated with nitro-glycerin.

(13) The United States Bureau of Land Management ("BLM") filed a statement in email format prior to this hearing listing concerns such as the waterflows and the effects the increased pressure limit would have on older wells with open hole completions.

(14) The case was heard on March 4, 2010, and then continued to permit ConocoPhillips to meet with BLM representatives to discuss its questions and concerns.

(15) ConocoPhillips testified at the April 1 hearing that it had met with the BLM and reviewed its application and recent step-rate tests. ConocoPhillips stated the BLM now supported its request for a maximum surface injection pressure in the MCA Unit of 2150 psi. The BLM did not appear at either hearing and did not send any subsequent letter after the meeting with ConocoPhillips.

(16) As the BLM had mentioned the possible need for periodic tracer surveys, ConocoPhillips presented recent tracer surveys run immediately after the initial completions of two wells to be used for injection in the MCA Unit. The completion fluids on each well had been tagged with radioactive material. These surveys demonstrated that the fracturing or stimulation fluids remained in the intended treatment intervals and did not migrate out of zone during the treatments.

(17) ConocoPhillips emphasized that all new injection wells will be drilled with production casing run to total depth and cement circulated to surface and will therefore competently isolate the injection interval from adjacent formations.

(18) A surface injection pressure of 2150 psi for all "new" injection wells in the MCA Unit will result in operational efficiencies for ConocoPhillips, and will not cause migration of injection fluids out of zone, will otherwise be in the best interest of conservation, the prevention of waste and the protection of correlative rights.

(19) Increased pressures should be limited in older wellbores if these are not repaired with liners or squeezed to supplement older cement jobs. If any conduits exist to allow vertical movement of injected waters it would be the old wellbores, some of which were drilled and abandoned decades ago. Away from these wells, there is a natural barrier to vertical movement of injected waters within the MCA Unit. There is no evidence of faulting in this area and logs presented at the hearings indicate higher stress rocks exist above and below the Grayburg-San Andres porosity intervals.

(20) Division records indicate there are approximately 29 injection wells and total injection per year is approximately 2 million barrels of water. There are approximately 205 producing wells and total water production per year is approximately 3 million barrels of water. Apparently ConocoPhillips intends to drill and convert additional injection wells in order to increase waterflood efficiency and to reverse the decline in reservoir pressure. The additional injection pressure is needed to serve the same purpose.

(21) Division permitting records indicate that injection pressure limits were imposed on MCA Unit wells permitted for injection after 1978. Injection wells permitted before this time period were not limited in pressure and are still not limited in pressure. The operator of the MCA Unit quickly asked for more than the 0.2 psi per foot injection gradient and supported these requests with results of Step Rate Tests run on wells #256 (tested 6/20/79) and wells #202 and #350 (both tested 12/11/89). Other evidence used to support these requests for increased pressure was breakdown pressures and ISIP's experienced during stimulation treatments. With the three Step Rate Tests presented in this application, the Division has evidence of a total of only 6 wells tested with injection Step Rate Tests within the life of the MCA Unit.

(22) The Division has granted 2150 psi for maximum surface injection pressure in previous years and indeed all current injection wells (see Exhibit "A" to this order) either are limited to 2150 psi or not limited at all. Approval of this application would be consistent with prior approvals and is supported by the evidence.

(23) ConocoPhillips testified that currently Well No. 380 is being used to inject gas that was contaminated with injected CO₂ from the old tertiary recovery project. Other wells may be used for this in the future. The maximum injection pressure while injecting CO₂ or a mixture of gases and water was addressed in 1992 with a permit from the Division and that permit is available in the files of administrative orders PMX-153 or IP1-375.

(24) The application of ConocoPhillips to authorize an increase in the maximum allowable surface injection pressure to 2150 psi for "new" wells in its Maljamar Cooperative Agreement Unit, Lea County, New Mexico should be approved subject to the following conditions:

- a. Wells listed on the attached Exhibit "A" should be considered as "existing" injection wells. The maximum allowable surface injection pressure on these existing wells should be as granted on previously approved permits. Any well NOT listed in the attached Exhibit "A", if converted to injection, should be considered to be a "new" injection well.
- b. The maximum allowable surface injection pressure while injecting water into any "new" injection well within the MCA Unit, should be set at 2150 psi; provided said well is equipped with cemented casing extending through the Grayburg San Andres waterflood interval.
- c. To prevent possible damage to older wells converted to injection, any "new" injection well any portion of which consists of an open hole or uncemented completion should be limited to a maximum allowable surface pressure of 800 psi, which is approximately equivalent to a gradient of 0.2 psi per foot of depth, until such well is itself step-rate-tested and administratively permitted for increased pressures.

- d. The Division director should be allowed to administratively approve increases to the permitted maximum surface injection pressure on any "new" or "existing" injection well within the MCA Unit after proper demonstration that such well is adequately cased and fracturing of the formation will not occur at the revised pressure.
- e. Any injection well permitted for and primarily used for injection of Carbon Dioxide or Carbon Dioxide contaminated gases, should be limited in maximum surface injection pressure, while injecting these gases, as per the Director's letter dated August 5, 1992. (See administrative Order IPI-375)

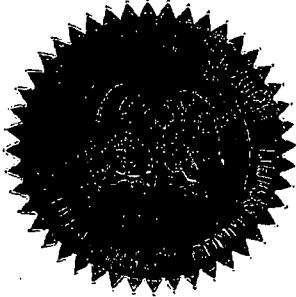
IT IS THEREFORE ORDERED THAT:

(1) The application of ConocoPhillips to authorize an increase in the maximum allowable surface injection pressure to **2150 psi for "new" wells** in its Maljamar Cooperative Agreement Unit, Lea County, New Mexico is hereby approved subject to the following conditions:

- a. Wells listed on the attached Exhibit "A" shall be considered as "existing" injection wells. The maximum allowable surface injection pressure on these existing wells shall be as granted on previously approved permits. Any well NOT listed in the attached Exhibit "A", if converted to injection, shall be considered to be a "new" injection well.
- b. The maximum allowable surface injection pressure while injecting water into any "new" injection well within the MCA Unit, shall be set at **2150 psi**; provided said well is equipped with cemented casing extending throughout the Grayburg-San Andres waterflood interval.
- c. Any "new" injection well any portion of which consists of an openhole or uncemented completion shall be limited to a maximum allowable surface pressure of 800 psi, until such well is itself Step-Rate-Tested and administratively permitted for increased pressures.
- d. The Division director shall be authorized to administratively approve increases to the permitted maximum surface injection pressure on any "new" or "existing" injection well within the MCA Unit after proper demonstration that such well is adequately cased and fracturing of the formation will not occur at the revised pressure. Any application for an increase in this pressure limit shall be accompanied by results from a new Step Rate Test run on any one well as subject to the application or, in the case of multiple cased and cemented wells, new Step Rate Tests run on representative wells.

- e. Any injection well permitted for and primarily used for injection of Carbon Dioxide or Carbon Dioxide contaminated gases, shall be limited in maximum surface injection pressure, while injecting these gases, as per the Director's letter dated August 5, 1992 (See administrative Order IPI-375).
- (2) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "Mark E. Fesmire".

MARK E. FESMIRE, P.E.
Acting Director

Exhibit "A" R-2403-B, Case No. 14421
MCA Unit "Existing" Injection Wells

30-025-	MCA Unit	Unit Letter	Sec	Psi Limit	Inj Permit	Plimit Water PSI
00610	067	L	21			
00627	074	J	22			
00639	084	P	22			
08063	094	P	20	Yes	PMX-153	2150
00759	109	D	29	Yes	PMX-153	2150
00767	111	B	29	Yes	PMX-153	2150
00715	121	B	27	Yes	PMX-153	2150
00705	123	D	26			
00678	127	D	25			
00682	131	B	25			
00685	137	H	25			
00681	139	F	25			
00697	141	H	26			
00714	145	H	27	Yes	PMX-153	2150
00740	150	H	28	Yes	PMX-153	2150
00736	152	F	28	Yes	PMX-153	2150
00753	154	H	29	Yes	PMX-153	2150
00755	169	L	29	Yes	PMX-153	2150
00764	171	J	29	Yes	PMX-153	2150
00728	180	L	27	Yes	PMX-153	2150
00718	184	J	27	Yes	PMX-153	2150
00701	189	J	26			
00763	211	P	29			
00800	223	B	33	Yes	PMX-153	2150
23730	273	L	26	Yes	PMX-153	2150
24226	301	J	28	Yes	PMX-153	2150
08051	331	D	20			
30337	380	B	28	Yes	See Permit Letter	Dated 8/5/92
31100	386	F	29	Yes	PMX-164-A	2150

1 of 3

Injection Permit Checklist: Received 03/12/13 First Email Date: 03/13/13 Final Reply Date: 04/02/13 Final Notice Date:

Issued Permit: Type WFX / PMX / SWD Number: 908 Permit Date: (Legacy Permit: WFX-886)
R-2403 / R-2403-A / R-2403-B

Wells 449 Well Name(s): MCA Unit

API Num: 30-0 25-39429 Spud Date: Proposed New/Old: N (UIC CI II Primacy March 7, 1982)

Footages 760 FNL / 1430 FWL Lot Unit C Sec 26 Tsp 17S Rge 32 E County Lea

General Location/Pool Area: Maljamar Coop Agreement (MCA) Unit / Maljamar Grayburg San Andres Pool

Operator: Conoco Phillips Contact Susan Mawnder (43329)

OGRID: 217817 RULE 5.9 (Inactive Wells) 4 Total Wells 4624 (Fincl Assur) Y Compl. Order? N IS 5.9 OK? Y

Well File Reviewed: N/A Current Status: Case files for previous permits and orders for MCA Unit

Planned Rehab Work to Well: None - new well / Perf & packer info in 04/02/13 e-mail

Well Diagrams: Before Conversion As proposed After Conversion Are Elogs in Imaging?: NA

Well Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <u> </u> or Existing <u> </u> Cond	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Planned <u>✓</u> or Existing <u> </u> Surface	<u>12 1/4 / 8 5/8</u>	<u>0-975</u>	<u>None</u>	<u>300 L / 200 T</u>	<u>Circulate to surf</u>
Planned <u> </u> or Existing <u> </u> Interm	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Planned <u>✓</u> or Existing <u> </u> LongSt	<u>7 7/8 / 5 1/2"</u>	<u>0-4411</u>	<u>None</u>	<u>500 L / 400 T</u>	<u>Circulate to surf</u>
Planned <u> </u> or Existing <u> </u> Liner	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Planned <u>✓</u> or Existing <u> </u> OH / PERP	<u> </u>	<u>3945-4215</u>	<u> </u>	<u> </u>	<u> </u>

Depths/Formations:	Depths (ft)	Formation	Tops?	Construction / Ops Details:
Above Top of Inject Formation	<u>+1003</u>	<u>Seven Rivers</u>	<u>2651</u>	Drilled TD <u>4411</u> PBTD <u>4351</u>
Above Top of Inject Formation	<u>378</u>	<u>Queen</u>	<u>3276</u>	Tubing Size <u>2 7/8' / 2.875'</u>
Proposed Interval TOP:	<u>3630</u>	<u>Grayburg</u>	<u>3654</u>	Open Hole <u> </u> or Perfs <u>X</u>
Proposed Interval BOTTOM:	<u>4351</u>	<u>San Andres</u>	<u>4217</u>	Proposed Packer Depth <u>3640 - shallower west</u>
Below Bottom of Inject Formation	<u>-1207</u>	<u>Glorieta</u>	<u>5558</u>	Max Packer Depth <u>3845</u> (100 ft limit)
Below Bottom of Inject Formation	<u>-1331</u>	<u>Paddock</u>	<u>5682</u>	Proposed Max. PSI <u>2150</u> (per R-2403-B)
Hydrologic- Geologic Information for AOR				Calc. FPP <u> </u> (0.65 psi per ft)
Capitan Reef? (in <u> </u> thru <u> </u>) Potash? <u>N</u> Noticed? <u>N</u> WIPP? <u>N</u> Noticed? <u>N</u> Salado Top <u>1111</u> Bot <u> </u> Cliff House? <u>N/A</u>				
Fresh Water: Max Depth: <u>1300 ft</u> FW Formation <u>Ogallala</u> Wells? <u><300'</u> Analysis? <u>✓</u> Hydrologic Affirm Statement <u>X</u> <u>Via e-mail 03/15/13</u>				
Disposal Fluid: Formation Source(s) <u>Grayburg-San Andres</u> On Lease <u>✓</u> Only from Operator <u>✓</u> or Commercial <u> </u>				
Disposal Interval: Protectable Waters? <u>N</u> H/C Potential: Log <u> </u> / Mudlog <u> </u> / DST <u> </u> / Depleted <u> </u> Other <u>Yes - water flooding for enhanced recovery</u>				

NOTICE: Newspaper Date Dec 13, 2012 Mineral Owner BLM Surface Owner BLM N. Date 03/12/13

RULE 26.7(A) Identified Tracts? Y Affected Persons: BLM + Attachment #9 list N. Date 03/12/13

AOR: 1/2 M-Radius Maps? Y Well List? Y Producing in Interval? Y Formerly Produced in Interval? Y

Penetrating Wells: No. Active Wells 13 WIN + 47 G-3A Pool Num Repairs? N on which well(s)? Diagrams? N

Penetrating Wells: No. P&Aed Wells 27 Num Repairs? N on which well(s)? Diagrams? Y

Permit Conditions:

Issues: Placement of packers ~ stipulate 100' distance for packer

Issues:

Issues:

2 of 3

Injection Permit Checklist: Received 03/12/13 First Email Date: 03/13/13 Final Reply Date: 04/02/13 Final Notice Date: 04/13/13Issued Permit: Type: WFX / PMX / SWD Number: 908 Permit Date: _____ (Legacy Permit: WFX-8666)# Wells 466 Well Name(s): MCA Unit R-2403/R-2403-A/R-2403-BAPI Num: 30-0 25-39430 Spud Date: Proposed New/Old: N (UIC CI II Primacy March 7, 1982)Footages 680 FNL/1210 FEL Lot _____ Unit A Sec 27 Tsp 17S Rge 32E County LeaGeneral Location/Pool Area: Maljamar Coop Agreement (MCA) Unit/ Maljamar; Grayburg - San Andres Pool (43329)Operator: ConocoPhillips Contact Susan MaunderOGRID: 217817 RULE 5.9 (Inactive Wells) 4 Total Wells 4624 (Fincl Assur) Y Compl. Order? N IS 5.9 OK? YWell File Reviewed: N/A Current Status: Case files for previous permits/orders for MCA UnitPlanned Rehab Work to Well: None - new well/ Perf & packer info in 04/02/13 e-mailWell Diagrams: Before Conversion Proposed After Conversion _____ Are Elogs in Imaging?: N/A

Well Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement St or Cf	Cement Top and Determination Method
Planned ___ or Existing ___ Cond	—	—	—	—	—
Planned <u>✓</u> or Existing ___ Surface	<u>12 1/4 / 8 5/8</u>	<u>0 - 950</u>	<u>None</u>	<u>300L / 200T</u>	<u>Circulate to surf</u>
Planned ___ or Existing ___ Interm	—	—	—	—	—
Planned <u>✓</u> or Existing ___ LongSt	<u>7 7/8 / 5 1/2</u>	<u>0 - 4301</u>	<u>None</u>	<u>500L / 400T</u>	<u>Circulate to surf</u>
Planned ___ or Existing ___ Liner	—	—	—	—	—
Planned <u>✓</u> or Existing ___ OH / <u>PERF</u>	—	<u>3850 - 4080</u>	—	—	—

Depths/Formations:	Depths (ft)	Formation	Tops?	Construction / Ops Details:
Above Top of Inject Formation	<u>+ 1066</u>	<u>Seven Rivers</u>	<u>2489</u>	Drilled TD <u>4301</u> PBTD <u>4235</u>
Above Top of Inject Formation	<u>+ 435</u>	<u>Queen</u>	<u>3120</u>	Tubing Size <u>7.875'</u>
Proposed Interval TOP:	<u>3542</u>	<u>Grayburg</u>	<u>3535</u>	Open Hole ___ or Perfs <u>X</u>
Proposed Interval BOTTOM:	<u>4235</u>	<u>San Andres</u>	<u>4130</u>	Proposed Packer Depth <u>3552 (shallowest)</u>
Below Bottom of Inject Formation	<u>- 1236</u>	<u>Glorieta</u>	<u>5471</u>	Max Packer Depth <u>3756</u> (100 ft limit)
Below Bottom of Inject Formation	<u>- 1360</u>	<u>Paddock</u>	<u>5595</u>	Proposed Max. PSI <u>2150</u> approved <u>R-2403-B</u>
Hydrologic - Geologic Information for AOR				Calc. FPP <u>2503</u> (0.65 psi per ft)

Capitan Reef? (in ___ thru ___) Potash? N Noticed? N WIPP? N Noticed? N Salado Top 975' Bot — Cliff House? N/AFresh Water: MaxDepth: ±300 FW Formation Ogallala Wells? 4300' Analysis? ✓ Hydrologic Affirm Statement X via email 02/15/13Disposal Fluid: Formation Source(s) G-SA On Lease ___ Only from Operator ___ or Commercial ___Disposal Interval: Protectable Waters? N H/C Potential: Log ___ Mudlog ___ DST ___ Tested ___ Depleted ___ Other water flooding for HC recoveryNOTICE: Newspaper Date Dec 13, 2012 Mineral Owner Attachment 9 Surface Owner ECM N. Date 03/12/13RULE 26.7(A) Identified Tracts? Y Affected Persons: Attachment 9 with RR N. Date 03/12/13AOR: 1/2 M-Radius Maps? Y Well List? Y Producing in Interval? Y - water flood Formerly Produced in Interval? _____Penetrating Wells: No. Active Wells _____ Num Repairs? _____ on which well(s)? See #449 Diagrams? _____Penetrating Wells: No. P&Aed Wells _____ Num Repairs? _____ on which well(s)? See #449 Diagrams? _____

Permit Conditions:

Issues: Packer placement as proposed - stipulate 100'

Issues: _____

Issues: _____

See well 449

3 of 3

Injection Permit Checklist: Received 03/12/13 First Email Date: 03/13/13 Final Reply Date: 04/02/13 Final Notice Date: _____

Issued Permit: Type WFX/PMX/SWD Number: 908 Permit Date: _____ (Legacy Permit: WFX-886)

Wells 477 Well Name(s): MCA Unit R-2403 | R-2403-A | R-2403-B

API Num: 30-0 25-39431 Spud Date: Proposed New/Old: N (UIC CI II Primacy March 7, 1982)

Footages 1380 FNL / 710 FEL Lot Unit K Sec 27 Tsp 17S Rge 32E County Lea

General Location/Pool Area: Maljamar Coop Agreement (MCA) Unit / Maljamar's Grayburg San Andres Pool (43329)
Operator: ConocoPhillips Contact Susan Maunders

OGRID: 217817 RULE 5.9 (Inactive Wells) 4 Total Wells 4624 (Fincl Assur) Y Compl. Order? N IS 5.9 OK? Y

Well File Reviewed N/A Current Status: Case files for previous permits/orders for MCA Unit

Planned Rehab Work to Well: None - new well / Perf & packer info. in e-mail 04/02/13

Well Diagrams: Before Conversion Proposed After Conversion N/A Are Elogs in Imaging?: N/A

Well Details:	Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned or Existing Cond	—	—	—	—	—
Planned or Existing Surface	12 1/4 / 8 5/8	0-940'	None	200 L / 200 T	Circulate to surf
Planned or Existing Interm	—	—	—	—	—
Planned or Existing LongSt	7 7/8 / 5 1/2	0-4274'	None	500 L / 400 T	Circulate to surf
Planned or Existing Liner	—	—	—	—	—
Planned or Existing OH/PERF	Same as Long	3840-4145			

Depths/Formations:	Depths (ft)	Formation	Tops?	Construction / Ops Details:
Above Top of Inject Formation	+995	Seven Rivers	2567	Drilled TD 4274 PBTD 4194
Above Top of Inject Formation	+357	Grayburg	3562	Tubing Size 7.875
Proposed Interval TOP:	3549	Grayburg	3562	Open Hole or Perfs X
Proposed Interval BOTTOM:	4194	San Andres	4093	Proposed Packer Depth 3559 (shallower)
Below Bottom of Inject Formation	-1242	Glorieta	5436	Max Packer Depth 3740 (100 ft limit)
Below Bottom of Inject Formation	-1366	Paddock	5560	Proposed Max. PSI 2150 - approved in
Hydrologic - Geologic Information for AOR				Calc. FPP 2496 (0.65 psi per ft)

Capitan Reef? (in / thru) Potash? Noticed? WIPP? Noticed? Salado Top 1082 Bot Cliff House? N/A
Fresh Water: MaxDepth: 1300' FW Formation Ogallala Wells <300' Analysis? Hydrologic Affirm Statement X via email 03/15/13
Disposal Fluid: Formation Source(s) G-SA On Lease Only from Operator or Commercial
Disposal Interval: Protectable Waters? N H/C Potential: Log Mudlog / DST Tested / Depleted Other Waterflooding - HC recovery in

NOTICE: Newspaper Date Dec 13, 2012 Mineral Owner BLM Surface Owner BLM / Fee N. Date 03/12/13

RULE 26.7(A) Identified Tracts? Y Affected Persons: Attachment #9 N. Date 03/12/13

AOR: 1/2 M-Radius Maps? Y Well List? Y Producing in Interval? Y - water flood Formerly Produced in Interval?

Penetrating Wells: No. Active Wells Num Repairs? on which well(s)? See well #449 Diagrams?

Penetrating Wells: No. P&Aed Wells Num Repairs? on which well(s)? See well #449 Diagrams?

Permit Conditions:

Issues: Packer placement - stipulate 100'

Issues:

Issues:

See well 449

R-2403-B

Goetze, Phillip, EMNRD

From: Maunder, Susan B <Susan.B.Maunder@conocophillips.com>
Sent: Tuesday, April 02, 2013 7:35 AM
To: Goetze, Phillip, EMNRD
Cc: Adam Rankin
Subject: RE: Request for Additional Information on New MCA Wells

Good morning Phillip,

ConocoPhillips Company is requesting authorization for packers to be set at any depth within the injection interval in these three wells. Thus we have specified the initial perforated interval while planning to preserve the potential to add perforations later through the C-103 process instead of the C-108 process. I had the reservoir engineer complete this table for inclusion into our C-108 package.

Well Name	API Number	Location	TD	PBTD	Injection Interval	Initial Perforated Interval	Shallowest Packer Setting
MCA 449	30-025-39429-00	Sec. 26, T17S, R32E 760 FNL, 1430 FWL	4,411	4,351	3630-4351	3945-4215	3640
MCA 466	30-025-39430-00	Sec. 27, T17S, R32E 680 FNL, 1210 FEL	4,301	4,235	3542-4235	3850-4080	3552
MCA 477	30-025-39431-00	Sec. 27, T17S, R32E 1380 FNL, 710 FEL	4,274	4,194	3549-4194	3840-4145	3559

Hopefully, this provides you with adequate information to complete the approval for our authorization to inject. If there are further data needs, please let me know at your earliest convenience so that I may gather information from appropriate team members.

Thank you for your time this morning.
All the best to you,
Susan Maunder
432-688-6913

From: Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]
Sent: Thursday, March 21, 2013 12:59 PM
To: Maunder, Susan B
Subject: [EXTERNAL]RE: Request for Additional Information on New MCA Wells

Sorry, I have been in hearing all morning – thanks for getting back to me on this one. Yes, this will be great. I will make it part of the C108 package once you get it back to me and no, you do not need to provide any corrected documentation since I am requesting more specific information. PRG

Phillip R. Goetze, P.G.
Engineering Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe, NM 87505
O: 505.476.3466 F: 505.476.3462

From: Maunder, Susan B [<mailto:Susan.B.Maunder@conocophillips.com>]
Sent: Thursday, March 21, 2013 10:21 AM
To: Goetze, Phillip, EMNRD
Subject: RE: Request for Additional Information on New MCA Wells

Phillip,

Good morning. This is a follow-up to a voice message this morning. I will have a table to summarize our intentions for these wells that will look something like the one below. Is this the format you are looking for? Do I need to provide corrected documentation?

Well Name	API Number	Location	TD	PBTD	Injection Interval	Initial Perforated Interval	Shallowest Packer Setting
MCA 449	30-025-39429-00						
MCA 466	30-025-39430-00						
MCA 477	30-025-39431-00						

Hope this will provide some clarity when the data is inserted by our geologists and production engineers. Please advise if this is what you are looking for.

Regards,
Susan Maunder
432-688-6913

From: Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]
Sent: Thursday, March 14, 2013 6:04 PM
To: Maunder, Susan B
Subject: [EXTERNAL]Request for Additional Information on New MCA Wells

Susan,

I am reviewing the application for the three new injection wells (MCA 449/MCA 466/MCA 477) at the Maljamar Cooperative Agreement Unit. In each of the well data sheets, the information provided for the injection interval is not consistent with the well diagrams (for instance, MCA 449 provides an injection interval of 3654' to 4444' while the well diagram shows a packer setting of 3600' and a PBTD of 4278'). What I am requesting is the proposed interval (top and bottom) for the perforations in each well so that this may be included in the application and used for the permit. Please provide (by e-mail) the proposed perf intervals for each well. Contact me with any questions this request. Thanks. PRG

Phillip R. Goetze, P.G.
Engineering Bureau, Oil Conservation Division
1220 South St. Francis Dr., Santa Fe, NM 87505
O: 505.476.3466 F: 505.476.3462