	`	pTG-W
DATE IN	<u>9/16,11</u> susper	NSE ENGINEER TW LOGGED IN 9.1/6,1// TYPE WFX APP NO.1125950087
		ABOVE THIS LINE FOR DIVISION USE ONLY
		NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 - Engineering Bureau -
		ADMINISTRATIVE APPLICATION CHECKLIST
1	THIS CHECKLIST IS N	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Appli	cation Acronym	15:
	[DHC-Dow [PC-Po	Indard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] (nhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] ool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] alified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF A [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD k One Only for [B] or [C] Commingling - Storage - Measurement
	Checl [B]	k One Only for [B] or [C] 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 <u>Amend Order No. WFX-850</u>
[2]	NOTIFICAT [A]	TION REQUIRED TO: - Check Those Which Apply, or Does Not Apply 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 AC	CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE

OF APPLICATION INDICATED ABOVE.

Signature

[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.

David Catanach Print or Type Name

9/16/11 Date

Agent for Quantum Resources Management, LLC Title

drcatanach@netscape.com E-Mail Address

G

# September 16, 2011

Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Attention: Ms. Jami Bailey, CPG Division Director

## HAND DELIVERED

Re: Application to Amend Order No. WFX-850 Quantum Resources Management, LLC Jalmat Field Yates Sand Unit Wells No. 178, 234 and 242 Sections 12, 2 & 11, respectively, Township 22 South, Range 35 East, NMPM, Jalmat (Tansill-Yates-Seven Rivers) Oil & Gas Pool Lea County, New Mexico

Dear Ms. Bailey,

By Order No. WFX-850 dated January 27, 2009, Melrose Operating Company ("Melrose") was authorized to convert seventeen (17) wells to water injection within the Jalmat Field Yates Sand Unit Waterflood Project. Among these wells were the Jalmat Field Yates Sand Unit ("JFYSU") Wells No. 178, 234 and 242, described in detail as follows:

<u>Well Name &amp; No</u> .	<u>API No</u> .	Well Location	<b>Injection Interval</b>
JFYSU No. 178	30-025-38924	528' FSL & 1869' FWL Unit N, Section 12-22S-35E	3,724'-3,852'
JFYSU No. 234	30-025-38927	688' FSL & 1060' FEL Unit P, Section 2-22S-35E	3,818'-3,992'
JFYSU No. 242	30-025-38941	625' FNL & 375' FWL Unit D, Section 11-22S-35E	3,795'-3,890'

Quantum Resources Management, LLC ("Quantum") assumed operatorship of the Jalmat Field Yates Sand Unit effective January 14, 2011. As current operator of this secondary recovery project, Quantum respectfully requests to amend Order No. WFX-850 by adding additional injection perforations within the above-described JFYSU Wells No. 178, 234 and 242, as follows:

<u>Well Name &amp; No</u> .	<b>Current Perforations</b>	Additional Perforations
JFYSU No. 178 JFYSU No. 234	3,724'-3,852' 3,818'-3,992'	3,853'-4,080' 3,993'-4,088'
JFYSU No. 242	3,795'-3,890'	3,891'-4,025'

Quantum Resources Management, LLC Application to Amend Order No. WFX-850 Jalmat Field Yates Sand Unit Waterflood Project Page 2

Attached is a portion of the Jalmat Field Yates Sand Unit Agreement. This document was presented as Exhibit No. 1 in Case No. 2545 on April 25, 1962 (See Order No. R-2235). Pursuant to the unit agreement, the unitized interval for the Jalmat Field Yates Sand Unit comprises the Yates Sand formation encountered in the drilling of the British American Hall State "D" No. 1 located 660 feet from the North line and 660 feet from the East line of Section 23, Township 22 South, Range 35 East, NMPM, between the depths of 3,812 feet and 4,018 feet (KB) as shown on the radiation log for said well. Also attached is a cross section showing that the proposed additional injection perforations within the JFYSU Wells No. 178, 234 and 242 are all contained within the unitized interval for the Jalmat Field Yates Sand Unit.

Extensive area of review ("AOR") well data was presented in the administrative application resulting in the issuance of Order No. WFX-850. An examination of the AOR well data for the JFYSU Wells No. 178, 234 and 242 indicates that since Order No. WFX-850 was issued, no additional wells have been drilled, no additional wells have been plugged and no other well activity that might affect the AOR has been performed. <u>Consequently, AOR well data relating to the JFYSU Wells No. 178, 234 and 242 remains virtually unchanged since the issuance of Order No. WFX-850.</u>

The proposed expansion of the injection intervals within the JFYSU Wells No. 178, 234 and 242 will allow Quantum to target additional pay sands within the Yates formation for secondary recovery, thereby resulting in the recovery of additional oil and gas reserves within the unit area.

Quantum is providing notice of this requested amendment to all offset operators and/or leasehold owners within a  $\frac{1}{2}$  mile radius of the JFYSU Wells No. 178, 234 and 242. Quantum will also publish notice of the requested injection interval expansion in the Hobbs Daily News Sun.

Attached are revised wellbore schematics showing the proposed wellbore configurations.

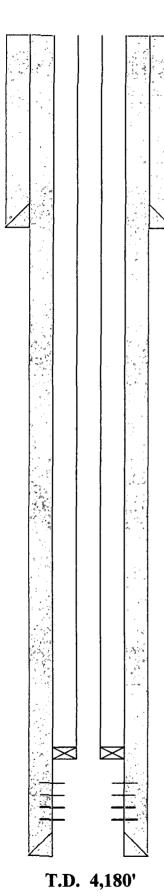
All of the information necessary to approve this request is attached. If additional information is necessary, please contact me at (505) 690-9453.

Sincerely,

auid (atanach

David Catanach-Agent Quantum Resources Management, LLC 1401 McKinney Street, Suite 2400 Houston, Texas 77010

Xc: OCD-Hobbs



# Quantum Resources Management, LLC Jalmat Field Yates Sand Unit No. 178

API No. 30-025-38924 528' FSL & 1869' FWL (Unit N) Section 12, T-22 South, R-35 East, NMPM Lea County, New Mexico

Date Drilled: September, 2008

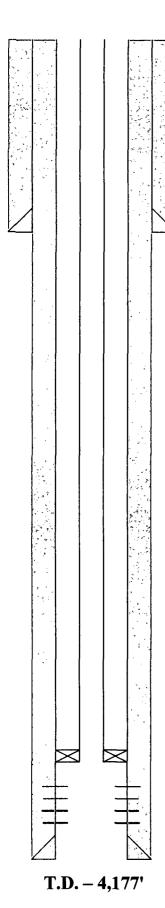
12 <sup>1</sup>/<sub>4</sub>" Hole; Set 8 5/8" 24# J-55 Csg. @ 413' Cemented w/ 375 Sx. Class C. Cement circulated to surface.

2 3/8" Duo-lined tubing set in a Baker AD-1 (IPC) Tension Packer @ 3,676'

Current Injection Perforations: 3,724'-3,852'

Proposed Additional Injection Perforations: 3,853'-4,080'

7 7/8" Hole; Set 5 ½" 15.5# J-55 Csg. @ 4,178' Cemented w/ 800 Sx. Class C. Cement circulated to surface.



# **Quantum Resources Management, LLC**

Jalmat Field Yates Sand Unit No. 234 API No. 30-025-38927 688' FSL & 1060' FEL (Unit P) Section 2, T-22 South, R-35 East, NMPM Lea County, New Mexico

Date Drilled: July, 2008

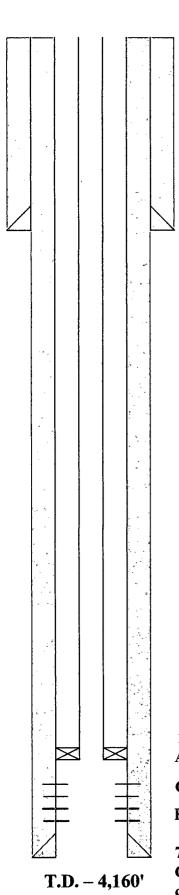
12 <sup>1</sup>/<sub>4</sub>" Hole; Set 8 5/8" 24# J-55 Csg. @ 429' Cemented w/ 375 Sx. Class C. Cement circulated to surface.

2 3/8" Duo-lined tubing set in a Baker AD-1 (IPC) Tension Packer @ 3,760'

1

Current Injection Perforations: 3,818'-3,992' Proposed Additional Injection Perforations: 3,993'-4,088'

7 7/8" Hole; Set 5 ½" 15.5# J-55 Csg. @ 4,176' Cemented w/ 850 Sx. Class C. Cement circulated to surface.



# Quantum Resources Management, LLC Jalmat Field Yates Sand Unit No. 242

API No. 30-025-38941 625' FNL & 375' FWL (Unit D) Section 11, T-22 South, R-35 East, NMPM Lea County, New Mexico

Date Drilled: August, 2008

12 <sup>1</sup>/<sub>4</sub>" Hole; Set 8 5/8" 24# J-55 Csg. @ 420' Cemented w/ 375 Sx. Class C. Cement circulated to surface.

2 3/8" Duo-lined tubing set in a Baker AD-1 (IPC) Tension Packer @ 3,740'

Current Injection Perforations: 3,795'-3,890'

Proposed Additional Injection Perforations: 3,891'-4,025'

7 7/8" Hole; Set 5 ½" 17# J-55 Csg. @ 4,157' Cemented w/ 750 Sx. Class C. Cement circulated to surface.

EXHIBIT No. 1

BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION EXHIBIT NO. 25 ČAŠE NO.

UNIT AGREEMENT for the JAIMAT FIELD YATES SAND UNIT LEA COUNTY, NEW MEXICO

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# Contents

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#### UNIT AGREEMENT JALMAT FIELD YATES SAND UNIT LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the first day of April, 1962, by the parties who have signed the original of this instrument, a counterpart thereof, or other instrument agreeing to be bound by the provisions hereof;

#### WITNESSETH:

WHEREAS, In the interest of the public welfare and to promote conservation and increase the ultimate recovery of oil, gas, and associated minerals from the Jalmat Field, in Lea County, State of New Mexico, and to protect the rights of the owners of interests therein, it is deemed necessary and desirable to enter into this agreement to unitize the Oil and Gas Rights in and to the Unitized Formation in order to conduct a secondary recovery, pressure maintenance, or other recovery program as herein provided; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chap. 88, Laws 1943, as amended, Laws 1961 ch 176 #1) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941, and Chap. 168, Laws of 1949) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, In consideration of the premises and of the mutual agreements herein contained, it is agreed as follows:

#### ARTICLE 1

#### DEFINITIONS

As used in this agreement, the terms herein contained shall have the following meaning:

1.1 Unit Area means the lands described by Tracts in Exhibit A and shown on Exhibit B as to which this agreement becomes effective or to which it may be extended as herein provided.

1.2 Unitized Formation means that subsurface portion of the Unit Area commonly known or described as follows: The Yates Sand Formation encountered in the drilling of the British-American Hall State "D" No. 1 Well between the depths of Three Thousand Eight Hundred Twelve (3,812) feet KB and Four Thousand and Eighteen (4,018) feet KB as shown by the Radiation Log of said well, which well is located Six Hundred Sixty (660) feet from the north line and Six Hundred Sixty (660) feet from the east line of Section 23, Township 22 South, Range 35 East, Lea County, New Mexico.

1.3 Unitized Substances means all oil, gas, gaseous substances, sulphur contained in gas, condensate, distillate, and all associated and constituent liquid or liquefiable hydrocarbons within or produced from the Unitized Formation.

1.4 <u>Working Interest</u> means an interest in Unitized Substances by virtue of a lease, operating agreement, fee title, or otherwise, including a carried interest, which interest is chargeable with and obligated to pay or bear, either in cash or out of production or otherwise, all or a portion of the cost of drilling, developing, producing, and operating the Unitized Formation. Any interest in Unitized Substances which is a Working Interest as of the date the owner thereof executes or ratifies this Agreement shall thereafter be treated as a Working Interest for all purposes of this Agreement.

1.5 <u>Royalty Interest</u> means a right to or interest in any portion of the Unitized Substances or proceeds thereof other than a Working Interest.

1.6 Royalty Owner means a party hereto who owns a Royalty Interest.

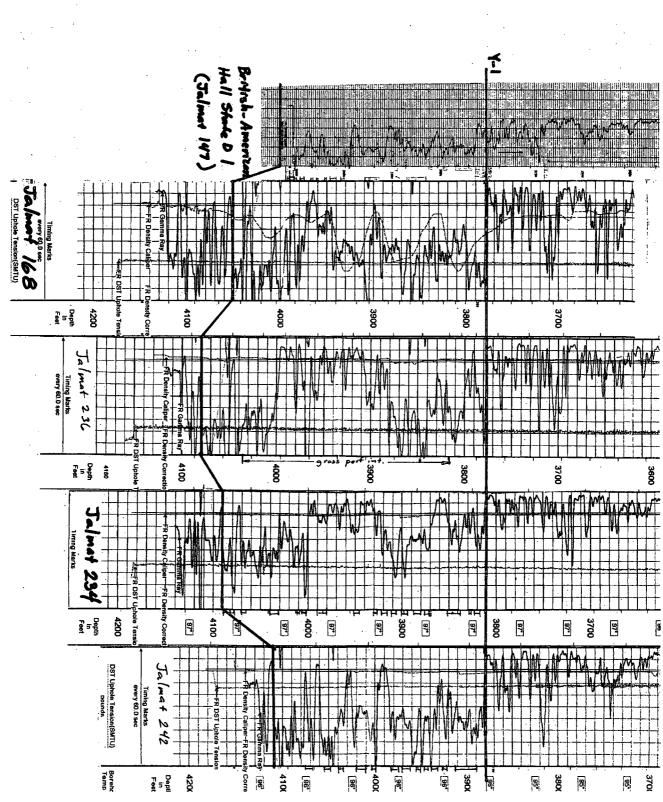
1.7 <u>Working Interest Owner</u> means a party hereto who owns a Working Interest. The owner of oil and gas rights that are free of lease or other instrument conveying the Working Interest to another shall be regarded as a Working Interest Owner to the extent of seven-eights (7/8) of his interest in Unitized Substances, and as a Royalty Owner with respect to his remaining one-eighth (1/8) interest therein.

1.8 <u>Tract</u> means each parcel of land described as such and given a Tract number in Exhibit A.

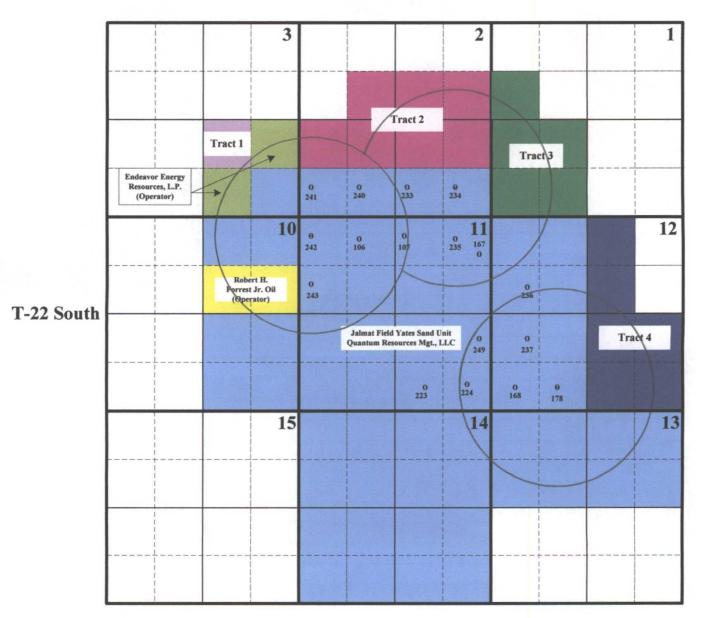
1.9 <u>Unit Operating Agreement</u> means the agreement entitled "Unit Operating Agreement, Jalmat Field Yates Sand Unit, Lea County, New Mexico," of the same effective date as the effective date of this agreement, and which is entered into by Working Interest Owners.

1.10 Unit Operator means the Working Interest Owner designated by Working Interest Owners under the Unit Operating Agreement to develop and operate the Unitized Formation, acting as operator and not as a Working Interest Owner.

1.11 <u>Tract Participation</u> means the percentage shown on Exhibit A for allocating Unitized Substances to a Tract under this agreement.



R-35 East



Quantum Resources Management, LLC Application to Amend Order No. WFX-850 Offset Operator/ Leasehold Owner Identification

### September 16, 2011

# <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

# TO: OFFSET OPERATORS/OFFSET LEASEHOLD OWNERS & SURFACE OWNERS

Re: Quantum Resources Management, LLC Application to Amend Order No. WFX-850 Jalmat Field Yates Sand Unit Wells No. 178, 234 & 242 Jalmat Field Yates Sand Unit Waterflood Project Sections 12, 2 & 11, T-22 South, R-35 East, NMPM, Lea County, New Mexico

# Ladies & Gentlemen:

Enclosed please find a copy of an application filed by Quantum Resources Management, LLC ("Quantum") with the Oil Conservation Division to amend Administrative Order No. WFX-850 dated January 27, 2009. Order No. WFX-850 authorized the use of the Jalmat Field Yates Sand Unit ("JFYSU") Wells no. 178, 234 and 242 as water injection wells within the JFYSU Waterflood Project. Quantum is proposing to add additional injection perforations in each of these wells within the unitized interval, as described in detail in the application. Doing so will allow Quantum to recover additional oil and gas reserves from the unit area.

You are being provided a copy of the application as an offset operator, offset leaseholder or surface owner.

Objections must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505, within 15 days.

If you should have any questions, please contact me at (505) 690-9453.

Sincerely,

auid atmach

David Catanach Agent-Quantum Resources Management, LLC 1401 McKinney Street, Suite 2400 Houston, Texas 77010

Enclosure

Quantum Resources Management, LLC Application to Amend Order No. WFX-850 <u>Notice List</u>

# **Offset Operators**

Endeavor Energy Resources, L.P. 110 N. Marienfeld, Suite 200 Midland, Texas 79701

Robert H. Forrest Jr. Oil, LLC 609 Elora Drive Carlsbad, New Mexico 88220

## **Offset Lease Owners**

TRACT 1:Quantum Resources Management, LLC<br/>Black Diamond Resources, LLC<br/>QAC Carried WI, LP<br/>QAB Carried WI, LP<br/>1401 McKinney Street, Suite 2400<br/>Houston, Texas 77010

ZPZ Delaware 1, LLC 2000 Post Oak Blvd., Suite 100 Houston, Texas 77054

Yates Petroleum Corporation Abo Petroleum Corporation Myco Industries, Inc. 105 S. Fourth Street Artesia, New Mexico 88210

- TRACT 2: Quantum Resources Management, LLC Black Diamond Resources, LLC QAC Carried WI, LP QAB Carried WI, LP
- TRACT 3: Finley Production Co., LP 1308 Lake Street Fort Worth, Texas 76102

Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc. Yates Petroleum Corporation 105 S. Fourth Street Artesia, New Mexico 88210

# Quantum Resources Management, LLC Application to Amend Order No. WFX-850 Notice List (Continued)

- TRACT 3: (Cont). Apache Corporation 6120 S. Yale, Suite 1500 Tulsa, Oklahoma 74136
- TRACT 4: Quantum Resources Management, LLC Black Diamond Resources, LLC QAC Carried WI, LP QAB Carried WI, LP

# Surface Owners

Commissioner of Public Lands P.O. Box 1148 Santa Fe, New Mexico 87504-1148

Merchants Livestock Company P.O. Box 1166 Carlsbad, New Mexico 88220 Application to Amend Order No. WFX-850 Quantum Resources Management, LLC Jalmat Field Yates Sand Unit Wells No. 178, 234 and 242 Sections 12, 2 and 11, respectively, T-22 South, R-35 East, NMPM, Lea County, New Mexico

## Legal notice will be published September 16, 2011 in the::

Hobbs News Sun 201 N. Thorp Hobbs, New Mexico 88240

Affidavit of Publication will be forwarded to the Division upon receipt.

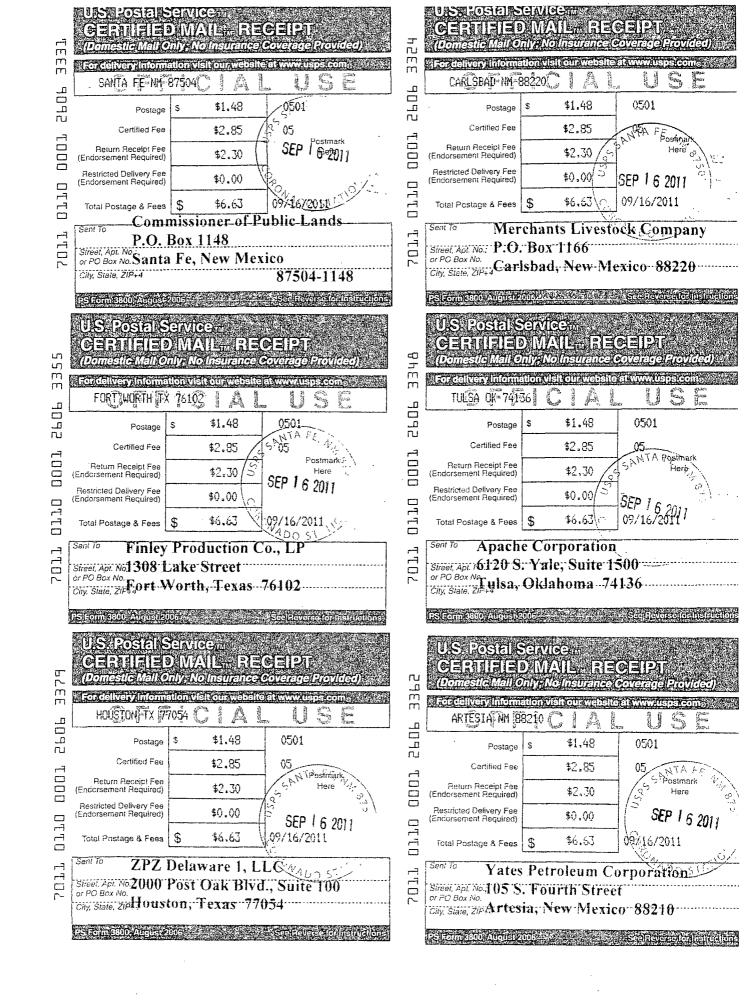
Quantum Resources Management, LLC, 1401 McKinney Street, Suite 2400, Houston, Texas 77010 has filed a request with the New Mexico Oil Conservation Division to expand the Yates formation water injection interval within the following-described wells in the Jalmat Field Yates Sand Unit Waterflood Project, Jalmat (Tansill-Yates-Seven Rivers) Oil & Gas Pool, Lea County, New Mexico. These wells were originally approved for water injection within this secondary recovery project by Order No. WFX-850 dated January 27, 2009:

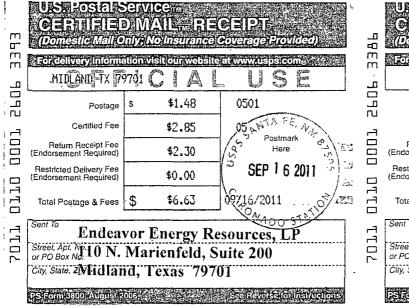
JFYSU Well No. 178	API No. 30-025-38924
	528' FSL & 1869' FWL (Unit N) Section 12, T-22S, R-35E
	Proposed Injection Interval: 3,724'-4,080'
JFYSU Well No. 234	API No. 30-025-38927
	688' FSL & 1060' FEL (Unit P) Section 2, T-22S, R-35E
	Proposed Injection Interval: 3,818'-4,088'
JFYSU Well No. 242	API No. 30-025-38941
	625' FNL & 375' FWL (Unit D) Section 11, T-22S, R-35E
	Proposed Injection Interval: 3,795'-4,025'

Produced water from the Jalmat Oil & Gas Pool and source water from the Santa Rosa formation will be injected into the wells at average and maximum rates of 500 and 1,500 barrels of water per day, respectively. The maximum surface injection pressure for each well is currently authorized at 1,400 psi.

Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication.

Additional information can be obtained by contacting Mr. David Catanach-Agent Quantum Resources Management, LLC at (505) 690-9453





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# **Affidavit of Publication**

State of New Mexico, County of Lea.

I. CINDY BENTLE 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 September 16, 2011 and ending with the issue dated September 16, 2011

ADMINISTRATIVE ASSISTANT Sworn and subscribed to before me this 19th day of September, 2011

Notary Public

My commission expires June 06, 2012 (Seal) LEGAL NOTICE SEPTEMBER 16, 2011

Quantum Resources Management, LLC, 1401 McKinney Street, Suite 2400, Houston, Texas 77010 has filed a request with the New Mexico Oli Conservation Division to expand the Yates formation water injection interval within the following-described wells in the Jaimat Field Yates Sand Unit Waterflood Project, Jaimat (Tansill-Yates-Seven Rivers) Oli & Gas Pool, Lea County. New Mexico. These wells were originally approved for water injection within this secondary recovery project by Order No. WFX-850 dated January 27, 2009:

JFYSU Well No. 178	API No. 30-025-38924
	528' FSL & 1869' FWL (Unit N)
· · · · · · · · · · · · · · · · · · ·	Section 12, T-22S, R-35E
	Proposed Injection Interval:
1. A.	3,724'-4,080'
*. •	

JFYSU Well No. 234 API No. 30-025-38927 688' FSL & 1060' FEL (Unit P) Section 2, T-22S, R-35E Proposed Injection Interval: 3.818'-4,088'

JFYSU Well No. 242 API No. 30-025-38941

Section 11, T-22S, R-35E Proposed Injection Interval: -3,795'-4,025'

625' FNL & 375' FWL (Unit D)

Produced water from the Jalmat Oil & Gas Pool and source water from the Santa Rose formation will be injected into the wells at average and maximum rates of 500 and 1,500 barrels of water per day, respectively. The maximum surface injection pressure for each well is currently authorized at 1,400 psi.

Interested parties must file objections with the New Mexico Oil Conservation Division, 1220 S. St Francis Drive, Santa Fe, New Mexico 87505, within 15 days of the date of this publication.

Additional Information can be obtained by contacting Mr. David Catanach-Agent Quantum Resources Management, LLC at (505) 690-9453 #26864

This newspaper is duly qualified to mutual publish legal notices or advertisments within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

publication has been made.

od

02108664

DAVID CATANACH REGULATORY CONSULTANT 1142 VUELTA DE LAS ACEQUIAS SANTA FE, NM 87507

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