

DATE IN 8/16/12	SUSPENSE 8-31	ENGINEER Ez@anjin	LOGGED IN 8/16/12	TYPE WFX	APP NO. PKVR1222955765
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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



*Quantum Resources
Management LLC
Northeast Pearl Queen
Unit #24*

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]

[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 _____

[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.

David Catanach
Print or Type Name

David Catanach
Signature

Agent-Quantum Resources Management, LLC
Title

8/16/12
Date

drcatanach@netscape.com
E-Mail Address

August 16, 2012

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: Form C-108
Quantum Resources Management, LLC
Northeast Pearl Queen Unit No. 24 (API No. 30-025-33463)
2310' FNL & 1500' FWL (Unit F)
Section 23, Township 19 South, Range 35 East, NMPM,
Pearl-Queen Pool (49780)
Lea County, New Mexico

Dear Ms. Bailey,

Enclosed please find a Division Form C-108 (Application for Authorization to Inject) to expand the Northeast Pearl Queen Unit Waterflood Project. Division Order No. R-3837 dated September 12, 1969 approved secondary recovery operations within the Northeast Pearl Queen Unit Area ("Unit Area"). The Unit Area was established by Division Order No. R-3836 dated September 12, 1969. The Northeast Pearl Queen Unit Waterflood Project is an active waterflood project operated by Quantum Resources Management, LLC ("Quantum"). Quantum proposes to convert the Northeast Pearl Queen Unit Well No. 24 from a producing well to injection in order to complete an efficient production/injection pattern within the Unit Area. This well is located in Section 23, Township 19 South, Range 35 East, Lea County, New Mexico.

All the required information is enclosed. If additional information is needed, please contact me at (505) 690-9453.


Sincerely,



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

Xc: OCD-Hobbs

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Quantum Resources Management, LLC
ADDRESS: 1401 McKinney Street, Suite 2400 Houston, Texas 77010
CONTACT PARTY: Mr. David Catanach PHONE: (505) 690-9453
- 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.
- IV. Is this an expansion of an existing project? X Yes No
If yes, give the Division order number authorizing the project: R-3837 dated 9/12/1969 issued in Case No. 4217
- 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.
- 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.
- 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.
- 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.
- 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.
- 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: David Catanach TITLE: Agent for Quantum Resources Management, LLC
SIGNATURE:  DATE: 8/16/12
E-MAIL ADDRESS: drcatanach@netscape.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: _____
- DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

C-108 Application
Quantum Resources Management, LLC
Northeast Pearl Queen Unit No. 24
API No. 30-025-33463 2310' FNL & 1500' FWL (Unit F)
Section 23, T-19S, R-35E, NMPM
Lea County, New Mexico

- I. The purpose of the application is to request approval to convert the Northeast Pearl Queen Unit No. 24 from a producing well to an injection well within the Northeast Pearl Queen Unit Waterflood Project.
- II. Quantum Resources Management, LLC ("Quantum")
1401 McKinney Street, Suite 2400
Houston, Texas 77010
Contact Party: David Catanach, Agent-Quantum Resources Management, LLC
(505) 690-9453
- III. Injection well data sheet is attached. In addition, attached is a wellbore schematic diagram showing the proposed wellbore configuration.
- IV. This is an expansion of the Northeast Pearl Queen Unit Waterflood Project which was approved by Division Order No. R-3837 dated September 12, 1969. The Northeast Pearl Queen Unit Area ("Unit Area") was approved by Division Order No. R-3836 also dated September 12, 1969.
- V. A map showing all wells/leases within a 2-mile radius of the Northeast Pearl Queen Unit No. 24 is attached. Also attached is a more detailed map showing the ½-mile Area of Review ("AOR") for the Northeast Pearl Queen Unit No. 24.
- VI. Area of review well data ("AOR") is attached. The AOR well data shows that all active wells are constructed adequately, and all plugged and abandoned wells are plugged adequately so as to confine the injected fluid to the proposed injection interval. Attached are wellbore schematics for all plugged and abandoned wells within the AOR.
- VII.
 1. The average injection rate is anticipated to be approximately 750 BWPD. The maximum rate will be approximately 2,500 BWPD. If the average or maximum rates increase in the future, the Division will be notified.
 2. This will be a closed system.
 3. The injection pressure will initially be in conformance with the Division assigned gradient of 0.2 psi/ft. or 989 psi. If a higher injection pressure is necessary, Quantum will conduct a step rate injection test to determine the fracture pressure of the injection interval.
 4. Produced water from the Pearl-Queen Pool originating from producing wells within the Unit Area will be injected into the Northeast Pearl Queen Unit No. 24.

5. Injection is to occur into the Queen formation, Pearl-Queen Pool.

VIII. Geologic data for the Queen formation:

Lithology:	Sandstone
Geologic Name:	Queen
Thickness:	100 Feet
Depth:	4,925'

According to the State Engineer, there are numerous fresh water wells in the vicinity of the Northeast Pearl Queen Unit No. 24. The average depth of these Ogallala water wells is approximately 60 feet, with water present at depths ranging from 18 feet to 35 feet.

IX. Proposed to acid stimulate the injection interval as needed.

X. Logs were filed at the time of drilling.

XI. According to the State Engineer, there is a fresh water well located within one mile of the Northeast Pearl Queen Unit No. 24. The well is located in the SE/4 NW/4 of Section 22, T-19S, R-35 East, NMPM. Quantum is currently attempting to obtain permission from the landowner to obtain a water sample from this well. Upon obtaining the water sample and analysis, Quantum will forward this water analysis to the Division.

XII. Affirmative statement is attached.

XIII. Proof of notice is attached.

INJECTION WELL DATA SHEET

OPERATOR: Quantum Resources Management, LLC

WELL NAME & NUMBER: Northeast Pearl Queen Unit No. 24 (API No. 30-025-33463)

WELL LOCATION: 2310' FNL & 1500' FWL F 23 19 South 35 East
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

See Attached Wellbore Schematic

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8" @ 470'
Cemented with: 350 Sx. or ft³
Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: Casing Size:
Cemented with: or ft³
Top of Cement: Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2" @ 5,100'
Cemented with: 950 Sx. or ft³
Top of Cement: 50' Method Determined: Calculated
Total Depth: 5,100' PBTD: 5,095'

Injection Interval

Queen Formation: 4,945'-5,045' Perforated

INJECTION WELL DATA SHEET

Tubing Size: 2 7/8" Lining Material: Polycore

Type of Packer: 1.78" F-Profile Packer

Packer Setting Depth: 4,900' or within 100' of the uppermost injection perforations

Other Type of Tubing/Casing Seal (if applicable): None

Additional Data

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

If no, for what purpose was the well originally drilled: Well was originally drilled in 1996 as a producing well in the Pearl-Queen Pool

2. Name of the Injection Formation: Queen

3. Name of Field or Pool (if applicable): Pearl-Queen Pool (49780)

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.

None

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

None

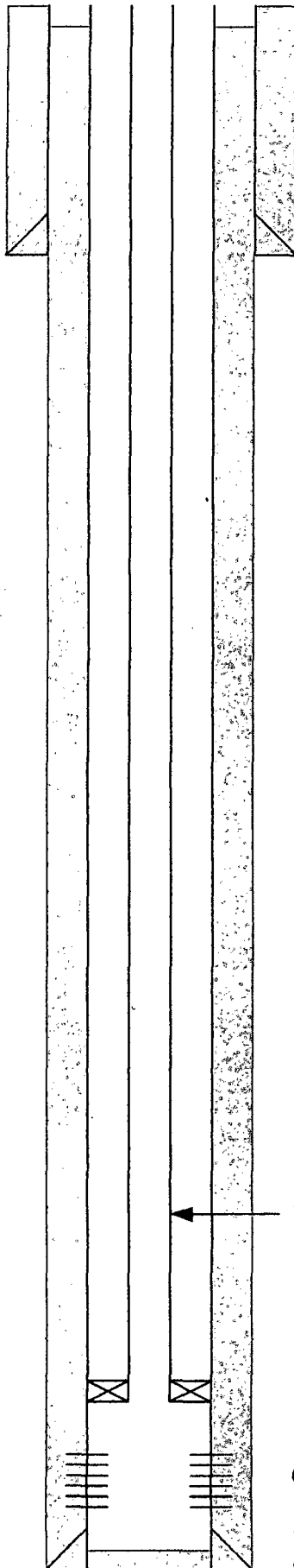
**Proposed Wellbore
Configuration**

**Quantum Resources Management, LLC
Northeast Pearl Queen Unit No. 24
API No. 30-025-33463
2310' FNL & 1500' FWL, Unit F
Section 23, T-19S, R-35E**

Calculated TOC @ 50'

Drilled: 6/96

**12 1/4" Hole; 8 5/8" csg. @ 470'
Cemented w/350 Sx.
Cement circulated to surface.**

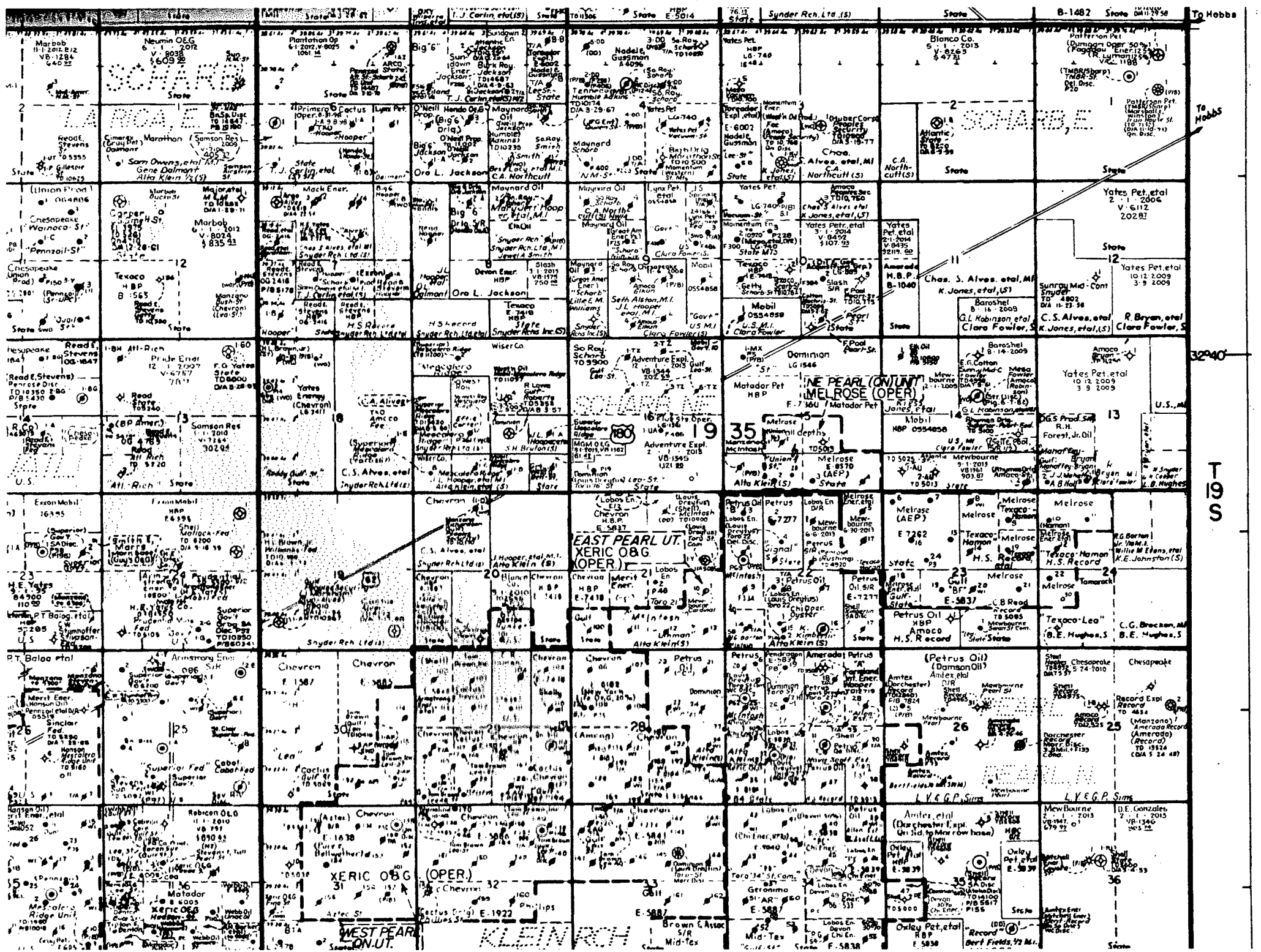


**2 7/8" Polycore Tubing set in a
1.78" F-Profile Packer @ 4,900'**

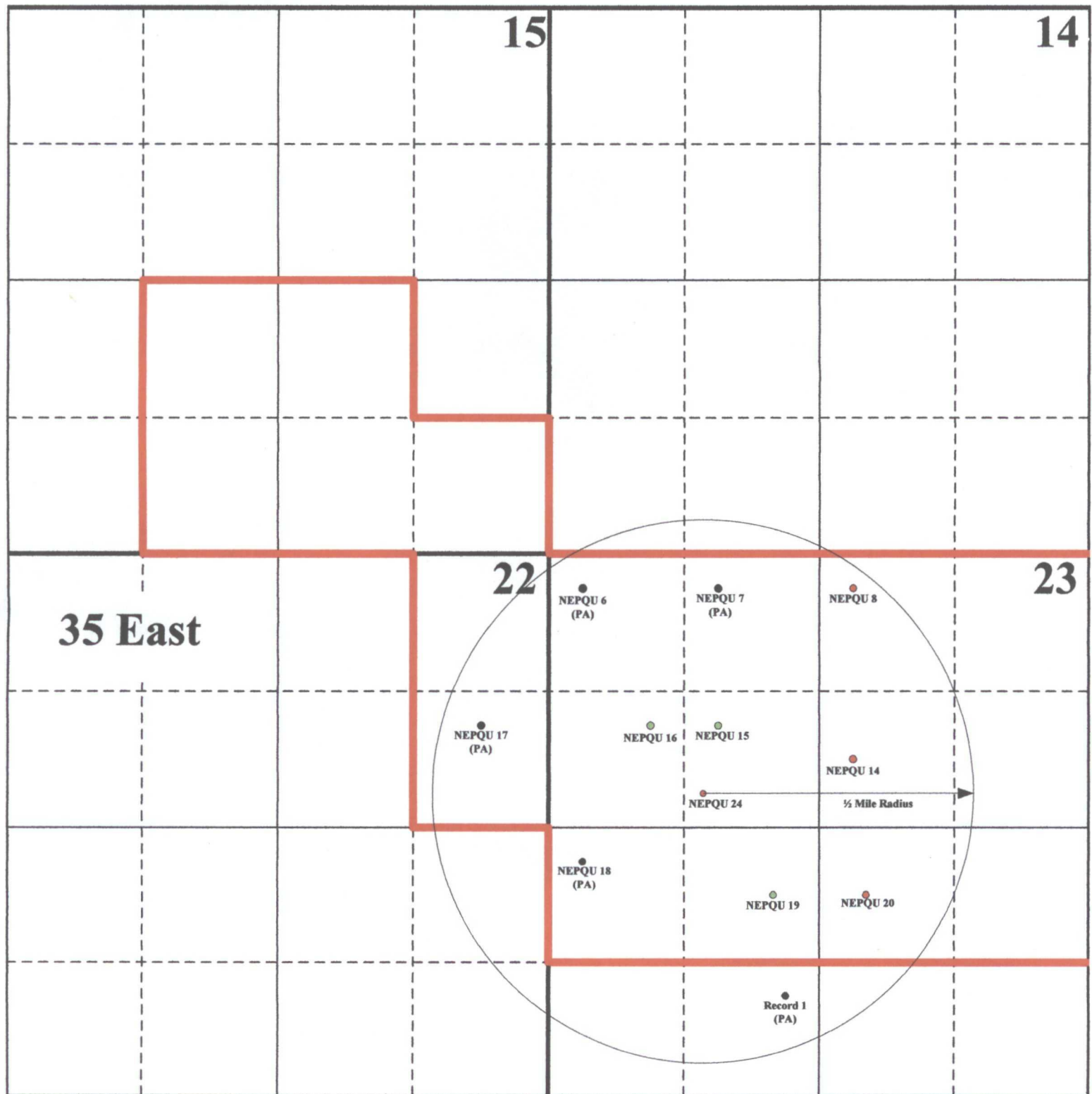
Queen Perforations: 4,945'-5,045'

**7 7/8" Hole; 5 1/2" csg. set @ 5,100'
Cemented w/950 Sx.
Calculated TOC @ 50'**

**PBSD: 5,095'
TD: 5,100'**



19 South



- Injection Well
- PA Well
- Producing Well
- NEPQU Boundary

1/2 Mile AOR Map-NEPQU No. 24

QUANTUM RESOURCES MANAGEMENT, LLC
AREA OF REVIEW WELL DATA
NORTHEAST PEARL QUEEN UNIT NO. 24

[illegible]

Actual P&A Wellbore Configuration

KB:
GL: 3791'

Cmt plugs set from 360' - sfc

4-1/2" csg cut & pulled from
245'

8-5/8" 24# @ 192' w/ 100 sxs,
Cmt circulated

Mud

CIBP @ 4760' w/ 13 sxs cmt

Perforations

Zone	Top	Btm	SPF	Holes
Queen	4,838	5,029		

4-1/2" 9.5# J-55 @ 5087' w/150 sxs
TTOC @ 4000'

PBTD:
TD: 5088'

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease
State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER- Water Injection Well	7. Unit Agreement Name Northeast Pearl Queen
2. Name of Operator Tamarack Petroleum Company, Inc.	8. Farm or Lease Name Northeast Pearl Queen
3. Address of Operator P.O. Box 2046, Midland, Texas 79702	9. Well No. Unit 17
4. Location of Well UNIT LETTER H 1650 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 22 TOWNSHIP 19 South RANGE 35 East NMPM.	10. Field and Pool, or Wildcat Pearl Queen
15. Elevation (Show whether DF, RT, GR, etc.) 3778 KB	12. County Lea

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

- 12/7&8/81 Move in pulling unit pull 98 jts tubing. Go in hole with overshot recover 31 jts tubing.
- 12/9/81 Go in hole with overshot, jar on pkr, pull pkr. Go in hole with Model R pkr, set @ 4850', attempt to pressure up on csg, csg would not pressure.
- 12/10/81 Pull pkr out hole, go in hole set bridge plug @ 4760', circulate hole with 9.5# mud, pump 13 sks Class C cmt on top of bridge plug, pull tubing.
- 12/11/81 Run pkr in hole to 558', set pkr, pressure test csg to 1000#, held. Pull pkr, run in hole to 551', pump 13 sks Class C cmt plug. Pull out of hole, Cut 4 1/2" csg @ 245', pull.
- 12/12/81 Run in hole, tag cmt @ 360', pump 13 sks Class C cmt, pull out of hole Wait 4 hrs, go in hole, tag cmt @ 215', pump 36 sks Class C cmt.
- 12/14/81 Run in hole, tag cmt @ 200', pump 100 sks Class C cmt. Cmt circulated to surface. Wait 4 hrs, tag cmt @ 20'. Cut off csg head, fill csg with cmt, set dry hole marker. Clean up location.

Csg left in hole:

192' 8 5/8" 24# csg

4842' 4 1/2" 9.5# csg

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED Frederick Bozi TITLE Data Coordinator DATE October 14, 1983

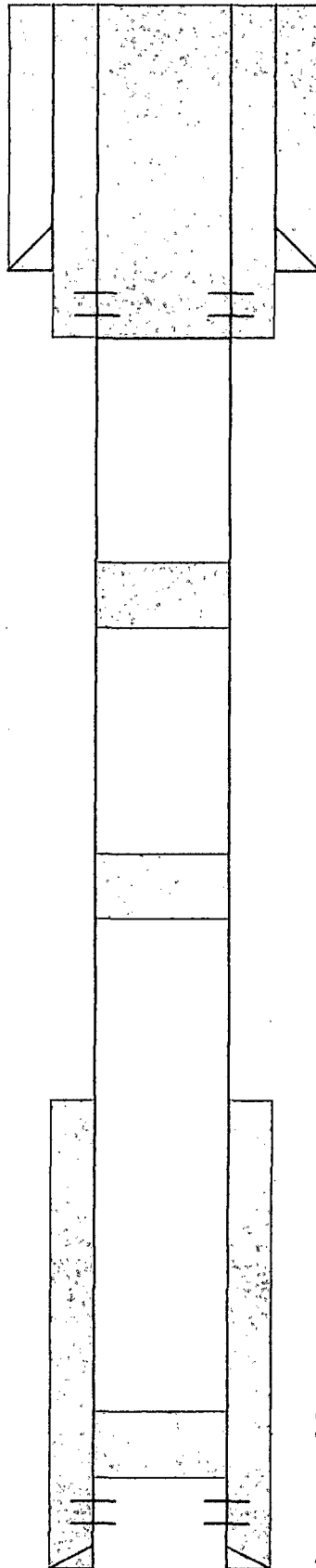
OIL & GAS INSPECTOR

NOV - 9 1984

APPROVED BY [Signature] TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

**Quantum Resources
Management, LLC
Northeast Pearl Queen Unit No. 6
API No. 30-025-03192
330' FNL & 330' FWL, Unit D
Section 23, T-19S, R-35E
Type Well: Producer**



30 Sx. surface plug

**12" Hole; 8 5/8" csg. set @ 316'
Cemented w/300 sx.
Cement circulated to surface**

**Perforate 5 1/2" csg. @ 366'. Set 115 sx. cement
plug & circulate to surface.**

Set 25 sx. cement plug 1,017'-1,770'

Set 25 sx. cement plug 2,855'-3,102'

TOC @ 3,929'

**Set 50 sx. cement plug 4,167'-4,705'
Tagged plug @ 4,167'**

Perforations: 4,930'-4,956'

**7 7/8" Hole; 5 1/2" csg. set @ 4,995'
Cemented w/200 Sx.
TOC @ 3,929' by calculation**

**Drilled: 9/61
Plugged: 7/11**

T.D. 4,995'

Submit 1 Copy to Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-103
October 13, 2009

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-03192
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Quantum Resources Management, LLC		6. State Oil & Gas Lease No. 25250
3. Address of Operator 1401 McKinney St. Ste 2400 Houston, TX 77010		7. Lease Name or Unit Agreement Name Northeast Pearl Queen Unit
4. Well Location Unit Letter <u>D</u> : <u>330</u> feet from the <u>North</u> line and <u>330</u> feet from the <u>West</u> line Section <u>23</u> Township <u>19S</u> Range <u>35E</u> NMPM County <u>Lea</u>		8. Well Number <u>006</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3790' GL		9. OGRID Number 243874
		10. Pool name or Wildcat Pearl Queen

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL. ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Quantum Resources Management, LLC has plugged and abandoned this wellbore as follows:

MIRU Mayo Marrs. RIH w/ 2-1/16" tubing open ended. Spot 50 sk cmt plug from 4705' - 4195'. Tagged TOC @ 4167'. Spot 25 sk cmt plug from 3102' - 2855'. Spot 25 sk cmt plug from 1770' - 1017'. Perf csg @ 366'. Pump 115 sxs cmt, circ cmt to sfc, sqzng 15 sks into formation. SDON. Top off with additional 30 sxs cmt. Cut off WH, erect P&A marker. RDMO.

Well plugged and abandoned on 7/21/11.

Approved for plugging of well bore only.
Liability under bond is retained pending receipt
of C-103 (Subsequent Report of Well Plugging)
which may be found at OCD Web Page under
Forms, www.cmnrd.state.nm.us/oed.

Spud Date:

7/14/11

Rig Release Date:

7/21/11

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Yolanda Perez TITLE Regulatory Supervisor DATE 11/30/11

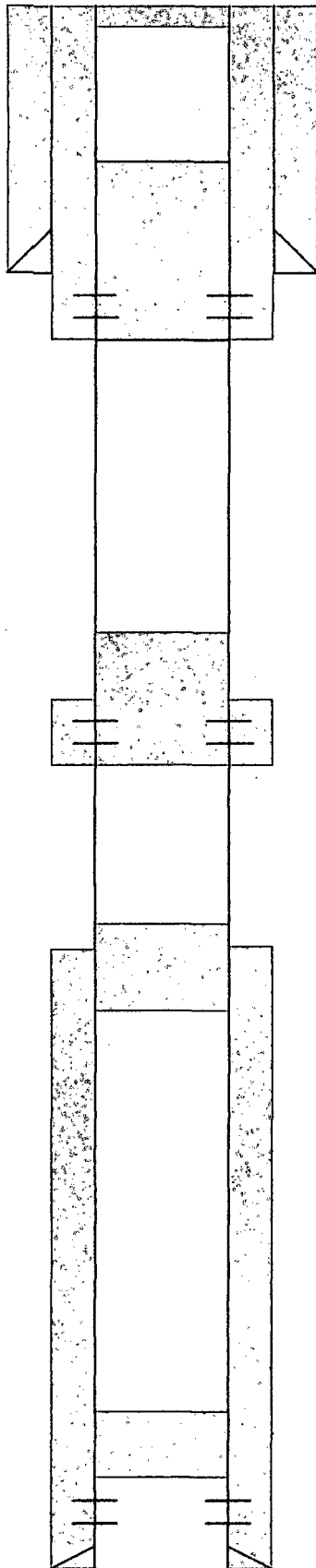
Type or print name Yolanda Perez E-mail address: yperez@qracq.com PHONE: (713) 634-4696

For State Use Only

APPROVED BY: [Signature] TITLE Staff MGR DATE 12-1-2011

Conditions of Approval (if any):

**Quantum Resources
Management, LLC
Northeast Pearl Queen Unit No. 7
API No. 30-025-03193
330' FNL & 1650' FWL, Unit C
Section 23, T-19S, R-35E
Type Well: Producer**



15 Sx. surface plug

**12 1/4" Hole; 8 5/8" csg. set @ 317'
Cemented w/300 sx.
Cement circulated to surface**

**Perforate 4 1/2" csg. @ 368'. Set 30 sx. cement
plug & circulate to surface. Tagged TOC @ 215'**

**Set 30 sx. cement plug 1,261'-1,645'
Tagged @ 1,261'**

**Perforated 4 1/2" csg. @ 1,800'. Set 40 sx.
cement plug 1,645'-1,845'. Tagged @ 1,645'**

**TOC @ 2,770'
Set 30 sx. cement plug 2,673'-3,108'**

**Set 35 sx. cement plug 4,480'-4,900'
Tagged plug @ 4,480'**

Perforations: 4,948'-4,972'

**7 7/8" Hole; 4 1/2" csg. set @ 5,044'
Cemented w/350 Sx.
TOC @ 2,770' as per well file**

T.D. 5,046'

**Drilled: 11/61
Plugged: 11/11**

Submit 1 Copy to Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OGD State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
October 13, 2009

MAR 01 2012
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
RECEIVED Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-03193
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other Injection <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Quantum Resources Management, LLC		6. State Oil & Gas Lease No. 647
3. Address of Operator 1401 McKinney St. Ste 2400 Houston, TX 77010		7. Lease Name or Unit Agreement Name Northeast pearl Queen Unit
4. Well Location Unit Letter <u>C</u> <u>330</u> feet from the <u>North</u> line and <u>1650</u> feet from the <u>West</u> line Section <u>23</u> Township <u>19S</u> Range <u>35E</u> NMPM County <u>Lea</u>		8. Well Number 7:
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3541' GL		9. OGRID Number 243874
		10. Pool name or Wildcat Pearl: Queen

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☒
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Quantum Resources Management has P&A'd the wellbore as follows:

MIRU. Spot 35 sk Class C cmt plug 4900' - 4500'. Tagged TOC @ 4480'. Circulate plug mud. Spot 30 sk cmt plug 3108' - 2673'. Perf 4-1/2" csg @ 1800' @ 4 SPF. Set pkr @ 1250'. Communicated around pkr to surface out 4-1/2". POOH w/ pkr. Spot 40 sk cmt plug 1845' - 1265'. Tagged TOC 2 1645'. Test 4-1/2" csg to 400 psl, leaked off. Spot 30 sk cmt plug 1645' - 1210'. Tagged TOC @ 1261'. Csg tested ok from 421' - 1261' w/ pkr. Perf 4-1/2" csg @ 368'. Set pkr @ 130'. Unable to pump-in. Circ 30 sxs cmt to sfc. Tagged TOC @ 215'. Top off w/ 15 sxs. Cut off csgs @ 4'. Install dead well marker, RDMO.

11/9/11-11/14/11

Approved for plugging of well bore only.
Liability under bond is retained pending receipt
of C-103 (Subsequent Report of Well Plugging)
which may be found at OCD Web Page under
Forms, www.emnrd.state.nm.us/oed.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Yolanda Perez TITLE Regulatory Supervisor DATE 3/01/12

Type or print name Yolanda Perez E-mail address: yperez@qracq.com PHONE: (713) 634-4696
For State Use Only

APPROVED BY [Signature] TITLE STAFF DATE 3-1-2012
Conditions of Approval (if any):

MAR 01 2012

Actual P&A Wellbore Configuration

KB:
GL: 3756'

10 sk surface plug

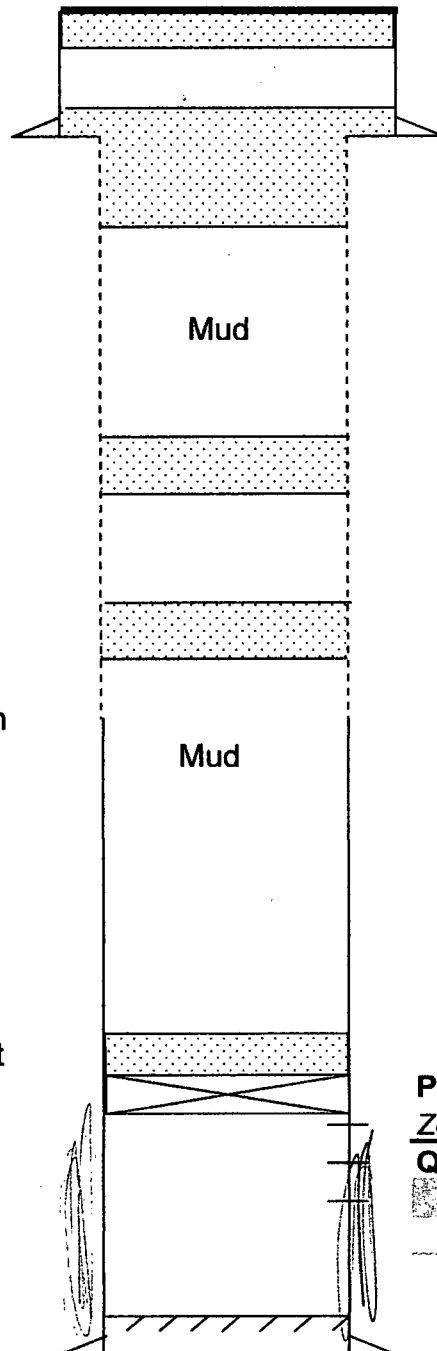
Cmt plug 80' – 180'

Cmt plug 1660' – 1860'

Cmt plug 2930' – 3130'

4-1/2" csg cut & pulled from
3200'

CIBP @ 4800' w/ 5 sxs cmt



8-5/8" 24# @ 135' w/ 40 sxs,
circulated

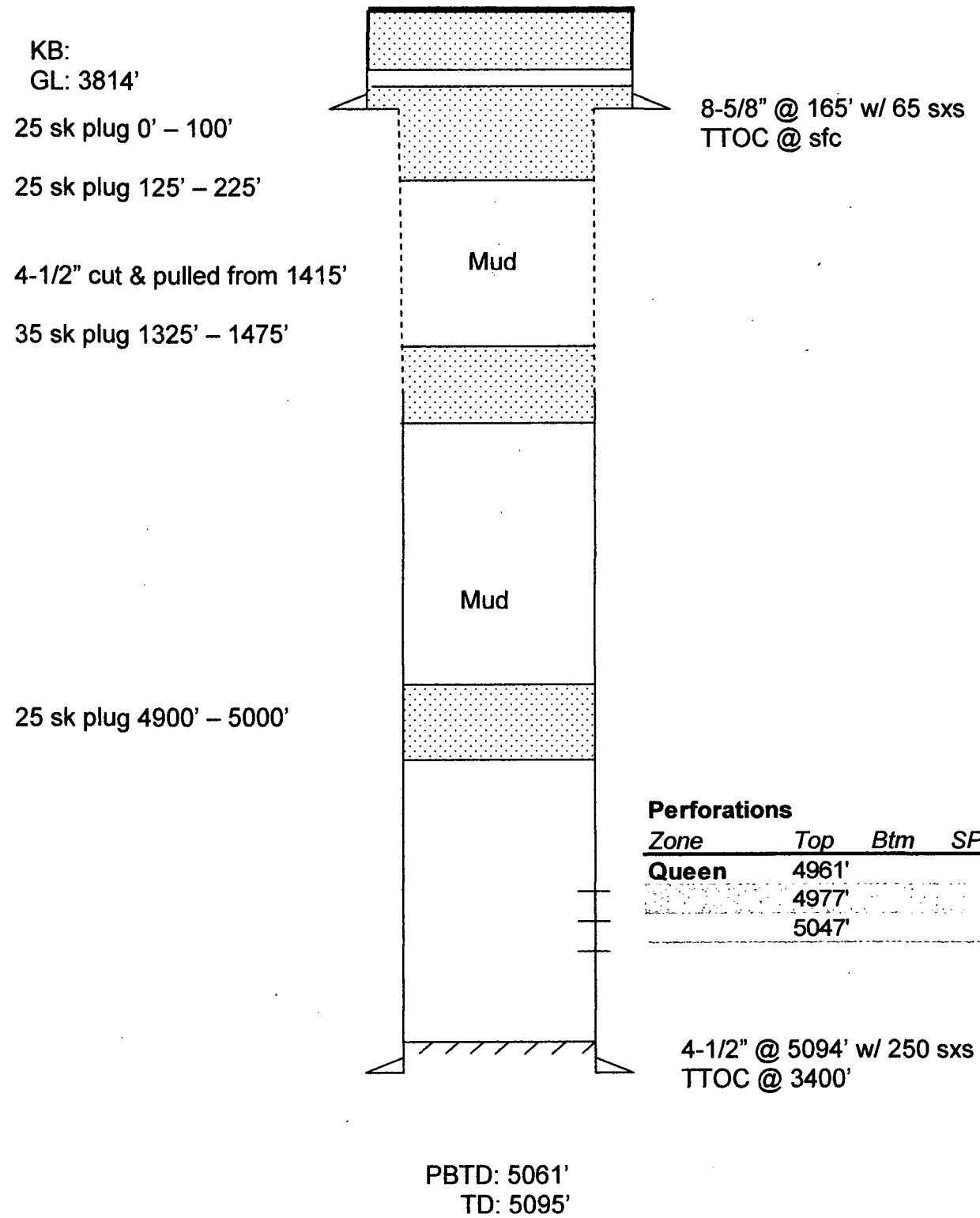
Perforations

Zone	Top	Btm	SPF	Holes
Queen	4,950	5,041		

4-1/2" 9.5# J-55 @ 5208' w/300 sxs
TTOC @ 3200'

PBTD: 5168'
TD: 5210'

Actual P&A Wellbore Configuration



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TRANSPORTER	OIL GAS
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NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company Charles B. Read		Address P. O. Box 1822, Roswell, N. M.	
Lease Record	Well No. 1	Unit Letter M	Section 23
		Township 19 South	Range 35 East
Date Work Performed 2/20/64	Pool 1 earl	County Lea	

THIS IS A REPORT OF: (Check appropriate block)

- ☐ Beginning Drilling Operations
 ☐ Casing Test and Cement Job
 ☐ Other (Explain):
☒ Plugging
 ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Well was plugged and abandoned on February 20, 1964. Pulled 90,000' on 4 1/2" casing, and estimated pipe to be stuck at 1450'. Shot 4 1/2" casing at 1415'. Pulled and recovered 1415' of 4 1/2" casing. Set cement plugs as follows:

25 on 4700' - 5000'
 35 on 1325' to 1475'
 25 on 125' to 225'
 25 on surface to 100'

Heavy mud spotted between all plugs. Installed 4 1/2" x 4' dry hole marker inscribed as follows:

Charles B. Read #1 Record
 SE 1/4 SW 1/4 23, T19S, R35E

Mud pits filled. Location leveled and cleaned. Ready for inspection.

Witnessed by Kermit Dunn	Position Engineer	Company Charles B. Read
------------------------------------	-----------------------------	-----------------------------------

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

ORIGINAL WELL DATA

D F Elev.	T D	P B T D	Producing Interval	Completion Date
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth	
Perforated Interval(s)				
Open Hole Interval		Producing Formation(s)		

RESULTS OF WORKOVER

Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						

OIL CONSERVATION COMMISSION

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved by <i>Lester A. Clement</i>	Name <i>Charles B. Read</i>
Title Owner	Position Owner
Date Feb 21, 1964	Company Charles B. Read



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD		Q Q Q								Depth Depth Water				
POD Number	Code Subbasin	County	64	16	4	Sec	Tws	Rng	X	Y	Well	Water	Column	
<u>L 01756</u>	L	LE	1	3	4	13	19S	35E	649145	3614253*	56	28	28	
<u>L 04563</u>	L	LE	2	2	4	13	19S	35E	649743	3614662*	56	24	32	
<u>L 04583</u>	L	LE	4	3	15	19S	35E	645617	3614107*	55	18	37		
<u>L 11560</u>	L	LE	4	4	13	19S	35E	649650	3614160*	39	27	12		

Average Depth to Water: **24 feet**

Minimum Depth: **18 feet**

Maximum Depth: **28 feet**

Record Count: 4

PLSS Search:

Section(s): 13, 14, 15

Township: 19S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the
POD suffix indicates the
POD has been replaced
& no longer serves a
water right file.)

(R=POD has
been replaced,
O=orphaned,
C=the file is
closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Code	Subbasin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 02250	L	LE		1	3	3	22	19S	35E	645137	3612586*	50	20	30
L 03843	L	LE			3	3	22	19S	35E	645238	3612487*	73	27	46
L 03844	L	LE		1	3		22	19S	35E	645232	3612891*	71	27	44
L 04101	L	LE			3	3	22	19S	35E	645238	3612487*	50	35	15
L 04290	L	LE		3	4	1	22	19S	35E	645528	3613198*	45	18	27
L 04604	L	LE		2	2	4	24	19S	35E	649766	3613048*	55	22	33
L 04604 S	L	LE		2	2	4	24	19S	35E	649766	3613048*	56	22	34
L 04604 S2	L	LE		2	2	4	24	19S	35E	649766	3613048*	56	22	34
L 04604 S3	L	LE		4	2	4	24	19S	35E	649766	3612848*	56	22	34
L 04604 S4	L	LE		4	2	4	24	19S	35E	649766	3612848*	57	22	35
L 04604 S5	L	LE		2	4	4	24	19S	35E	649772	3612645*	55	22	33
L 04604 S6	L	LE		2	2	4	24	19S	35E	649766	3613048*	57	22	35

Average Depth to Water: **23 feet**

Minimum Depth: **18 feet**

Maximum Depth: **35 feet**

Record Count: 12

PLSS Search:

Section(s): 22, 23, 24

Township: 19S

Range: 35E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

No records found.

PLSS Search:

Section(s): 26, 27

Township: 19S

Range: 35E

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.


7/23/12 10:57 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

Form C-108
Affirmative Statement
Quantum Resources Management, LLC
Northeast Pearl Queen Unit No. 24
Section 23, T-19 South, R-35 East, NMPM,
Lea County, New Mexico

Available geologic and engineering data has been examined and no evidence of open faults or hydrological connection between the injection zone and any underground sources of drinking water has been found.



David Catanach
Agent for Quantum Resources Management, LLC

8/16/12

Date

Jones, William V., EMNRD

From: David Catanach <drcatanach@netscape.com>
Sent: Thursday, August 23, 2012 6:38 AM
To: Jones, William V., EMNRD
Subject: Quantum
Attachments: Fresh Water Analysis.pdf

Will,

I recently filed a WFX application for Quantum Resources Management, LLC for its Northeast Pearl Queen Unit No. 24. We have now obtained a water sample from a fresh water well located within one mile of the proposed injection well. Attached is a water analysis. Please include that in the application file.

Thanks,

David

Netscape. Just the Net You Need.

Analytical Laboratory Report for:
Quantum



Account Representative:

Production Water Analysis

Listed below please find water analysis report from: **Cline, Stock water**

Lab Test Number		Sample Date
2012124632		08/13/2012
Specific Gravity:	1.002	
TDS:	998	
pH:	7.20	
Cations		mg/L
Calcium as Ca ⁺⁺	104	
Magnesium as Mg ⁺⁺	21.00	
Sodium as Na ⁺	304	
Iron as Fe ⁺⁺	0.01	
Potassium as K ⁺	9.0	
Barium as Ba ⁺⁺	0.06	
Strontium as Sr ⁺⁺	1.31	
Manganese as Mn ⁺⁺	0.03	
Anions		mg/L
Bicarbonate as HCO ₃ ⁻	60	
Sulfate as SO ₄ ⁼	30	
Chloride as Cl ⁻	469	
Gases		mg/L
Carbon Dioxide as CO ₂	0	
Hydrogen Sulfide as H ₂ S	0.0	

Analytical Laboratory Report for:
Quantum



Account Representative:

DownHole SAT™ Scale Prediction @ 100 deg. F

Lab Test Number	Sample Date	Location
2012124632	08/13/2012	Stock water

Mineral Scale	Saturation Index	Momentary Excess (lbs/1000 bbls)
Calcite (CaCO3)	0.30	-0.32
Strontianite (SrCO3)	0.01	-5.78
Anhydrite (CaSO4)	0.01	-1320.06
Gypsum (CaSO4*2H2O)	0.01	-1216.87
Barite (BaSO4)	0.12	-0.71
Celestite (SrSO4)	0.00	-194.23
Siderite (FeCO3)	0.06	-0.16
Halite (NaCl)	0.00	-437153.28
Iron sulfide (FeS)	0.00	-0.35

Interpretation of DHSat Results:

The **Saturation Index** is calculated for each mineral species independently and is a measure of the degree of supersaturation (driving force for precipitation) under the conditions modeled. This value ranges from 0 to infinity with 1.0 representing a condition of equilibrium where scale will neither dissolve nor precipitate. Values less than 1.0 are undersaturated and values greater than 1.0 are supersaturated. The **Momentary excess** is a measure of how much scale would have to precipitate to bring the system back to a non-scaling condition. This value ranges from negative (dissolving) to positive (precipitating) values. The **Momentary Excess** represents the amount of scale possible while the **Saturation Level** represents the probability that scale will form.

Affidavit of Publication

State of New Mexico,
County of Lea.

I, GUSSIE BLACK
BUSINESS MANAGER
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
August 15, 2012
and ending with the issue dated
August 15, 2012

Gussie Black

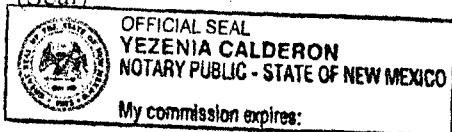
BUSINESS MANAGER

Sworn and subscribed to before me
this 15th day of
August, 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

LEGAL

Legal Notice
August 15, 2012

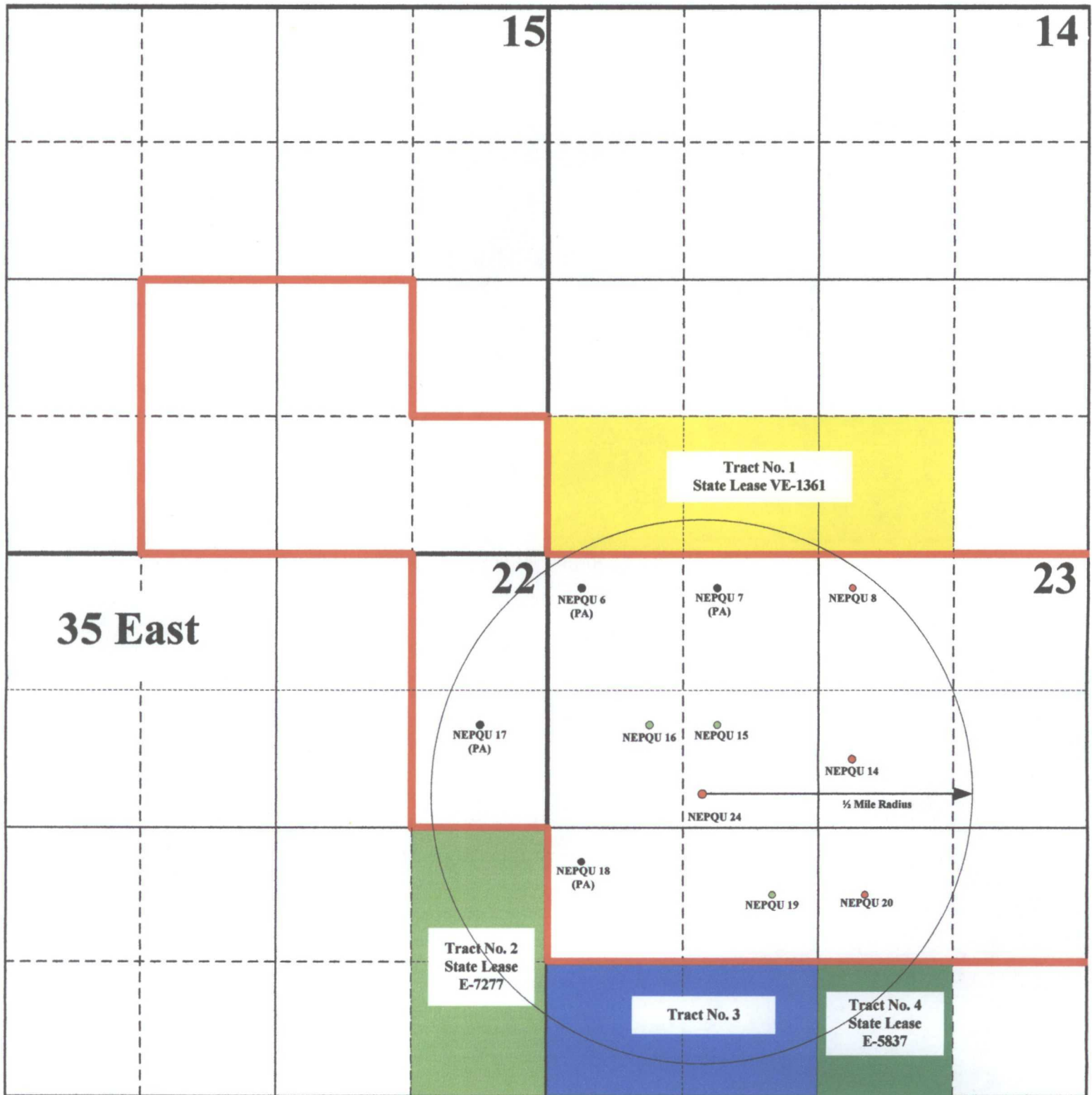
Quantum Resources Management, LLC, 1401 McKinney Street, Suite 2400, Houston, Texas 77010 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to convert the Northeast Pearl Queen Unit No. 24 (API No. 30-025-33463) located 2310 feet from the North line and 1500 feet from the West line (Unit F) of Section 23, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico, to a waterflood injection well within the Northeast Pearl Queen Unit Waterflood Project. Injection will occur into the Queen formation, Pearl-Queen Pool, through the perforated interval from 4,945 feet to 5,045 feet. Produced water from the Pearl-Queen Pool will be injected into the well at average and maximum rates of 750 and 2,500 barrels of water per day, respectively. The average and maximum surface injection pressure for the well is anticipated to be 1,800 psi and 2,475 psi, respectively. 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.
#27524

67109432

00098598

DAVID CATANACH
QUANTUM RESOURCES MANAGEMENT, LLC
1142 VUELTA DE LAS ACEQUIAS
SANTA FE, NM 87507

19 South



NEPQU Boundary

**Form C-108: Northeast Pearl Queen Unit No. 24
Offset Operator/Leasehold Owner Identification Map**

Quantum Resources Management, LLC
Form C-108: Northeast Pearl Queen Unit No. 24
Section 23, T-19 South, R-35 East, NMPM
Lea County, New Mexico

Offset Operator/Leasehold Owner Notification List

All acreage located within a ½ mile radius of the Northeast Pearl Queen Unit No. 24, with the exception of the following-described acreage, is currently contained within Northeast Pearl Queen Unit Area which is currently operated by Quantum Resources Management, LLC. (See attached map).

Tract No. 1: S/2 SW/4 & SW/4 SE/4 of Section 14, T-19S, R-35E

Mewbourne Oil Company
500 W. Texas, Suite 1020
Midland, Texas 79701

McCombs Energy, Ltd.
5599 San Felipe, Suite 1200
Houston, Texas 77050

Tract No. 2: E/2 SE/4 of Section 22, T-19S, R-35E

Pyramid Energy, Inc.
14100 San Pedro, Suite 700
San Antonio, Texas 78232

ConocoPhillips Company
3300 North "A" Street, Suite # 6-100
Midland, Texas 79705

Tract No. 3: S/2 SW/4 of Section 23, T-19S, R-35E

John C. Oxley, LLC
Williams Center Tower I, Suite 1300
1 West 3rd Street
Tulsa, Oklahoma 74103

McRae Exploration & Production, Inc.
10333 Richmond, Suite 860
Houston, Texas 77012

Mewbourne Oil Company
500 West Texas, Suite 1020
Midland, Texas 79701

Tract No. 4: SW/4 SE/4 of Section 23, T-19S, R-35E

Chevron USA, Inc.
15 Smith Road
Midland, Texas 79705

Mewbourne Oil Company
500 West Texas, Suite 1020
Midland, Texas 79701

McCombs Energy, Ltd.
5599 San Felipe, Suite 1200
Houston, Texas 77050

3 MG Corporation
P.O. Box 7698
Tyler, Texas 75711

CWM 2000-B, Ltd.
P.O. Box 7698
Tyler, Texas 75711

Mewbourne Energy Partners 07-A, L.P.
P.O. Box 7698
Tyler, Texas 75711

Chesapeake Energy Corp.
P.O. Box 18492
Oklahoma City, Oklahoma 73154

Mewbourne Development Corp.
P.O. Box 7698
Tyler, Texas 75711

**Quantum Resources Management, LLC
Form C-108: Northeast Pearl Queen Unit No. 24
Section 23, T-19 South, R-35 East, NMPM
Lea County, New Mexico**

Offset Operator/Leasehold Owner Notification List (Page 2)

Surface Owner

Commissioner of Public Lands
P.O. Box 1148
Santa Fe, New Mexico 87504
Attn: Oil & Gas Division

Additional Notice

Oil Conservation Division (Hobbs Office)
1625 N. French Drive
Hobbs, New Mexico 88240

August 16, 2012

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**TO: Offset Operators, Offset Leasehold Owners & Surface Owner
(See Attached List)**

**Re: Quantum Resources Management, LLC
Form C-108 (Application for Authorization to Inject)
Northeast Pearl Queen Unit No. 24
Section 23, T-19 South, R-35 East, NMPM,
Lea County, New Mexico**

Dear Sir:

Enclosed please find a copy of Oil Conservation Division Form C-108 (Application for Authorization to Inject) for the Quantum Resources Management, LLC Northeast Pearl Queen Unit No. 24 located 2310 feet from the North line and 1500 feet from the West line (Unit F) of Section 23, T-19 South, R-35 East, NMPM, Lea County, New Mexico. You are being provided a copy of the application as either an offset operator, offset leasehold owner or the surface owner of the land on which the proposed injection well is located. In accordance with the provisions of Division Order No. R-3837, which order approved waterflood operations within the Northeast Pearl Queen Unit, Quantum Resources Management, LLC proposes to inject water into the Northeast Pearl Queen Unit No. 24 in order to complete an efficient injection/production pattern within the Northeast Pearl Queen Unit Waterflood Project.

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,



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

Enclosure

Form C-108
Quantum Resources Management, LLC
Northeast Pearl Queen Unit No. 24
Section 23, T-19 South, R-35 East, NMPM,
Lea County, New Mexico

Legal notice will be published in the:

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

A copy of the legal advertisement will be forwarded to the Division upon publication.

Quantum Resources Management, LLC, 1401 McKinney Street, Suite 2400, Houston, Texas 77010 has filed a Form C-108 (Application for Authorization to Inject) with the Oil Conservation Division seeking administrative approval to convert the Northeast Pearl Queen Unit No. 24 (API No. 30-025-33463) located 2310 feet from the North line and 1500 feet from the West line (Unit F) of Section 23, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico, to a waterflood injection well within the Northeast Pearl Queen Unit Waterflood Project. Injection will occur into the Queen formation, Pearl-Queen Pool, through the perforated interval from 4,945 feet to 5,045 feet.

Produced water from the Pearl-Queen Pool will be injected into the well at average and maximum rates of 750 and 2,500 barrels of water per day, respectively. The average and maximum surface injection pressure for the well is anticipated to be 1,800 psi and 2,475 psi, respectively.

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.

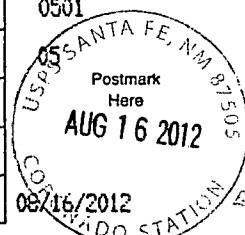
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MIDLAND TX 79701

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Certified Fee	\$2.95	
Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **Mewbourne Oil Company**
 Street, Apt. No., or PO Box No. **160 W. Texas, Suite 1020**
 City, State, ZIP+4® **Midland, Texas 79701**

PS Form 3800, August 2006 See Reverse for Instructions

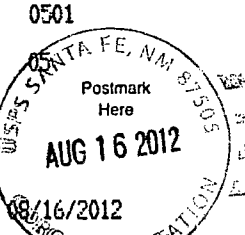
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Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **Pyramid Energy, Inc.**
 Street, Apt. No., or PO Box No. **1100 San Pedro, Suite 700**
 City, State, ZIP+4® **San Antonio, Texas 78232**

PS Form 3800, August 2006 See Reverse for Instructions

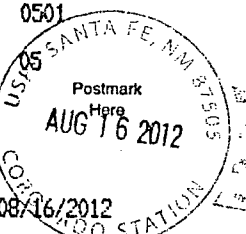
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HOUSTON TX 77012

Postage	\$ 2.46	
Certified Fee	\$2.95	
Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **McRae Exploration & Production**
 Street, Apt. No., or PO Box No. **10333 Richmond, Suite 860**
 City, State, ZIP+4® **Houston, Texas 77012**

PS Form 3800, August 2006 See Reverse for Instructions

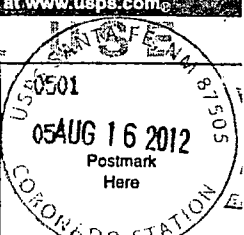
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OFFICIAL USE

TYLER TX 75711

Postage	\$ 2.46	
Certified Fee	\$2.95	
Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **3MG Corporation**
 Street, Apt. No., or PO Box No. **CWM 2000-B, Ltd.**
 City, State, ZIP+4® **Mewbourne Energy Partners 07-A, LP**
Mewbourne Development Corp.
Box 7698
Tyler, Texas 75711

PS Form 3800, August 2006 See Reverse for Instructions

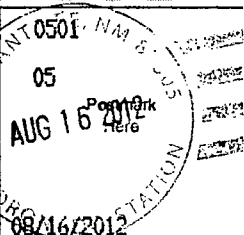
7012 0470 0001 5947 9381

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

OFFICIAL USE

HOUSTON TX 77050

Postage	\$ 2.46	
Certified Fee	\$2.95	
Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **McCombs Energy, Ltd.**
 Street, Apt. No., or PO Box No. **5599 San Felipe, Suite 1200**
 City, State, ZIP+4® **Houston, Texas 77050**

PS Form 3800, August 2006 See Reverse for Instructions

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OFFICIAL USE

TULSA OK 74103

Postage	\$ 2.46	
Certified Fee	\$2.95	
Return Receipt Fee (Endorsement Required)	\$2.35	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	

Sent To **John C. Oxley, LLC**
 Street, Apt. No., or PO Box No. **Williams Center Tower 1, Suite 1300**
 City, State, ZIP+4® **West 3rd Street**
Tulsa, Oklahoma 74103

PS Form 3800, August 2006 See Reverse for Instructions

7012 0470 0001 5947 9312

U.S. Postal Service TM		
CERTIFIED MAIL TM RECEIPT		
(Domestic Mail Only; No Insurance Coverage Provided)		
For delivery information visit our website at www.usps.com		
OKLAHOMA CITY OK 73154 OFFICIAL USE		
Postage	\$ 2.46	0501
Certified Fee	\$2.95	05
Return Receipt Fee (Endorsement Required)	\$2.35	Postmark Here AUG 16 2012
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	
Sent To Chesapeake Energy Corp.		
P.O. Box 18492		
Oklahoma City, Oklahoma 73154		
PS Form 3800, August 2006 See Reverse for Instructions		

7012 0470 0001 5947 9367

U.S. Postal Service TM		
CERTIFIED MAIL TM RECEIPT		
(Domestic Mail Only; No Insurance Coverage Provided)		
For delivery information visit our website at www.usps.com		
MIDLAND-TX 79705 OFFICIAL USE		
Postage	\$ 2.46	0501
Certified Fee	\$2.95	05
Return Receipt Fee (Endorsement Required)	\$2.35	Postmark Here AUG 16 2012
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	
Sent To ConocoPhillips Company		
3300 North "A" Street,		
Suite # 6-100		
Midland, Texas 79705		
PS Form 3800, August 2006 See Reverse for Instructions		

7012 0470 0001 5947 9336

U.S. Postal Service TM		
CERTIFIED MAIL TM RECEIPT		
(Domestic Mail Only; No Insurance Coverage Provided)		
For delivery information visit our website at www.usps.com		
MIDLAND-TX 79705 OFFICIAL USE		
Postage	\$ 2.46	0501
Certified Fee	\$2.95	05
Return Receipt Fee (Endorsement Required)	\$2.35	Postmark Here AUG 16 2012
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	
Sent To Chevron USA, Inc.		
15 Smith Road		
Midland, Texas 79705		
PS Form 3800, August 2006 See Reverse for Instructions		

7012 0470 0001 5947 9305

U.S. Postal Service TM		
CERTIFIED MAIL TM RECEIPT		
(Domestic Mail Only; No Insurance Coverage Provided)		
For delivery information visit our website at www.usps.com		
SANTA FE-NM-87504 OFFICIAL USE		
Postage	\$ 2.46	0501
Certified Fee	\$2.95	05
Return Receipt Fee (Endorsement Required)	\$2.35	Postmark Here AUG 16 2012
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.76	
Sent To Commissioner of Public Lands		
P.O. Box 1148		
Santa Fe, New Mexico 87504		
Attn: Oil & Gas Division		
PS Form 3800, August 2006 See Reverse for Instructions		