STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 SOUTH PACHECO
SANTA FE, NEW MEXICO 87505

FORM C-108
Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: X Secondary Recovery ____ Pressure Maintenance ____ Disposal ____ Storage
Application qualifies for administrative approval? X Yes ____ No

II. OPERATOR: Mewbourne Oil Company

ADDRESS: P. O. Box 7698 - Tyler, Texas 75711

CONTACT PARTY: K. M. Calvert PHONE: (903) 561-2900

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. **Attachment 1**

IV. Is this an expansion of an existing project? ____ Yes X No
If yes, give the Division order number authorizing the project: R-9737-A

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**

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 3**

VII. Attach data on the proposed operation, including: **Attachment 4**

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 5**

IX. Describe the proposed stimulation program, if any. **Attachment 6** NONE

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). Previously Submitted. **Attachment 7**

*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 8**

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. **Attachment 9**

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: Sue Hearon TITLE: EngineeringTech.

SIGNATURE: Sue Hearon DATE: 7/26/01

* 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: C-108 5-28-93

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, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

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

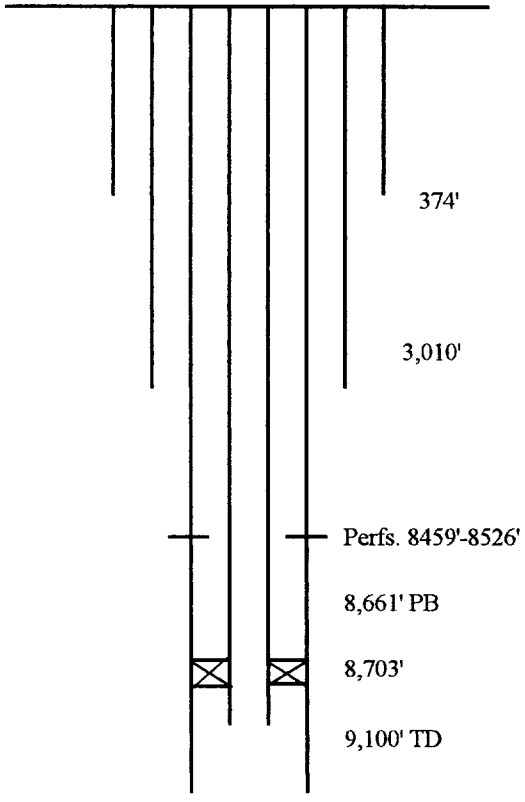
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET
(ITEM III: Attachment 1 to Form C-108)

Mewbourne Oil Company (Operator) QPBSSU 13-2 (Lease, Well No.) (30-025-29679)

760' FSL & 2310' FWL (Location) 23 (Section) 18S (Township) 32E (Range) Lea (County) NM (State)

Schematic



Tubular Data

Surface Casing
Size 13-3/8" Cemented with 374 sx. Class H
TOC Surface Feet determined by Circ.
Hole size 17½"

Intermediate Casing
Size 8-5/8" Cemented with 1300 sx. Lite and 300 sx. Class C
TOC Surface Feet determined by Circ.
Hole size 11"

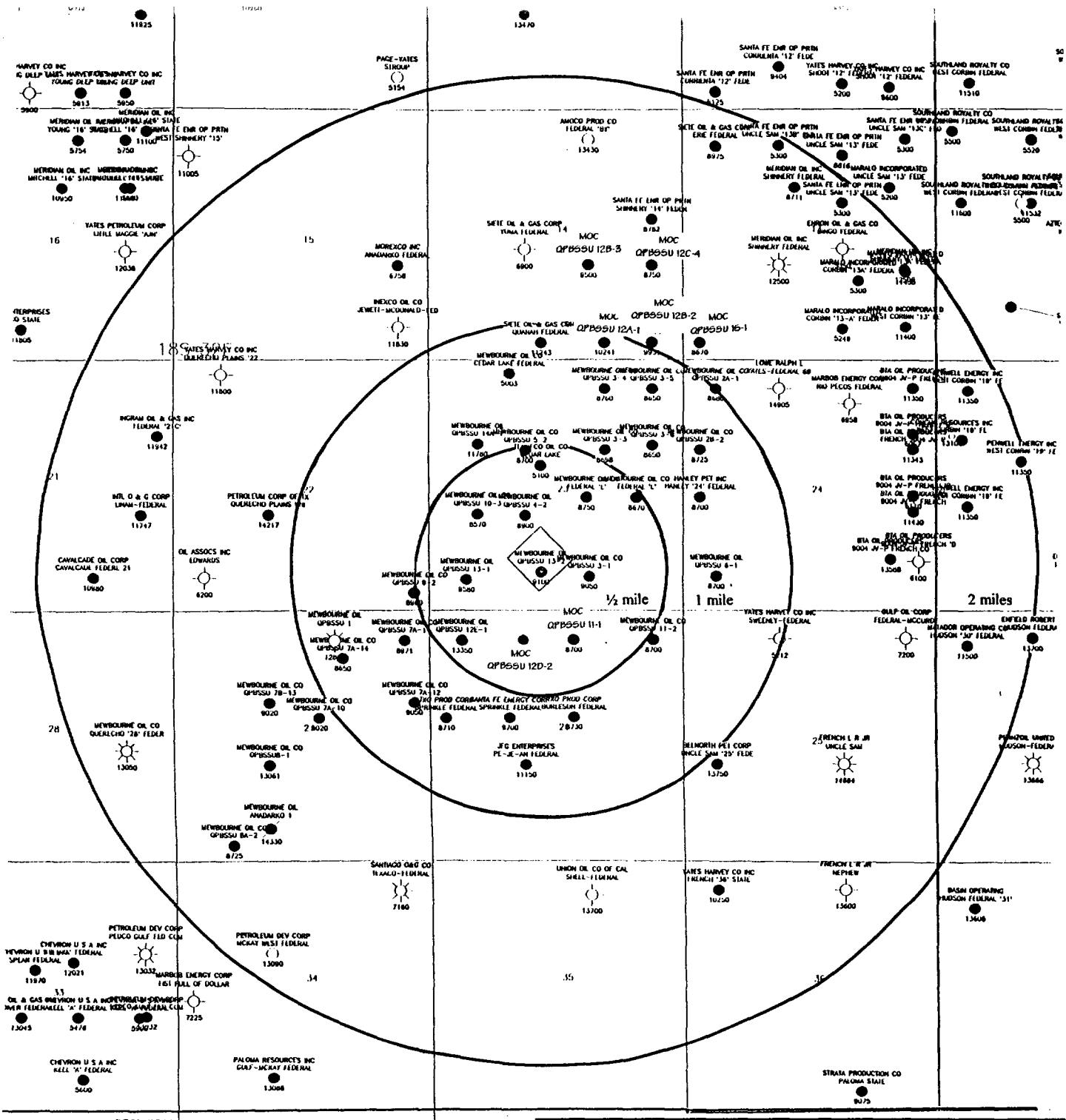
Long String
Size 5½" Cemented with 1100 sx. Class H
TOC 4350' Feet determined by Temp. Survey
Hole size 7-7/8"
Total depth 9,100'

Injection interval
8459 feet to 8526 feet - perforated

Tubing size 2-3/8" lined with Bonded PVC (material) set in a Otis Permalatch (brand and model) packer at 8703 feet

Other Data

1. Name of the injection formation Upper Bone Spring
2. Name of field or pool (if applicable) Querecho Plains - Upper Bone Springs
3. Is this a new well drilled for injection? ☐Yes ☒ No
   If no, for what purpose was the well originally drilled? Producing well
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Queen - 3890', Morrow - 12,693'



MEWBOURNE OIL COMPANY

Attachment 2
Application for Authorization to Inject

Querecho Plains Bone Spring Sand Unit 13-2
Sec. 23, T18S, R32E
Lea County, New Mexico

Scale 1" = 3000' **SH 7/20/01**

ATTACHMENT 3 TO FORM C-108
Tabulation of Data on all wells within the Area of Revies

OPERATOR	LEASE/WELL	LOCATION	TYPE	CONSTRUCTION	DATE DRILLED	TD	COMPLETION & COMMENTS
Mewbourne Oil Company	QPBSSU 5-2	Sec. 23, T18S, R32E 1980' FNL & 1980' FWL	Oil	13⅜" @ 478' CMT w/ 500 sx. 8⅝" @ 4,286' CMT w/1400 sx. 5½" @ 8,708' CMT w/1075 sx.	11/10/86	8,700'	Perfs. @ 8,435'-8,501' 8,653' PBTD
Mewbourne Oil Company	QPBSSU 10-3	Sec. 23, T18S, R32E 1980' FSL & 990' FWL	Oil Converted to injection. 12/12/93	13⅜" @ 480' CMT w/ 275 sx. 8⅝" @ 4,285' CMT w/1700 sx. 5½" @ 8,570' CMT w/1375 sx.	12/31/86	8,570'	Perfs. @ 8,362'-8,436' 8,528' PBTD
Mewbourne Oil Company	QPBSSU 4-2	Sec. 23, T18S, R32E 1950' FSL & 1980' FWL	Oil Converted to injection 10/05/92	13⅜" @ 700' CMT w/ 700 sx. 8⅝" @ 3,100' CMT w/4800 sx. 5½" @ 8,900' CMT w/ 900 sx.	9/19/86	8,900'	Perfs. @ 8,343'-8,515' Packer @ 8277'
Mewbourne Oil Company	QPBSSU 3-2	Sec. 23, T18S, R32E 2310' FSL & 2030' FEL	Oil	13⅜" @ 441' CMT w/ 450 sx. 9⅝" @ 4,293' CMT w/1800 sx. 5½" @ 8,750' CMT w/ 925 sx.	10/14/86	8,750'	Perf. @ 8,458'-8,473' 8,494'-8,508' and 8,517'-8,531' 8,660' PBTD
Mewbourne Oil Company	QPBSSU 3-7	Sec. 23, T18S, R32E 2310' FSL & 990' FEL	Oil	8⅝" @ 356' CMT w/ 250 sx. 5½" @ 8,670' CMT w/4630 sx.	5/14/88	8,670'	Perfs. @ 8,485'-8552'
Mewbourne Oil Company	QPBSSU 13-1	Sec. 23, T18S, R32E 610' FSL & 760' FWL	Oil	13⅜" @ 354' CMT w/ 385 sx. 8⅝" @ 3,047' CMT w/1475 sx. 5½" @ 8,565' CMT w/1250 sx.	12/31/85	9,580'	Perfs. @ 8,414'-8,447' 8743' PBTD
Mewbourne Oil Company	QPBSSU 3-1	Sec. 23, T18S, R32E 660' FSL & 1980' FEL	Oil	13⅜" @ 459' CMT w/ 400 sx. 8⅝" @ 4,345' CMT w/1700 sx. 5½" @ 9,050' CMT w/1050 sx.	4/22/86	9,050'	Perfs. @ 8,370'-8,390' RBP @ 8,453'
Mewbourne Oil Company	QPBSSU 12E-1	Sec. 26, T18S, R32E 660' FNL & 660' FWL	Oil converted to injection 12/29/93	13⅜" @ 536' CMT w/ 500 sx. 8⅝" @ 4,814' CMT w/1250 sx. 5½" @ 10,635' CMT w/1735 sx.	5/11/85	13,350'	Perfs. @ 8,507'-8,512' 10,595' PBTD
Mewbourne Oil Company	QPBSSU 12D-2	Sec. 26, T18S, R32E 660' FNL & 1980' FWL	Oil converted to injection 11/26/93	8⅝" @ 537' CMT w/ 400 sx. 5½" @ 8,711' CMT w/1850 sx.	10/03/85	8,711'	Perfs. @ 8,506'-8,574' Packer @ 8420'
Mewbourne Oil Company	QPBSSU 11-1	Sec. 26, T18S, R32E 660' FNL & 2310' FEL	Oil converted to injection 11/26/93	11¾" @ 350' CMT w/ 485 sx. 8⅝" @ 2,800' CMT w/1750 sx. 4½" @ 8,700' CMT w/1205 sx.	11/02/85	8,700'	Perfs. @ 8,512-8,526', @ 8,542'-8,572' 8,613' PBTD Packer @ 8426'

Attachment 4
Application for Authorization to Inject
Querecho Plains Bone Spring Sand Unit 13-2
Lea Co., NM

ITEM VII. (1) Anticipated average injection rate is 400 bwpd for the injector. Proposed maximum injection rate is 2000 bwpd for the unit.

ITEM VII. (2) The injection system will be operated as a closed system.

ITEM VII. (3) Proposed average injection pressure is 1700. Proposed maximum injection pressure is 1700.

ITEM VII. (4) See Case No. 10,761.

ITEM VII. (5) Not applicable.

Attachment 5
Application for Authorization to Inject
Querecho Plains Bone Spring Sand Unit 13-2
Lea Co., NM

The zone being target for water injection at Querecho Plains is the First Bone Spring sand at a depth from 8459'- to 8526' in the Querecho Plains Bone Spring Sand Unit 13-2, Section 23, T18S, R32E. The First Bone Spring sands are a sequence of well consolidated sandstone, silt stone, and shale strata, with localized carbonate deposition, of Permian age cemented with calcareous material. An eight percent porosity cut-off is used to determine net pay as porosity less than eight percent is considered impermeable at the existing and proposed reservoir pressure and reservoir fluid regimes. Net pay isopach maps contained in the engineering report portion of the unit plan show the areal extent of the targeted sands. Impermeable carbonate deposits exist above and below the targeted sands thus defining the permeable limits of the reservoir. All injected fluid should remain in the reservoir with the exception of cycling to the surface through well bores.

Item XI. Form C-108
Attachment 8
Application for Authorization to Inject
Querecho Plains Bone Spring Sand Unit 13-2
Lea Co., NM

There are no known fresh water wells within the area of review.

Item XII. Form C-108
Attachment 9
Application for Authorization to Inject
Querecho Plains Bone Spring Sand Unit 13-2
Lea Co., NM

The Querecho Plains Bone Spring Sand Unit waterflood has been operating approximately eight years. No know communication between the proposed injection zone and any possibly known fresh water zones has been detected.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1

weeks.

Beginning with the issue dated

July 22 2001

and ending with the issue dated

July 22 2001

Kathi Bearden

Publisher

Sworn and subscribed to before me this 23rd day of July 2001

Jodi Henson

Notary Public.

My Commission expires
October 18, 2004
(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
July 22,2001
NOTICE OF APPLICATION FOR FLUID INJECTION WELL PERMIT
Mewbourne Oil Company
P.O. Box 7698
TYLER, TX 75711

has applied to the state of New Mexico. Oil Conservation Division, Santa Fe, New Mexico, to allow injection of produced water into the existing Querecho Plains Bone Springs Sand Unit 13-2 in the Upper Bone Spring formation at a depth of approximately 8459 feet to 8526 feet subsurface. The well is located 2310 feet from the west line and 760 feet from the south line of Section 23, Township 18 South, Range 32 East, Lea County, New Mexico. The maximum injection rate is 400 barrels of water per day at an estimated maximum pressure of 1700 psi.
Interested parties must file objections or requests for hearing within 15 days of the publication of this notice with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. The applicant is Mewbourne Oil Company.
#18312

01102551000 02548694

Mewbourne Oil Company
P.O. Box 7698
TYLER, TX 75711

ITEM XIV. (C-108)
MEWBOURNE OIL COMPANY
APPLICATION FOR AUTHORIZATION TO INJECT
QPBSSU 13-2
LEA COUNTY, NEW MEXICO

CERTIFICATE OF SERVICE

I, Sue Hearon, Engineering Technician, Mewbourne Oil Company, Operator of the QPBSSU 13-2 have on this 23rd day of July 2001, mailed or caused to be mailed, postage prepaid a copy of the Application for Authorization to Inject to the Bureau of Land Management - P. O. Box 1397 - Roswell, New Mexico 88220. There are no offset operators to notify.

QPBSSU 13-2
Sec. 23, T18S, R32E
Lea County, New Mexico

Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711 has applied to the State of New Mexico, Oil Conservation Division, Santa Fe, New Mexico, to allow injection of produced water into the existing Querecho Plains Bone Springs Sand Unit 13-2 in the Upper Bone Spring formation at a depth of approximately 8459 feet to 8526 feet subsurface. The well is located 2310 feet from the west line and 760 feet from the south line of Section 23, Township 18 South, Range 32East, Lea County, New Mexico. The maximum injection rate is 400 barrels of water per day at an estimated maximum pressure of 1700 psi.

Interested parties must file objections or requests for hearing within 15 days of the publication of this notice with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. The applicant is Mewbourne Oil Company.

Sue Hearon
Sue Hearon, Engineering Technician

Subscribed in my presence and duly sworn to before me on this 23rdth day of July 2001.

CHERYL LITTLE
Notary Public
STATE OF TEXAS
My Comm. Exp. 5-30-2002

Notary Public, in and for Smith Co., TX

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 8, 2001

Mewbourne Oil Company
P.O. Box 7698
Tyler, Texas 75711

Attention: Ms. Sue Hearon

Re: Form C-108 Application
QPBSSU No. 13-2

Dear Ms. Hearon:

This letter acknowledges the receipt of your administrative application dated July 26, 2001, to convert the QPBSSU No. 13-2 located in Section 23, Township 18 South, Range 32 East, NMPM, Lea County, New Mexico, to an injection well. The Division received your application on July 31, 2001.

Our preliminary review indicates that the information provided in the application is not sufficient to process the administrative order. The following information is necessary:

a) **Administrative Application Checklist;**
b) **Was the surface owner and any offset operator within ½ mile of the proposed injection well notified of your application.**

Since the submitted information is insufficient to review, the application was **Ruled Incomplete** on August 8, 2001. Please submit the above stated information by August 15, 2001.

The Division cannot proceed with your application until the required information is submitted. Upon receipt, the division will continue to process your application. The additional information can be faxed, or mailed to the Division. If the necessary information is not submitted, your application will be returned to you.

If you have any questions, please contact me in Santa Fe, at (505) 476-3466.

Sincerely,

David Catanach
Petroleum Engineer

Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711

Telephone: (903) 561-2900 Fax: (903) 561-1870

Fax Tranmission Page
Page 1 of 2

To: DAVID CATANACH Fax No. 505/476-3462

From: SUE HEARON Date: 8-13-01

Re: FORM C-108 APPLICATION QPBSSO 13-2

Comments:

DAVID -

PLEASE FIND ATTACHED A COPY OF THE ADMINISTRATIVE APPLICATION CHECK LIST FOR THE ABOVE REFERENCED WELL. I DID NOT KNOW ABOUT THIS FORM UNTIL LAST WEEK WHICH WAS AFTER I HAD MAILED OUR APPLICATION IN ON 7/26/01.

WE ARE THE ONLY OFFSET OPERATOR AND BLM WAS NOTIFIED.

THANKS FOR YOUR HELP.

SUE

Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711

Telephone: (903) 561-2900 Fax: (903) 561-1870

Fax Tranmission Page
Page 1 of 3

To: DAVID CATANACH Fax No. 505/476-3462

From: SUE HEARON Date: 8-13-01

Re: QPBSSU 13-2 CONV. TO INJECTOR
FORM C-108

Comments:

DAVID -

I AM ENCLOSING A COPY OF THE LETTER WE SENT OUT TO INTEREST OWNERS ON THE ABOVE APPLICATION. (I FORGOT TO CHECK BOX A UNDER "NOTIFICATIONS") ALSO ATTACHED IS A COPY OF OUR CERTIFIED RECEIPT TO THE BLM. THE REASON I AM SENDING THIS BY FAX IS THAT YOUR LETTER DATED 8-8-01 SAID I MUST SUBMIT THIS INFORMATION BY 8-15-01.

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505

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.

SUE HEARON	Sue Hearon	ENG. TECH.	8-13-01
Print or Type Name	Signature	Title	Date

e-mail Address

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

7000 0520 0020 3905 8104

Postage	$ .80
Certified Fee	2.10
Return Receipt Fee (Endorsement Required)	1.50
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$ 4.40

MT SUE

AUG 26 2001 USPS

Recipient's Name (Please Print Clearly) (To be completed by mailer)
BUREAU OF LAND MANAGEMENT
Street, Apt. No.; or PO Box No.
P.O. BOX 1397
City, State, ZIP+4
ROSWELL, NM 88220-1397

PS Form 3800, February 2000 See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- 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:
BUREAU OF LAND MANAGEMENT
P.O. BOX 1397
ROSWELL, NM 88220-1397

C-108 APP. TO INJ. QPB SSU 13-2

2. Article Number *(Copy from service label)*

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* B. Date of Delivery 8-7-01

C. Signature
X ☐ Agent ☐ Addressee

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

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

DAVID CATHWRIGHT

MEWBOURNE OIL COMPANY
P. O. BOX 7698
TYLER, TEXAS 75711
(903) 561-2900
FAX (903) 561-1870

July 19, 2001

FIELD(Name)
FIELD(Representative)
FIELD(Address)
FIELD(City, State Zip)

Re: Well Conversion
Querecho Plains Bone Spring Sand Unit 13-2
Lea County, New Mexico

Dear Working Interest Owner:

Mewbourne Oil Company, as operator of the Querecho Plains Bone Spring Sand Unit, recommends the conversion of the captioned well from a producer to a injector. Conversion will be accomplished through the use of idle Unit equipment. Cost of conversion will be limited to well servicing expenditures only. The estimated cost is below that required in Section 3.4.4 of the Unit Operating Agreement

If you concur with the above recommendation, please so indicate your approval by signing below.

Sincerely,

K. M. Calvert
Chairman, Operating Committee

KMC/sh

Approval: FIELD(Name)

_____
Representative

_____
Date

C:\OFFICE\WPWIN\Qpbssu\LETTERS\13-2 conversion.frm

Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711

Telephone: (903) 561-2900 Fax: (903) 561-1870

Fax Tranmission Page
Page 1 of 5

To: David Catanach Fax No. 505/476-3462

From: Ken Calvert Date: 8/30/01

Re: QPBSSC 13-2

Comments:

See attached letter.

Thanks

Ken Calvert

MEWBOURNE OIL COMPANY

P. O. BOX 7698
TYLER, TEXAS 75711
(903) 561-2900
FAX (903) 561-1870

August 30, 2001

Mr. David Catanach
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 88504

Re: Completion Procedure
QPBSSU 13-2
Lea County, NM

Dear Mr. Catanach:

By Administrative Order No. WFX-776 dated August 24, 2001, you approved the conversion of the Querecho Plains Bone Spring Sand Unit (QPBSSU) 13-2 from a producer to an injector. As preparatory work was being performed to insure the integrity of the well bore, it was determined an oval-shaped casing collapse had occurred between 2020'-2028' (see attached casing caliper log). After thorough consideration, it has been determined the better option to correct the problem will be to cement a string of 2⅞" od lined tubing inside of the 5½" casing, thus forming a tubing-less completion as per OCD Part I, Section 702. This procedure, in fact, forms a cement packer over the entire length of the injection tubing. The attached schemat shows the tubing cemented in place. A proposed procedure is attached.

I will call you to discuss the procedure and obtain your approval prior to any work being done.

Yours truly,

K. M. Calvert

K. M. Calvert

KMC/sh
Attachments: Casing Inspection Log
Wellbore Schemat (proposed)
Proposed Procedure

QPBSSU 13-2

Proposed Procedure

1. Spot 20/40 frac sand approximately 50' above top perforations.

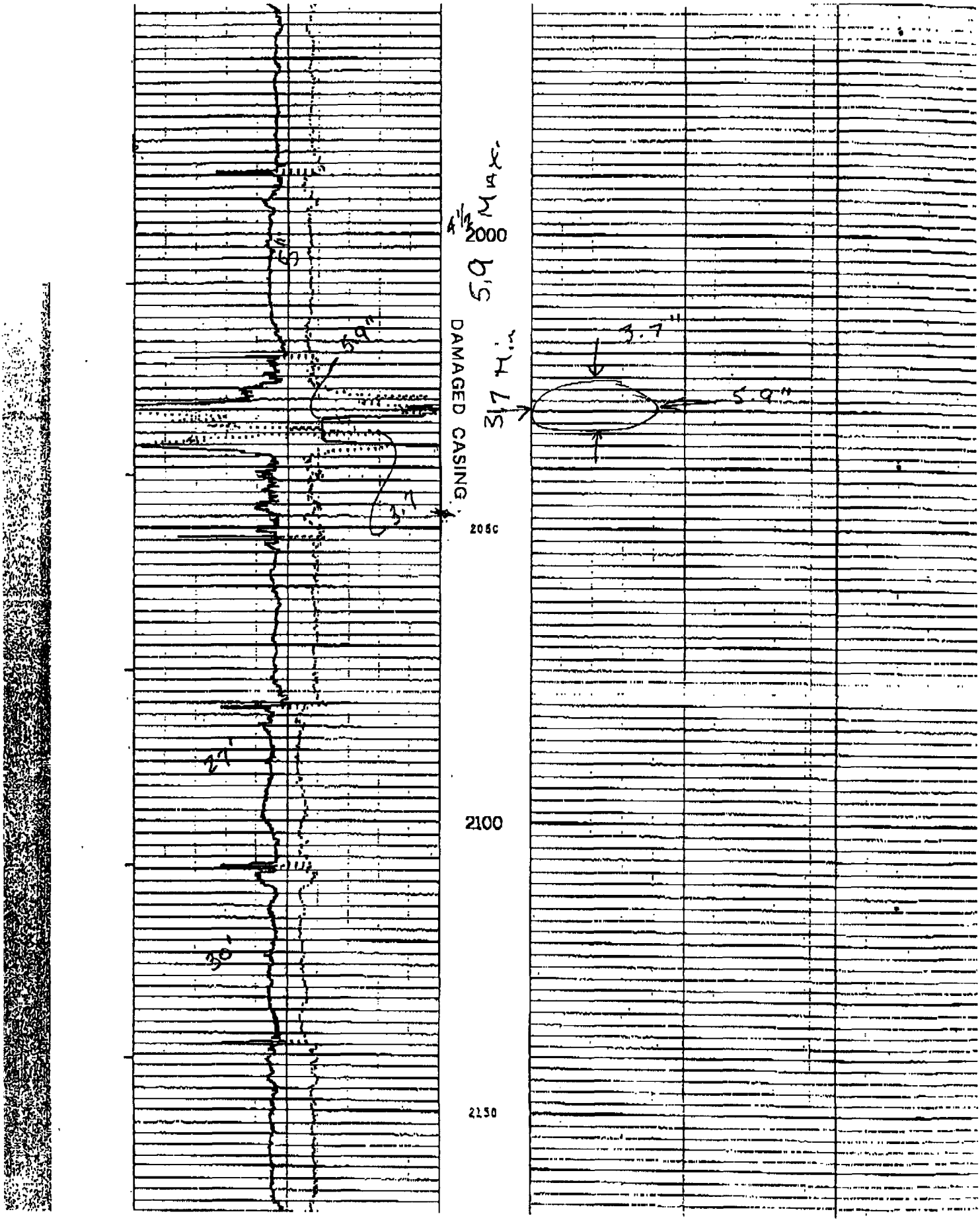
2. Run 2⅞" od Duoline tubing with fiberglass lining (2¼" id). Centralize with aluminum centralizers.

3. Set bottom of tubing within 100' of top perforations (8459').

4. Conventionally cement tubing in place as if making a tubing-less completion as per procedure OCD Part I, Section 702. Note: The attached schemat shows the original placement of cement. The cross-hatched area is the placement of cement with this procedure. The 2⅞" tubing x 5½" casing annulus will be cemented from the bottom of the 2⅞"tubing to the surface.

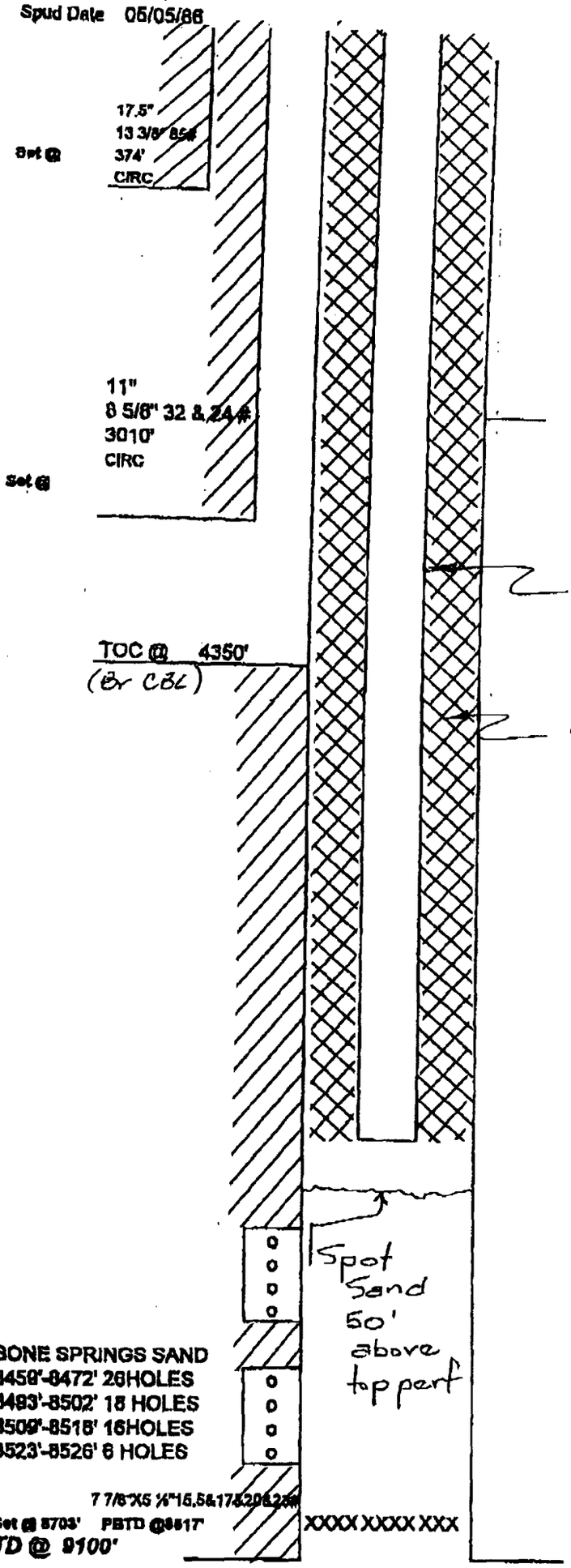
5. Wash sand from bottom of hole with coil tubing.

6. Test and inject through 2⅞" fiberglass-lined tubing.


4 1/2 Max.
2000
5.9
DAMAGED CASING
3.7"
3.7 Min.
5.9"
2050
2100
2150

Schematic for the *Mewbourne Oil Company*

QPBSSU # 13-2
Spud Date 05/05/86



5½" Casing Collapsed in oval shape 2020'-2058'. (See Casing caliper log)

2 7/8" fiberglass-lined Tubing (Dualine)

Cement circulated in 2 7/8" X 5½" annulus from bottom of tubing to surface.

Spot Sand 50' above top perf

13.3# 3000 Cir

TOC @ CBL - 5½"

Cir Cmt

Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711

Telephone: (903) 561-2900 Fax: (903) 561-1870

Fax Tranmission Page
Page 1 of 6

To: David Catanach Fax No. 505-476-3462

From: Ken Calvert Date: 9/12/01

Re: Workover Procedure to convert @ PBSSC 13-2 to Injector from Producer

Comments:

After you have reviewed this procedure, please call me.

Thanks
Ken Calvert

MEWBOURNE OIL COMPANY

P. O. BOX 7698
TYLER, TEXAS 75711
(903) 561-2900
FAX (903) 561-1870

September 12, 2001

Via Fax (505) 476-3462

Mr. David Catanach
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 88504

Re: Completion Procedure - Revision 1
QPBSSU 13-2
Lea County, NM

Dear Mr. Catanach:

Since I last talked to you on Tuesday, September 4, Mewbourne has taken further steps to determine the mechanical condition of the wellbore, discussed remedial alternatives with various industry service companies, and have teamed five Mewbourne engineers and personnel to determine the best procedure to preserve the wellbore integrity plus maintain the security of the environment.

First, you will note on the attached Revision 1 of the procedure that a casing integrity test was performed by BJ Services (See attached Job Report). The result of the test and conclusions are summarized above the procedure portion of Well 13-2, Revision 1.

The collapse of the 5½" casing at 2020', plus the confirmed leak in the same area, emphasizes the need to leave the 5½" casing as it is and not try to remove or repair the casing due to its poor mechanical condition. The cementing of tubing to make a tubingless completion is by far the best alternative.

The attached recommended procedure plus the wellbore schemat shows the placement of the tubing and cement. The placement of cement has been discussed in detail. First, there is 13⅜" casing set at 374'. Should thus be any fresh water in the area, it typically is no deeper than 200'. The fresh water sand is protected. Next 8⅝" casing is set to 3010' with cement circulated to the surface. The 5½" casing has good cement to 4350'. The proposed procedure provides cementing the 2⅞" x 5½" annulus to within 100' of the top of the Unitized Formation to the surface. The 5½" x 8⅝" annulus will be cemented from area of leakage, 2020'-2038' to surface. The surface sands will be protected by four strings of steel pipe (1.538") and 7.5" of cement. This is considered adequate to protect any surface areas. Measurement of displacement fluid is extremely critical to assure leaving no cement in the tubing or below the tubing, and still maintain cement no higher than 100' above the Unitized Formation.

The tubing will be internally lined with Duoline fiberglass. The top joint and bottom 10 joints of tubing will be externally coated with epoxy. To insure integrity of the system, a cement bond log and an injection profile log will be run.

Mewbourne has spent much time in detailing this procedure. It must be done right the first time and, at the same time, meet with OCD approval. In order to assure preservation of this wellbore as a critical injector for the Querecho Plains Bone Spring Sand Unit. Mewbourne respectfully requests approval of this procedure.

After you have reviewed this proposed procedure, please call me if you have additional questions. There are many details that have been investigated that I did not discuss in this presentation. Thank you for your consideration.

Yours truly,

K. M. Calvert

KMC/sh
Attachments: BJ Services Job Report
Proposed Wellbore Schemat QPBSSU 13-2

C:\OFFICE\WPWIN\Qpbssu\LETTERS\D Catanach.wpd

Sep-12-2001 01:07pm From-MEWBOURNE OIL 19035611870 T-692 P.004/006 F-742

09/06/2001 15:50 5053976252 MEWBOURNE OIL HOBBS PAGE 01/01
SEP 06 '01 16:15 FR BJ ARTESIA 7462235 TO 15053976252 P.02/02

CEMENT JOB REPORT

CUSTOMER Mewbourne Oil Co	DATE 05-SEP-01	F.R. # 272815336	SERV. SUPV. Charles Folmar
LEASE & WELL NAME DPSSU 13#2	LOCATION Sec.29T18SR32E		COUNTY-PARISH-BLOCK Eddy New Mexico
DISTRICT Artesia	DRILLING CONTRACTOR RIG # None		TYPE OF JOB Misc Pump - Misc

SIZE & TYPE OF PLUGS	LIST-CSG-HARDWARE						
	No Shoe						

MATERIALS FURNISHED BY BJ	SLURRY WGT PPG	SLURRY YLD FT³	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
Water.	8.34				2	
20 Barrels Dye Water.	8.34				20	
Water.	8.34				120	
Available Mix Water 130 Bbl. Available Displ. Fluid 130 Bbl.				TOTAL	142	

HOLE			TBG-CSG-D.P.					COLLAR DEPTHS		
SIZE	% EXCESS	DEPTH	SIZE	WGT.	TYPE	DEPTH	GRADE	SHOE	FLOAT	STAGE
0	0	0	5.5	15.5	CSG	8703	J-55	0	0	0

LAST CASING				PKR-CMT RET-BR PL-LINER		PERF. DEPTH		TOP CONN		WELL FLUID	
SIZE	WGT	TYPE	DEPTH	BRAND & TYPE	DEPTH	TOP	BTM	SIZE	THREAD	TYPE	WGT.
8.625	32	CSG	3010	No Packer	0	0	0	2.875	8RD	FRESH WATER	8.34

DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TBG PSI		MAX CSG PSI		MIX WATER
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED	Operator	RATED	Operator	SOURCE
118.6	BBLS	Water.	8.34	0	0	0	0	0	4910	3848	TPT

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: None

PRESSURE/RATE DETAIL						EXPLANATION
TIME HR:MIN.	PRESSURE - PSI PIPE	ANNULUS	RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW [X] CO. REP. [ ]
						TEST LINES 1000 PSI
						CIRCULATING WELL - RIG [ ] BJ [X]
09:30	40	0	2	5	H20	Rig up to Test 5-1/2" Casing Circulate out 8-5/8" Casing
09:32	70	0	3	20	DYE	20 Barrels Dye Water.
09:40	80	0	3	56	H20	Flush.
09:56	115	0	4	5	H20	Flush.
09:58	180	0	5	54	H20	Flush.
10:13	30	0	3	2	H20	Injection Rate.
10:14	70	0	4	2	H20	Injection Rate.
10:16	115	0	5	2	H20	Injection Rate.
10:16	0	0	0	0	0	Shut Down.
00:00	0	0	0	0	0	Tyank You Cody & Crew!!!!!!

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	SERV. SUPV.
Y [N]	0	Y [N]	0	145	0	Y [N]	Cody [signature]

Querecho Plains Bone Spring Sand Unit
Well 13-2 - Revision 1

Work performed to determine the best procedure to convert tubing-casing completion to tubingless completion for waterflood injection.

1. Spotted 3500# 20/40 sand plug on bottom. Top of Sand @ 8411' (8/29/01)
2. Performed casing test by pumping down 5½" casing. (See BJ Services Job Report - 9/05/01)
   A. 5½" casing would not test.
   B. With 2 bbls. FW pumped - returns on 8⅝" casing.
   C. Mixed 20 bbls. red dye marker pill.
   D. Red-dye marker returned to surface through 5½" x 8⅝" annulus after 20 bbls. dye and 98 bbls. FW flush pumped. Calculated depth of communication in the immediate vicinity of 5½" casing collapse @ 2020'-2038'.
3. Performed injection/circulation test to determine cement placement pressures.
   A. 3 B/M @ 30#
   B. 4 B/M @ 70#
   C. 5 B/M @ 115#
4. Concluded no water was lost out of 8⅝" casing or below 8⅝" casing shoe.

Recommended Procedure

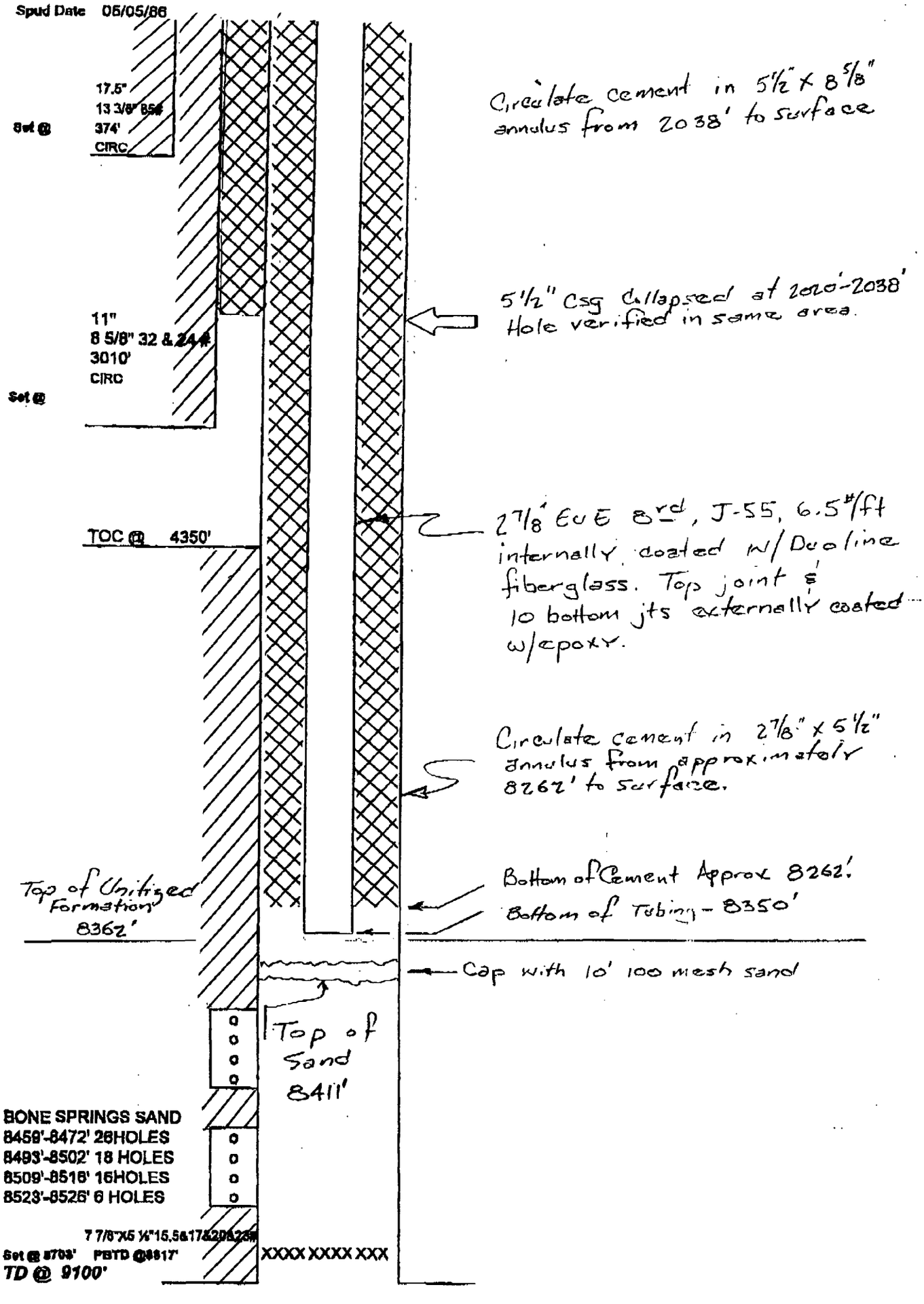
1. Place 10' of 100 mesh sand to cap sand plug.
2. Rig up WO rig. Install BOP.
3. Pick up 2⅞" od EUE 8rd J-55 6.5#/ft. tubing lined with Duoline fiberglass, 2¼" id w/WL entry guide. Bottom 10 jts. and top joint to be externally coated with epoxy.
4. TIH w/tubing open-ended. Centralize from bottom up jts. 1, 2, 3, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32.
5. Set bottom of tubing @ 8350'. Top of Unitized Formation as defined in Unit Agreement Section 2.11 (Equivalent depth 8362')
6. RU BJ Services. Perform dye-marker injection/circulation test in order to design cement job to assure proper volume of cement, annular pressure losses, placement rate and optimum sequence of placement.
7. RD BOP's
8. Hang tubing with top and bottom-threaded type G adapter flange.
9. Design cement job based on test from item 6 above.
10. Circulate cement in place to fill 2⅞" x 5½" annulus from approximately 8262' to surface and 5½" x 8⅝" annulus from 2042' to surface. Follow cement w/10 bbls. cross link gel for wiper. Cement volume approximately 193 bbls. Pump 10% excess cement.
11. Flush cement to bottom with total 42.4 bbls. (10 bbls. gel + 32.4 bbl. FW). (Tubing set approximately 8350' w/13' zero above THF)
12. Hold pressure on tubing to balance cement plug. Bottom of cement in 2⅞" x 5½" annulus calculated to be at approximately 8262', 100' above top of Unitized Formation.
13. RD WO Rig.
14. WOC 72 hours. Pressure test to 2500#.
15. Run cement bond log w/$1^{11}/_{16}$" Baker Atlas tool from top perf. @ 8459' to surface.
16. RU coil tubing unit.
17. TIH w/max. $1^{13}/_{16}$" BHA to wash sand to PBTD 8605'. Use foam to circulate sand as required.
18. Wash perfs. @ 8459'-8526' with 2000 gal. 15% HCl.
19. Jet hole clean w/N_2.
20. TOOH w/coil tubing. RD.
21. Rig up injection head with swab valve. Run injection tests.
22. RU Cardinal Surveys. Run injection profile log from PBTD to surface.
23. RD. Place on injection pending log analysis.

K. M. Calvert
9/11/2001

Schematic for the

Mewbourne Oil Company

QPBSSU # 13-2
Spud Date 05/05/86



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:
MC_____
DHC_____
NSL_____
NSP_____
SWD_____
WFX X
PMX_____

Gentlemen:

I have examined the application for the:

Newbourne Oil Co QPBSSU 3 #2-N-23-18s-32e 30-025-29679
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

Yours very truly,

Chris Williams

Chris Williams
Supervisor, District 1

New Mexico Oil Conservation Division---Enginnering Bureau
Administrative Application Process Documentation

Date Application Received: 7/31/01

Date of Preliminary Review: 8/8/01
(Note: Must be within 10-days of received date)

Results: _____**Application Complete** __X__**Application Incomplete**

Date Incomplete Letter Sent: 8/8/01

Deadline to Submit Requested Information: 8/15/01 - Rec'd 8/13/01

Phone Call Date: _____
(Note: Only applies if requested data is not submitted within the 7-day deadline)

Phone Log Completed? _____**Yes** _____**No**

Date Application Processed: _____

Date Application Returned: _____
(Note: Only as a last resort & only after repeated attempts by the Division to obtain the necessary information to process the application)