

DATE IN 4/8/08	SUSPENSE 4/23/08	ENGINEER W Jones	LOGGED IN 4/8/08	TYPE SWD	APP NO. PKVR0809955065
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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



## 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.

Sam Brandon

Signature

Area Engineer

Title

4/8/08

Date

Print or Type Name

sbrandon@ypcnm.com  
 e-mail Address

2008 APR 8 PM 3:09

RECEIVED

TACO AUK State #2

RE-ACTIVATED ORDER

MARTIN YATES, III

1912-1985

FRANK W. YATES  
1936-1986

RECEIVED

2008 APR 7 PM 3 41



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

S.P. YATES  
CHAIRMAN EMERITUS

JOHN A. YATES  
CHAIRMAN OF THE BOARD

FRANK YATES, JR.  
PRESIDENT

PEYTON YATES  
DIRECTOR

JOHN A. YATES, JR.  
DIRECTOR

January 22, 2008

New Mexico Energy & Minerals Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504

Dear Mr. Jones:

Enclosed please find a copy of form C-108 (Application for Authority to Inject) on Yates Petroleum Corporation Taco AUK State No. 2 located in Unit A, Section 10-T10S-R34E of Lea County New Mexico.

Should you have any questions, please feel free to contact me at (575) 748-4281.

Sincerely,

Sam Brandon  
Area Engineer

SB

Enclosure

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage  
Application qualifies for administrative approval? X Yes No
- II. OPERATOR:  
ADDRESS: 105 South 4<sup>th</sup> Street, Artesia, New Mexico 88210  
CONTACT PARTY: Sam Brandon PHONE: (505) 748-4281
- 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? Yes X No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- 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 re-injected 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 litho logic 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: Sam Brandon TITLE: Area Engineer  
SIGNATURE: Sam Brandon DATE: 1/22/2008
- \* 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: Submitted 11/1/06  
Approved 11/27/06 Administrative Order SWD-1058

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.

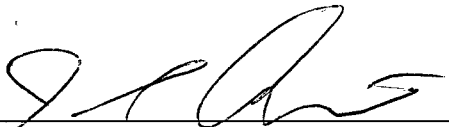
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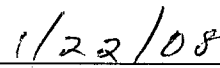
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

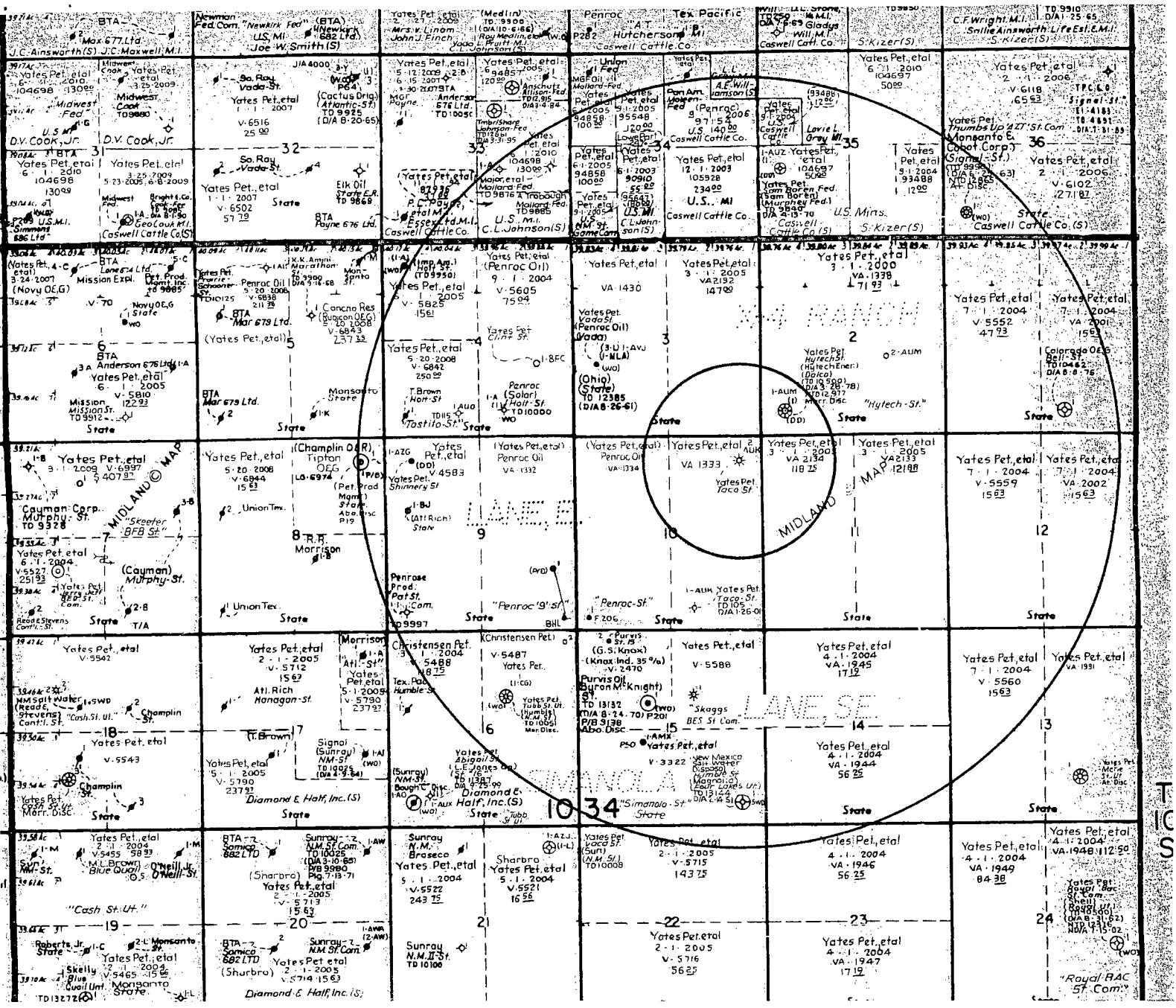
**Attachment G**

C-108 Application for Authorization to Inject  
Yates Petroleum Corporation  
Taco AUK State No. 2  
Unit A, Section 10 T10S-R34E  
Lea County, New Mexico

Available engineering and geological data have been examined and no evidence of open faults of hydrologic connection between the disposal zone and any underground sources of drinking water has been found.

  
\_\_\_\_\_  
John Amiet  
Geologist  
Yates Petroleum Corporation

  
\_\_\_\_\_  
Date



ATTACHMENT B

YATES PETROLEUM CORPORATION

TACO AUK STATE NO. 2

660' FNL & 660' FEL

SEC. 10-10S-34E

LEA COUNTY, NEW MEXICO

**C-108 Application for Authorization to Inject  
Yates Petroleum Corporation  
Taco AUK State No. 2  
Unit A Sec. 10, T10S, R34E  
Lea County, New Mexico**

- I. The purpose of completing this well is to make a disposal well for produced Devonian, Mississippian, Morrow, Atoka and Penn Sands water into the Devonian Dolomite formation.**

**Yates Petroleum Corporation plans to convert this well to a water disposal well into the Devonian Dolomite.**

- II. Operator: Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, NM 88210  
Sam Brandon (505) 748-4281**
- III. Well Data: See Attachment A**
- IV. This is not an expansion of an existing project.**
- V. See attached map, Attachment B.**
- VI. 1 well within the area of review penetrates the proposed injection zone. (See Attachment C)**
- VII. 1. Proposed average daily injection volume approximately 10000 BWPD. Maximum daily injection volume approximately 20000 BWPD.**
- 2. This will be a closed system.**
- 3. Proposed average injection pressure –unknown.  
Proposed maximum injection pressure: 2500 psi.**
- 4. Sources of injected water would be produced water from the Devonian, Mississippian, Morrow, Atoka, Pennsylvanian and Permo-Penn. (Attachment D)**
- VIII. 1. The proposed injection interval is the portion of the Devonian Dolomite formation consisting of porous Dolomite from estimated depths of 12967-13090.**

**Application for Authorization to Inject  
Taco AUKDP State No. 2**

**-2-**

- 2. Possible Fresh water zones overlie the proposed injection formations at depths to approximately 110'. There are no fresh water zones underlying the formation.**
- IX. The proposed disposal interval may be acidized with 15% HCL acid.**
- X. Logs were filed at your office when the well was drilled.**
- XI. There are no windmills within a one-mile radius of the subject location.**
- XII. Yates Petroleum Corporation has examined geologic and engineering data and has found that there is no evidence of faulting in the proposed interval. (Attachment G)**
- XIII. Proof of notice.**
  - A. Certified letters sent to the surface owner and offset operators attached (Attachment E)**
  - B. Copy of legal advertisement attached. (Attachment F)**
- XIV. Certification is signed.**



**Yates Petroleum Corporation  
Taco AUK State No. 2  
A-SEC. 10-10S-34E  
Lea County, New Mexico**

**Attachment A**

III. Well Data

- A.
1. Lease Name/Location  
Taco AUK State No. 2  
A-SEC. 10-10S-34E  
660' FNL & 660' FEL
  2. Casing Strings:
    - a. Present well condition  
11<sup>3</sup>/<sub>4</sub>", 42# @ 400 w/350 sx (circ)  
8<sup>5</sup>/<sub>8</sub>" 32# J55 @ 4141' w/1000 sx (circ.)  
5<sup>1</sup>/<sub>2</sub>", 17#, 20# @ 12987' w/1375 sx (TOC 7206').
    - b. Present Status:  
Non-commercial completion in Atoka at 11336-66'.
  3. Proposed well condition:  
Casing same as above.  
2<sup>7</sup>/<sub>8</sub>" 6.5# N80 plastic-coated injection tubing @ 12920'.
  4. Propose to use Guiberson or Baker plastic-coated or nickel-plated packer set at 12920'.
- B.
1. Injection Formation: Devonian Dolomite.
  2. Injection Interval will be through perforations and open hole from 12967-74', and 12987' to approximately 13090'.
  3. Well was originally drilled as a Devonian Dolomite oil well. Well will be a Devonian Dolomite water disposal well (12967-13090') when work is completed.
  4. Perforations: High porosity dolomite will be drilled and previous perforations 12967-90' will be utilized.
  5. Next higher (shallower) oil or gas zone within 2 miles-Austin Cycle (Mississippian).  
Next lower (deeper) oil or gas zone within 2 miles-None.

# Injection Permit Checklist 2/8/07

SWD Order Number \_\_\_\_\_ Dates: Division Approved \_\_\_\_\_ District Approved \_\_\_\_\_

Well Name/Num: TACO AUK State #2 Date Spudded: \_\_\_\_\_

API Num: (30-) \_\_\_\_\_ County: Lea

Footages 660 FUL/660 FEL Sec 10 Tsp 10S Rge 34E

Operator Name: Yates Petroleum Corporation Contact Sam BRANDON

Operator Address: 105 South Fourth Street, Albem, NM, 88210-2118

Current Status of Well: POOR ATOKA 115% - 66 Planned Work: \_\_\_\_\_ Inj. Tubing Size: 2 7/8 @ 12920

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	11 3/4	400	350	CIRC
Intermediate	8 5/8	4141	1000	CIRC
Production	5 1/2	12987	1375	7206 TOC
Last DV Tool				
Open Hole/Liner				
Plug Back Depth				

Diagrams Included (Y/N): Before Conversion \_\_\_\_\_ After Conversion \_\_\_\_\_

Checks (Y/N): Well File Reviewed \_\_\_\_\_ ELogs in Imaging \_\_\_\_\_

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/Potash			
Capitan Reef			
Cliff House, Etc:			
Formation Above		<u>Clusky Cycle</u>	
Top Inj Interval	<u>12967</u>	<u>Dev (Perf)</u>	
Bottom Inj Interval	<u>13090</u>	<u>Deviation (Open Hole)</u>	
Formation Below			

See SWD-1058  
11/27/06

2593 PSI Max. WHIP  
1320 Open Hole (Y/N)  
Deviated Hole (Y/N)

**Fresh Water:** Depths: 0-150' Wells(Y/N) NO Analysis Included (Y/N): \_\_\_\_\_ Affirmative Statement ☒

**Salt Water Analysis:** Injection Zone (Y/N/NA) \_\_\_\_\_ DispWaters (Y/N/NA) \_\_\_\_\_ Types: DEV/MS/MN/ATOKA/Penn

**Notice:** Newspaper(Y/N) \_\_\_\_\_ Surface Owner SLC Mineral Owner(s) \_\_\_\_\_

Other Affected Parties: \_\_\_\_\_

**AOR/Repairs:** NumActiveWells \_\_\_\_\_ Repairs? \_\_\_\_\_ Producing in Injection Interval in AOR \_\_\_\_\_

AOR Num of P&A Wells \_\_\_\_\_ Repairs? \_\_\_\_\_ Diagrams Included? \_\_\_\_\_ RBDMS Updated (Y/N) \_\_\_\_\_

Well Table Adequate (Y/N) \_\_\_\_\_ AOR STRs: Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ UIC Form Completed (Y/N) \_\_\_\_\_

New AOR Table Filename \_\_\_\_\_ Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ This Form completed \_\_\_\_\_

**Conditions of Approval:** Sec \_\_\_\_\_ Tsp \_\_\_\_\_ Rge \_\_\_\_\_ Data Request Sent \_\_\_\_\_

AOR Required Work: \_\_\_\_\_

Required Work to this Well: \_\_\_\_\_

**RECALLY EXPIRED ORDER REACTIVATED**

Taco AUK State #2  
Form C-108

Tabulation of data on wells within area of review

Well Name	Operator	Type	Spud	Total Depth	Producing Zone	Perforations	Completion Information
Hytech AUM State No. 1 660' FSL & 660' FWL Sec 2-10S-34E	Yates Petroleum Corp	Gas	2/7/1978	12987'	Morrow Woodford Sd Devonian	11706-18 12852-56', 12865-78', CIBP @ 12800' OH 12977'-12987', Retainer @ 12942' Squeezed OH w/ 50 sx.	13 3/8" 48# H40 @ 385'. Cmtid w/ 420 sx. 8 5/8" 24 & 32# K55 @ 4085' Cmtid w/ 150 sx. Repaired csg @ 1063' in 2/200. 5 1/2" 17# HCP110, S95, M95, J55, L80 @ 12977'. Cmtid w/ 350 sx, TOC 10642'