FEB 15 1985

OIL CONSERVATION DIVISION

#### BEFORE THE

#### OIL CONSERVATION DIVISION

#### NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF YATES DRILLING COMPANY FOR AUTHORITY TO INSTALL AND OPERATE A PARTIAL PRESSURE MAINTENANCE PROJECT, CHAVES COUNTY, NEW MEXICO.

Case \_ 8502

### APPLICATION

Comes now, YATES DRILLING COMPANY, and hereby makes application to the New Mexico Oil Conservation Division, for authority to install and operate a partial pressure maintenance project in the Queen Formation, Chaves County, New Mexico by conversion of its Doyal No. 3 well to water injection, and for approval of administrative procedures for expansion of said pressure maintenance project, and in support thereof, would show:

- 1. Applicant seeks permission to institute a partial pressure maintenance project in the southeast Chaves Queen gas area (assoc.) by injection of produced water into the Queen Formation.
- 2. Applicant proposes to convert to water injection its Doyal No. 3 well, located 1,980 feet from the south line and 990 feet from the east line in Section 27, Township 12 South, Range 31 East, N.M.P.M., Chaves County, New Mexico.
- 3. That the wells in the project area are in an advanced state of depletion.

- 4. That the proposed partial pressure maintenance project will result in the recovery of otherwise unrecoverable hydrocarbons, thereby preventing waste, and will not impair the correlative rights of any interest owner in the area.
- 5. That attached hereto and incorporated herein is a copy of OCD Form C-108 with all attachments, which has been mailed to the surface owner and all offset leasehold operators within one-half mile of the well location on February 12, 1985, by certified mail.
- 6. Applicant further requests that an administrative procedure be authorized whereby modification or expansion of this partial pressure maintenance project may be approved without further notice and hearing, including the addition of injection wells and/or producing wells, and the conversion of existing wells to injection at both orthodox and unorthodox locations.

WHEREFORE, applicant respectfully requests this matter be set for hearing before the Division's duly appointed Examiner on February 27, 1985, and that after notice and hearing as required by law, the Division enter its order approving the application and making such other provisions as the Division deems appropriate.

Respectfully submitted,

CAMPBELL & BLACK, P.A.

William F. Carr

P.O. Box 2208

Santa Fe, New Mexico 87501

(505) 988-4421

Attorneys for Yates Drilling Company

APPLICATION	FOR	AUTHORIZATION	ŦO	INJECT	

1.	Purpose: Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? yes Xno
11.	Operator: Yates Drilling Company
	Address: 207 South Fourth Street, Artesia, New Mexico 88210
	Contact party: Tobin L. Rhodes Phone: (505) 746-9889
111.	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
٧.	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:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and</li> <li>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.).</li> </ol>
111.	Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological 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 source known to be immediately underlying the injection interval.
1X.	Describe the proposed stimulation program, if any.
х.	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 source of drinking water.
111,	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: Tobin L. Rhodes Title Engineer
	Signature: Date: February 12, 1985
mdua	he information required under Sections VI, VIII, X, and XI above has been previously itted, it need not be duplicated and resubmitted. Please show the date and circumstance he earlier submittal. Subject well logs were submitted to the NMOCD in Hobbs.

#### 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, hale 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.

- 8. 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 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

# FORM C-108 SUPPLEMENT

## DOYAL #3

I. Purpose:

To convert the temporarily abandoned Doyal #3 well to an injection well for the purpose of partial pressure maintenance in the Queen formation. Initially only produced water from the wells listed in part VII-4 will be injected into this well. At a later date when oil production has significantly lowered reservoir pressure, a full pressure maintenance project will be considered. We respectfully request the ability to handle the transition from partial pressure maintenance to full pressure maintenance administratively.

II. The operator is Yates Drilling Company 207 South Fourth Street Artesia, New Mexico

III. Well Data:

See attached well data sheet.

- IV. This is not an expansion of an existing project.
- V. An ownership map is attached. Well and lease information is posted through 12-31-84. Displayed on this map are one-half mile and two-mile radius circles, which are centered around the Doyal #3 location.
- VI. There are eight wells other than the proposed injection well within the area of review, as indicated by the attached map. All available data concerning the eight wells is included in the attached tabulation and schematic.
- VII. Data on proposed partial pressure maintenance operations:
  - (1) The proposed average and maximum daily rates of fluid injection are 200 barrels per day and 400 barrels per day respectively. The estimated total volume of fluid to be injected is 300,000 barrels.
  - (2) We intend to use a closed system.
  - (3) The proposed average and maximum surface injection pressures are approximately 265 psig and 1500 psig.
  - (4) The source of the injection fluid will be produced water from the following Yates Drilling Company wells which are producing from the Queen formation in the general area of the subject well, indentified as follows:
    - a. Doyal #1
      660' FNL & 990' FEL
      Section 35-T12S-R31E
      See attached tabulation.
    - b. Doyal #2
      500' FSL & 760' FEL
      Section 27-T12S-R31E
      See attached tabulation.
    - c. Doyal #4
      330' FSL & 330' FWL
      Section 26-Tl2S-R31E
      See attached tabulation

- d. Gallagher State #1
  330' FNL & 330' FWL
  Section 35-T12S-R31E
  See attached tabulation
- e. Garner Federal #7
  660' FSL & 1980' FEL
  Section 27-T12S-R31E
  See attached tabulation
- f. Garner Federal #9
   1650' FSL & 2310' FEL
   Section 27-T12S-R31E
   See attached tabulation
- g. Pebble Queen #1 990' FNL & 1980' FWL Section 11-T13S-R31E This well is not within the area of review and therefore not included in the tabulation. This well is approximately 2.5 miles south and .5 miles east of the subject well and is producing from the Queen formation at 3028'-3038'.

The water produced from subsequently drilled wells in this area which produce water from the Queen formation will also utilize the injection well covered by this application.

(5) The fluid injected into the Queen formation in the subject well will be produced water from the Queen formation, thus water compatibility will be assured.

## VIII. Geologic data:

Injection zone: Queen at +1435' to +1429' subsea, very fine grained gray and red sandstone with traces of anhydrite and dolomite. Porosity is intergranular with very little natural secondary porosity.

Analysis of logging, pressure, and production data has resulted in the composition of the attached isopach, structure and pressure maps. The structure map shows the top of the Queen formation to be 1445 feet above sea level in the Doyal #3 well. Production test data has proved the water-oil contact to be between +1445 and +1449 in this reservoir.

The underground source of drinking water in this area is the Ogollala formation of Tertiary age, the base of which is estimated to be 300' in the area of the subject well. This aquifer is behind the surface pipe of the subject well and all other wells within the area of review. The Chinlee formation is also a fresh water aquifer which immediately underlies the Ogollala formation. The base of the Chinlee is estimated to be at approximately 500' in the area of the subject well. The Chinlee aquifer is behind the production casing of the subject well and all producing wells within the area of review.

- IX. No additional stimulation program is planned for the subject well.
- X. LDT-CNL, DLL-RXO logs have been submitted to the NMOCD in Hobbs.
- XI. According to records from the Division II State Engineer Office there are seven water wells within one mile of the subject well. The total depths from four of the seven wells are unknown, however all seven wells are assumed to be producing water from the Ogollala formation. An analysis of water taken from two of the seven wells is attached.

Form C-108 Supplement Doyal #3 Page 3

- XII. Available geological and engineering data have been examined and no evidence of open faults or any other hydrologic connections between the disposal zone and any underground fresh water aquifers have been found.
- XIII. The off-set leasehold operators listed below have been furnished a copy of this application by certified mail.

HNG Oil Company P.O. Box 2267 Midland, Texas 79702

Enserch Exploration, Inc. P.O. Box 4815 Midland, Texas 79701

The Toles Company
P.O. Drawer 1300
Roswell, New Mexico 88201

C.R. Gallagher, Jr., etal 1005 Texas Commerce Bank Building Lubbock, Texas 79401

Rich Partnership 2008 American Bank Building New Orleans, Louisiana 70130

Phillips Oil Company P.O. Box 1967 Houston, Texas 77001

BelNorth Petroleum Corporation One Petroleum Center Building Six InterNorth Suite 201 3300 North A Midland, Texas 79701

The surface owners listed below have been furnished a copy of this application by certified mail.

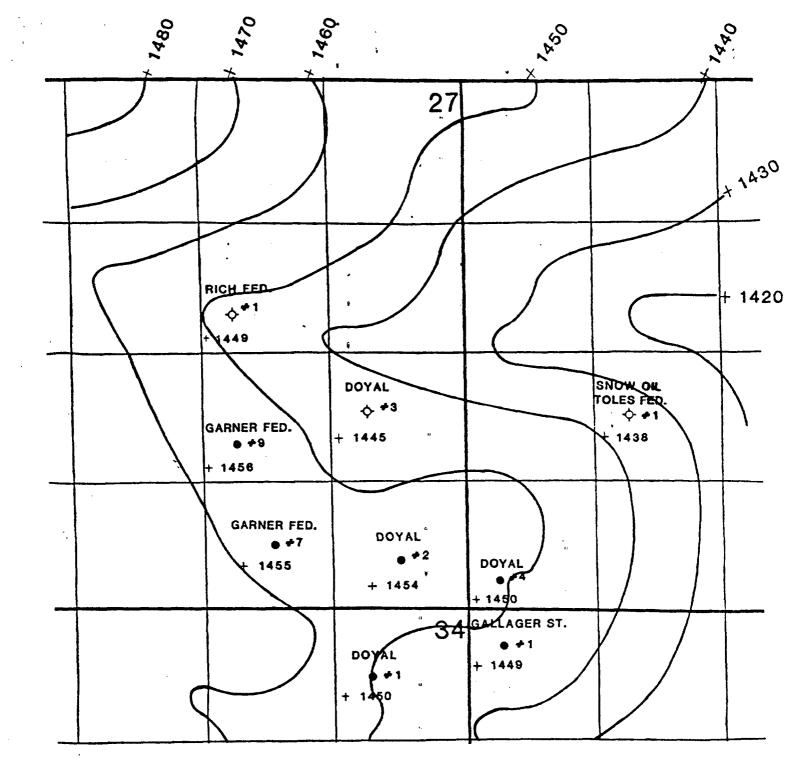
Raymond Spears 307 North 7th Lovington, New Mexico 88260

J.D. Spears P.O. Box 1017 Carlsbad, New Mexico 88220

abolish a bite makes was at all alight es Drilling Company 1980' FSL & 990' FOOTAGE LOCATION 27 SCCTION Schematic Elevation-4429' GL Tubular Data こえれてはいてナルムノナン Surface Casing Size 8 5/8" 24# " Cemented with 260 sx. Surface feet determined by circulation Hole size 12 1/4" Intermediate Casing Cemented with sx. 8 5/8" 24# feet determined by 409'/260 sx. TOC \_\_\_ Hole size TOC 630' Long string Size 5 1/2" 14# " 700 \_\_\_sx. Cemented with というパーンフィンシン feet determined by CBL Hole size \_ 7 7/8" 3099' Total depth Injection interval 2997 feet to (perforated or open-hole, indicate which) Tubing Packer 2945 Perforations 2991'-2997' 5 1/2" 14# 3099'/700 sx. Tubing size 2 3/8" lined with Plastic (material) packer at 2945 plastic coated Baker AD 1 Tension (brand and model) (or describe any other casing-tubing seal). 1. Name of the injection formation \_\_\_\_ Queen 2. Name of Field or Pool (if applicable) Southeast Chaves Queen Gas Area Assoc. 3. Is this a new well drilled for injection?  $\overline{//}$  Yes  $\overline{/X/}$  No If no, for what purpose was the well originally drilled? Oil Production Has the well over 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 other perforations Give the depth to and name of any overlying and/or underlyims oil or gas zones (pools) in this ares. None, known

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# YATES DRILLING CO.

DOYAL #3

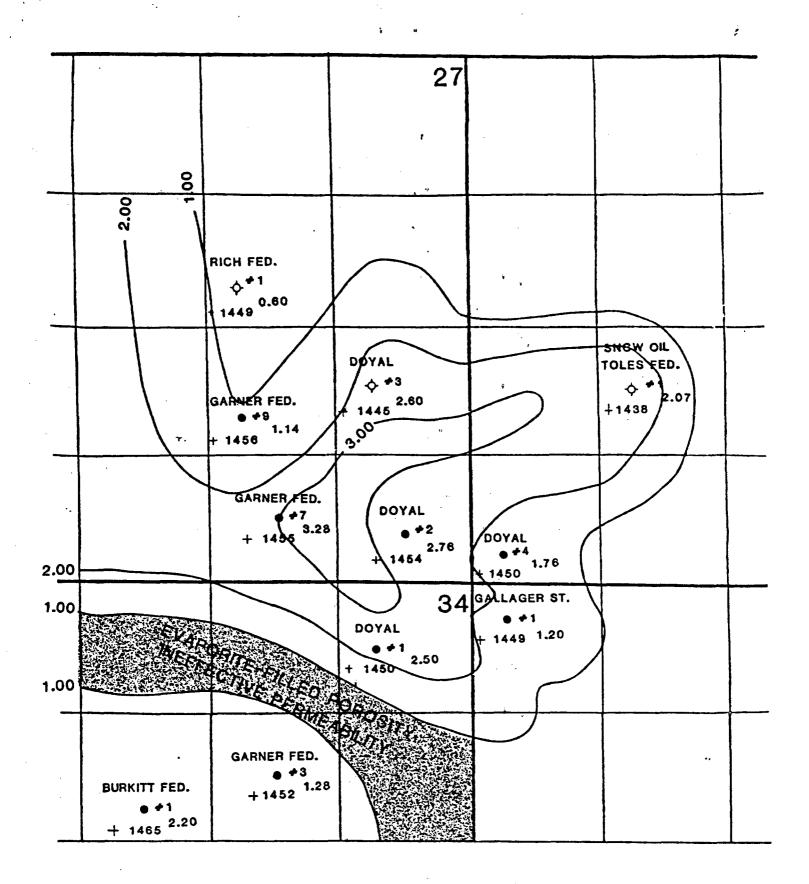
PARTIAL PRESSURE MAINTENANCE PROJECT

Sec. 27 - T12S - R31E

Chaves Co., New Mexico

Contoured on Top of Queen

C.I. = 10' Scale: 1" = 1000'



# YATES DRILLING CO.

DOYAL #3
PARTIAL PRESSURE MAINTENANCE PROJECT
Sec. 27 - T12S - R27E
Chaves Co., New Mexico

Contoured on Queen Porosity Feet

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Scale: 1" = 1000'

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SI 15 HR-22 MIN 902 PSIA @ +1448	
971 PSIA @ +1450 11-9-84	
8-23-84	
GARNER FED.	
43	
BURKITT FED. + 1452 1.28	
+ 1465 2.20 340 PSIA @+1452	

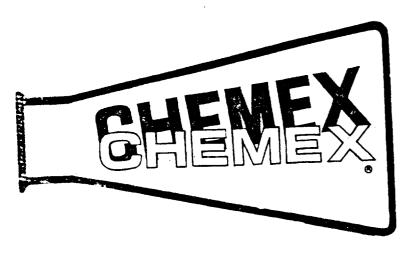
SI 180 HR 250 PSIA @ +1465 1-30-85

# YATES DRILLING COMPANY

DOYAL #3

PARTIAL PRESSURE MAINTENANCE PROJECT
MOST RECENT SIBHP

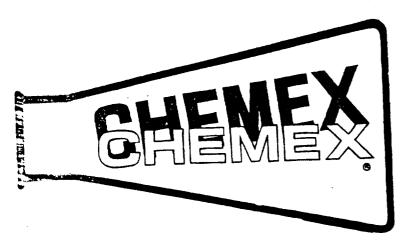
SEC. 27 T12S-R27E
CHAVES CO. NEW MEXICO
SCALE: 1" - 1000'



P. O. Box 423 Artesia, N. M. 88210

# WATER ANALYSIS REPORT

Company Yates Drill	ing Co.			Date <u>2-5-85</u>
Field		9	County Chaves	StateNM
Lease and Well No. Samp	le #1	Prod. For	mation	
Source of Sample wel			•	
Sample of Prod. Water	≚ Inj. Water⊡	Other[]		
Date Collected		Analyst	James B. Ca	ampanella
		R ANALYSIS PAT		
Na* 20 15	10 <b>5</b>	N SYMBOL INDICATES  0		15 2001-
Ca**	_			HCO3
Mg**				SO4=
	1111111	<del>                                      </del>		<del></del>
Fe ***				co3=
Dissolved Solids Constituent Calcium	MG/L(PPM)		EPM	ph <u>6.0</u> Sp. Gravity <u>.</u>
Magnesium				Sp. Gravity
Sodium	nil	- •		
'ron Chloride		-		
Bicarbonate		- -		
Carbonate	nil			1
Sulfate	nil			· e
Total Hardness	nil			,
Total Dissolved Solids	88	<b></b> 		
Hydrogen Sulfide	nil	·		
Oxygen	10+	,		
Remarks:				u e
SEIZNWIANEIZSEIZNEIZ, Se	ection 27-T12S-R3	1E		H <sub>2</sub> S



P. O. Box 423 Artesia, N. M. 88210

# **WATER ANALYSIS REPORT**

Company Yates Dril	ling Co.		Date <u>2-6-85</u>
Field			
Lease and Well No. Same	ole #2 Prod.	Formation	
Source of Sample well	l head		
Sample of Prod. Water	r⊠ Inj. Water□ Other□		
Date Cohected		lyst James B. Campa	anella
- Na <sup>+ 20</sup> 15	WATER ANALYSIS F (NUMBER BESIDE ION SYMBOL INDIC	ATES me/I* SCALE UNIT)	15 20 <sub>C1</sub> -
	<del></del>	++++++++	HCO3-
Mx**   + + + + + + + + + + + + + + + + + +	+++++++++++++++++++++++++++++++++++++++	<del></del>	\$04 <sup>=</sup>
Fe ***			co <sub>3</sub> =
Dissolved Solids Constituent	MG/L (PPM)	EPM	
Calcium	nil nil nil nil	Sp.	ph 6.0 Gravity
Glearbonate	108 nil nil		
Total Hardness Total Dissolved Solids Hydrogen Sulfide Oxygen			
Hemarks: SW\2SW\2SW\2SW\4SE\4,	Section 26-T12S-R31E	•	

LEASE NAME: Doyal	WELL NUMBER: 1
OPERATOR: Yates Drilling Company	
FORMATION: Queen	POOL: S.E. Chaves Queen Area Gas Assoc.
LOCATION: 660'FNL & 990' FEL Section 34-T12S-	R31E
ELEVATION: 4425'	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 409.46'	CEMENT: 250 sx. TOP: Surface
INT. CASING:	CEMENT:sx. TOP:
PROD. CASING: 5 1/2", 14# @ 3098'	CEMENT: 250 sx. TOP: 2200' (Temp. Sur.)
SPUD DATE: 7-31-84	COMP. DATE: 8-25-84
PERFORATIONS: 2982'-2989'	
STIMULATION: 750 gals. of 15% HCL, 15000 gals.	14F-30, 5000 SCF N <sub>2</sub> per barrel.
10900# of 20-40 sand, 4200# 10-20	sand
COMP. TYPE: Oil Well	
CURRENT STATUS: Pumping oil well	
	•
LEASE NAME: Doyal	WELL NUMBER: 2
OPERATOR: Yates Drilling Company	LEASE NUMBER: Fee
FORMATION: Queen	POOL: S.E. Chaves Queen Area Gas Assoc.
LOCATION: 500' FSL & 760' FEL Section 27-T12	S-R31E
ELEVATION: 44271	TOTAL DEPTH: 3100
SURFACE CASING: 8 5/8", 24# @ 411'	
	CEMENT: 275 sx. TOP: surface
INT. CASING:	CEMENT: 275 sx. TOP: surface  CEMENT: - sx. TOP: -
INT. CASING: - ' PROD. CASING: 5 1/2", 14# @ 3090'	
INT. CASING:	CEMENT: - sx. TOP: -
PROD. CASING: 5 1/2", 14# @ 3090'	CEMENT: - sx. TOP: -  CEMENT: 400 sx. TOP: 1810 (Temp.Sur.)
PROD. CASING: 5 1/2", 14# @ 3090'  SPUD DATE: 9-7-84	CEMENT: - sx. TOP: -  CEMENT: 400 sx. TOP: 1810' (Temp.Sur.)  COMP. DATE: 9-20-84
PROD. CASING: 5 1/2", 14# @ 3090'  SPUD DATE: 9-7-84  PERFORATIONS: 2981'-2987'	CEMENT: - sx. TOP: -  CEMENT: 400 sx. TOP: 1810' (Temp.Sur.)  COMP. DATE: 9-20-84
PROD. CASING: 5 1/2", 14# @ 3090'  SPUD DATE: 9-7-84  PERFORATIONS: 2981'-2987'  STIMULATION: 750 gals. 15% HCL, 15000 gal WF-	CEMENT: - sx. TOP: -  CEMENT: 400 sx. TOP: 1810' (Temp.Sur.)  COMP. DATE: 9-20-84
PROD. CASING: 5 1/2", 14# @ 3090'  SPUD DATE: 9-7-84  PERFORATIONS: 2981'-2987'  STIMULATION: 750 gals. 15% HCL, 15000 gal WF-	CEMENT: - sx. TOP: -  CEMENT: 400 sx. TOP: 1810' (Temp.Sur.)  COMP. DATE: 9-20-84

OPERATOR: Yates Drilling Company	LEASE NUMBER: Fee
FORMATION: Queen	POOL: S.E. Chaves Queen Gas Area Assoc.
LOCATION: 1980' FSL & 990' FEL Section 27-T12:	S-R31E
ELEVATION: 4429	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 409'	CEMENT: 260 sx. TOP: Surface
INT. CASING:	CEMENT: - sx. TOP: -
PROD. CASING: 5 1/2", 14# @ 3099'	CEMENT: 850 sx. TOP: 630' (CBL)
SPUD DATE: 9-20-84	COMP. DATE:
PERFORATIONS: 2991'-2997' .	
STIMULATION: 750 gals. 15% HCL acid, 15000 ga	ls WF-30, 25% CO <sub>2</sub>
20000# 20-40 sand, 10000# 10-20	sand
· · · · · · · · · · · · · · · · · · ·	
COMP. TYPE: Not completed	
CURRENT STATUS: Temporarily Abandoned	
LEASE NAME: Doyal .	WELL NUMBER: 4
OPERATOR: Yates Drilling Company	LEASE NUMBER: Fee
FORMATION: Queen	POOL: S.E. Chaves Queen Gas Area Assoc.
LOCATION: 330' FSL & 330' FWL Section 26-T12	S-R31E
ELEVATION: 4424.5'	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 400'	CEMENT: 250 sx. TOP: Surface
INT. CASING:	CEMENT: _ sx. TOP:
PROD. CASING: 5 1/2", 14# @ 3088"	CEMENT: 975 sx. TOP: 310' (Temp Sur.)
SPUD DATE: 11-18-84	COMP. DATE: 1-24-85
PERFORATIONS: 2982'-2985'	,
STIMULATION: 750 gals. 15% HCL, 15000 gals.	WF-30, 22 Tons CO,
12000 20-40 sand and 8500# 12-2	0 sand
COMP. TYPE: 0il Well	
CURRENT STATUS: Pumping oil well	

WELL NUMBER: 3

LEASE NAME: Doya1

EASE NAME: Gallagher State	WELL NUMBER: 1
OPERATOR: Yates Drilling Company	LEASE NUMBER: B-10418
FORMATION: Queen	POOL: S.E. Chaves Queen Gas Area Assoc.
LOCATION: 330' FNL & 330' FWL Section 35-7	F12S-R31E
ELEVATION: 4424.5'	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 433'	
INT. CASING:	
PROD. CASING: 5 1/2", 14# @ 3084'	· · · ·
SPID DATE: 10-28-84	
PERFORATIONS: 2982'-2987'	
STIMULATION: 650 gals. 15% HCL acid, 15000	
12000# 20-40 sand, 10750# 10-	
COMP. TYPE: Oil Well	
LEASE NAME: Garner Federal	
OPERATOR: Yates Drilling Company	
	POOL: S.E. Chaves Queen Gas Area Assoc.
LOCATION: 660' FSL & 1980' FEL Section 27-	
ELEVATION: 4433.4°	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 424'	CEMENT: 250 sx. TOP: Surface
INT. CASING: -	CEMENT: - sx. TOP: -
PROD. CASING: 5 1/2", 14# @ 3098.54"	CEMENT: 270' sx. TOP: 1900 (Temp. Sur.
SPUD DATE: 10-14-84	COMP. DATE: 10-30-84
PERFORATIONS: 2987'-2993'	
STIMULATION: 750 gals 15% HCL, 15000 gals.	• • • • • • • • • • • • • • • • • • • •
13000# 20-40 sand, 9000# 10-2	20 sand.
	*
COMP. TYPE: Oil well	
CURRENT STATUS: Pumping oil well	

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LEASE NAME: Garner Federal	WELL NUMBER: , 9
OPERATOR: Yates Drilling Company	LEASE NUMBER: NM-015807
FORMATION: Queen	POOL: S.E. Chaves Queen Gas Area Assoc.
LOCATION: 1650' FSL & 2310' FEL Section 27-T12	
ELEVATION: 4434.5'	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8", 24# @ 428'	CEMENT: 250 sx. TOP: Surface
INT. CASING:	CEMENT: - sx. TOP: -
PROD. CASING: 5 1/2", 14# @ 3098'	CEMENT: 320 sx. TOP: 1820' (Temp. Sur.)
•	COMP. DATE: 11-30-84
PERFORATIONS: 2985'-2995'	
STIMULATION: 750 gals. 15% HCL, ball sealers,	15000 gals. WF-30, 16 Tons CO <sub>2</sub> ,
18000# 20-40 sand & 12500# 10-20	sand
	· .
COMP. TYPE: Oil Well	
CURRENT STATUS: Pumping oil well	
	¢ .
•	•
·	
LEASE NAME: Rich Federal .	WELL NUMBER: 1
OPERATOR: Yates Drilling Company	
FORMATION: Oueen	
LOCATION: 2310' FNI. & 2310' FEL Section 27-T1	
ELEVATION: 4435.6'	TOTAL DEPTH: 3100'
SURFACE CASING: 8 5/8" 24# @ 412'	CEMENT: 250 sx. TOP: Surface
INT. CASING:	CEMENT: - sx. TOP: -
PROD. CASING:	CEMENT: - sx. TOP: -
SPUD DATE: 11-30-84	COMP. DATE:
PERFORATIONS: None	•
STIMULATION: None	
	9

CURRENT STATUS: P&A. See attached schematic

OPERATOR: Snow 011 Company LEASE NUMBER: NM-31113  FORMATION: Queen POOL: S. E. Chaves Queen Gas Area Assoc LOCATION:  ELEVATION: TOTAL DEPTH: SX. TOP:  INT. CASING: CEMENT: SX. TOP:  PROD. CASING: CEMENT: SX. TOP:  SPUD DATE: COMP. DATE:  PERFORATIONS:  STIMULATION:  COMP. TYPE: No information available for public record as of 1-31-85.  CURRENT STATUS:  LEASE NAME: WELL NUMBER:  FORMATION: POQL:  LOCATION:  ELEVATION: POQL:  LOCATION:  ELEVATION: SX. TOP:  SURFACE CASING: CEMENT: SX. TOP:  SURFACE CASING: CEMENT: SX. TOP:  SURFACE CASING: CEMENT: SX. TOP:	LEASE NAME:	Toles Federal	WELL NUMBER: 1
FORMATION: Queen POOL: S.E. Chaves Queen Gas Area Assoc LOCATION:  ELEVATION: TOTAL DEPTH: sx. TOP:  ELEVATION: SYL TOP: SX. TOP:  INT. CASING: CEMENT: SX. TOP:  PPROD. CASING: CEMENT: SX. TOP:  SPUD DATE: COMP. DATE:  COMP. TYPE: No information available for public record as of 1-31-85.  CURRENT STATUS:  LEASE NAME: WELL NUMBER:  FORMATION: POQL:  LOCATION: FLEVATION: TOTAL DEPTH:  SURFACE CASING: CEMENT: SX. TOP:  ELEVATION: SYL TOP:  ELEVATION: SYL TOP:  PROD. CASING: CEMENT: SX. TOP:  COMP. TYPE: COMP. DATE:  PERFORATION:  SURFACE CASING: CEMENT: SX. TOP:  COMP. CASING: CEMENT: SX. TOP:  PROD. CASING: CEMENT: SX. TOP:  PROD. CASING: CEMENT: SX. TOP:  PERFORATIONS:  STIMULATION:	-		•
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RICH FEDERAL NO. 1 2310' FNL & 2310' FEL Section 27-T12S-R31E Chaves County, N.M.

# Elevation-4435.6' GL.

