

DATE IN 4-8-05	SUSPENSE 4/25/05	ENGINEER Jones	LOGGED IN 4-11-05	TYPE SWD	PW 053044914
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NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



RECEIVED

APR 08 2005

OIL CONSERVATION
DIVISION

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.

Jerry W. Sherrell
Print or Type Name

Jerry W. Sherrell
Signature

Production Clerk
Title

4/5/2005
Date

jerrys@mackenergycorp.com
e-mail Address

Zero AOR wells
Check logs of 11 wells
30-015-30874
where is DV Tool
Get Depth?
Get water analysis of C1560 (Sub B)
GBG SA PDK

ASKed For Data 4/15/05

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Mack Energy Corporation

ADDRESS: P.O. Box 960, Artesia, NM 88211-0960

CONTACT PARTY: Jerry W. Sherrell

PHONE: (505)748-1288

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 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.).

*V111. 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 freshwater from two or more freshwater 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: Mack C. Chase

TITLE: President

SIGNATURE: Mack C. Chase

DATE: 4/4/2005

* 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: _____

INJECTION WELL DATA SHEET

OPERATOR:

Mack Energy Corporation

WELL NAME & NUMBER:

Chase 21 State Com #1

WELL LOCATION: 660 FSL & 810 FWL

M

FOOTAGE LOCATION

UNIT LETTER

21

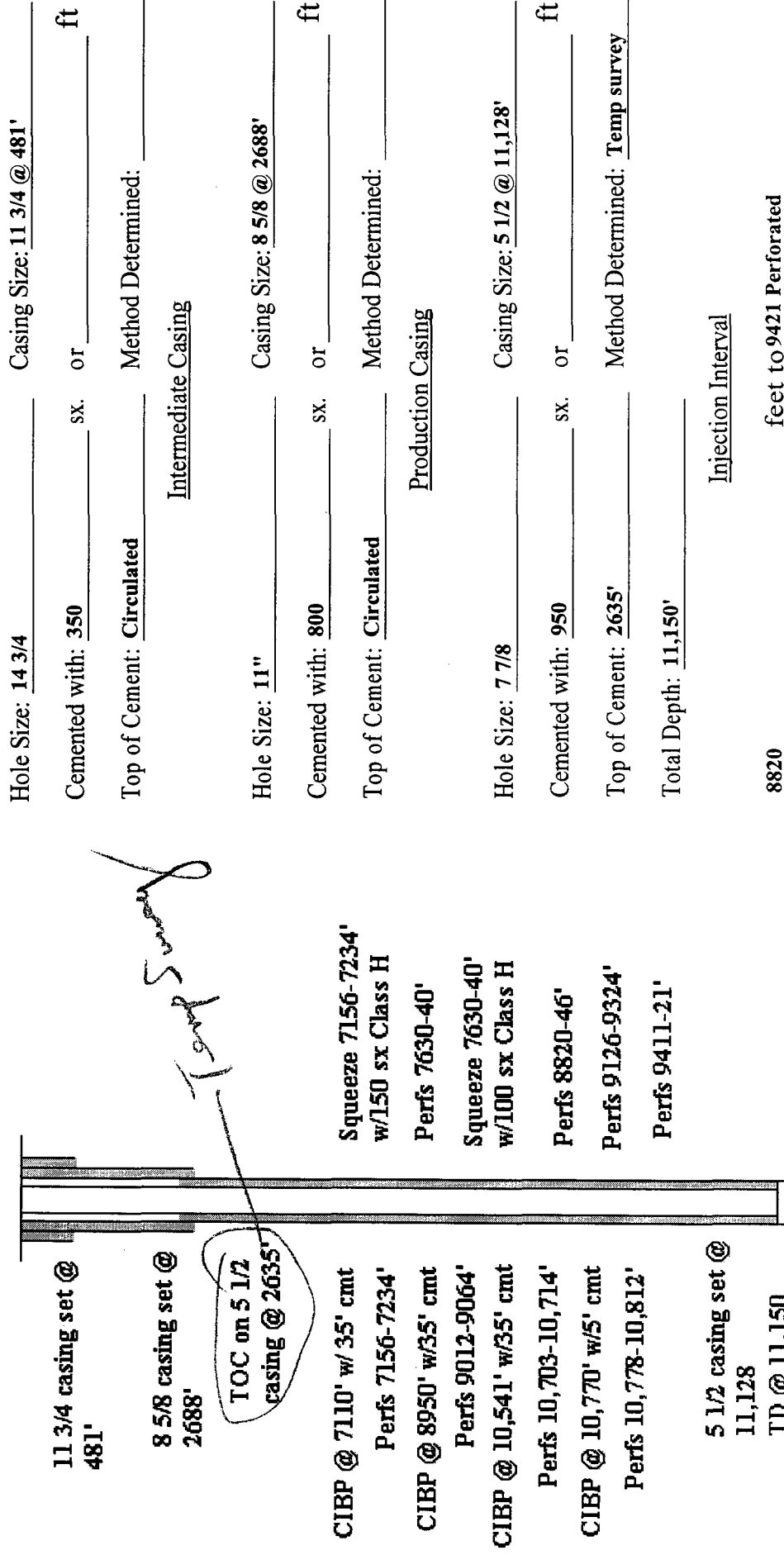
SECTION

17S

TOWNSHIP

29E

RANGE

WELL CONSTRUCTION DATASurface CasingWELLBORE SCHEMATIC

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: Plastic CoatedType of Packer: Haliburton Trump PackerPacker Setting Depth: 8720'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data1. Is this a new well drilled for injection? ☐ Yes ☒ NoIf no, for what purpose was the well originally drilled? Morrow Gas Well2. Name of the Injection Formation: Cisco3. Name of Field or Pool (if applicable): Empire4. 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. See Schematic5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Underlying-Atoka, Overlying-Wolfcamp

AREA OF REVIEW WELL DATA

[illegible]

Submit 3 Copies to Appropriate District

Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-103

Revised March 25, 1999

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, NM 87505

WELL API NO. ✓

30-015-30874

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

B-9563-8

7. Lease Name Or Unit Agreement Name:

Chase "21" State Com

8. Well No.

1

9. Pool Name or Wildcat

Undesignated Empire (Morrow) So.

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. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

EOG Resources, Inc.

3. Address of Operator

P.O. Box 2267, Midland, TX 79702

4. Well Location

Unit Letter M 660 feet from the South line and 810 feet from the West line

Section 2 Township 17-S Range 29-E NMPM County Eddy

10. Elevation (Show whether DR, RKB, RT, GR, etc.)

11. 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 COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☒

OTHER: ☐

12. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

2/20/2000 Ran 246 Jts, 5 1/2", 17 #ft., N/80 Production Csg to 11,128'. 8 Tubulators - 20' spacing 10,849' - 10,694', 7 centralizers on each collar 7,089' - 7,315', 1 centralizer placed above and below DV tool. Set @ 7,990' - 7,988'. Cemented in (2) Stages:

1st Stage - 1st Slurry 240 sx Premium Plus, + 3% econolite, 5 #/sx CLCL2, 1/4 #/sx flocele, .2% HR-5; Weight 11.4 #/gal., 2.99 cu. ft./sx. 2nd Slurry - 240 sx Premium 50/50 POZ, 1/4 #/sx D-AIR, .6% halad 447, .5% KCL, .2% HR-5, Weight 14.2 #/gal., 1.24 cu. ft./sx.

2nd Stage - 1st Slurry, 710 sx, Premium Plus, + 3% econolite, 5 #/sx CCL2, 1/4 #/sx flocele; Weight 11.4 #/gal., 2.99 cu ft./sx. 2nd Slurry - 100 sxs Premium Neat; Weight 15.6 #/gal., 1.18 cu ft./sx. TOC @ 2,635' by Temperature Survey.

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

SIGNATURE Mike Francis TITLE Agent DATE 3-17-00

Type or print name Mike Francis Telephone No. 915 / 686-3714

(This space for State use)

APPROVED BY Jim W. Brown TITLE District Supervisor DATE MAR 24 2000

Conditions of approval, if any:

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-105
Revised 1-1-89

WELL API NO.

30-015-30874

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

B-9563-8

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well:
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐

b. Type of Completion:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESER. ☐

2. Name of Operator

EOG Resources, Inc.

3. Address of Operator

P. O. Box 2267, Midland, TX 79702

4. Well Location

Unit Letter M: 660 Feet From The South Line and 810 Feet From The West Line

Section 21 Township 17S Range 29E NMPM Eddy County

10. Date Spudded

1-23-00

11. Date T.D. Reached

2-15-00

12. Date Compl. (Ready to Prod.)

3-5-00

13. Elevations (DF & RKB, RT, GR, etc.)

14. Elev. Casinghead

15. Total Depth

11,150

16. Plug Back T.D.

11,056

17. If Multiple Compl. How Many Zones?

18. Intervals Drilled By

Rotary Tools

Cable Tools

19. Producing Interval(s), of this completion - Top, Bottom, Name

10,703-10,714 Morrow

20. Was Directional Survey Made

21. Type Electric and Other Logs Run

GR-Density; GR Neutron; Digital Sonic

22. Was Well Cored

No

23. CASING RECORD (Report all strings set in well)

Post 5-5-00

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4"	42#/ft.	481'	14-3/4"	350 sxs C1 "C"	circ.
8-5/8"	32#/ft.	2,688'	11"	800 sxs C1 "C"	circ to surf
5-1/2"	17#/ft.	11,128'	7-7/8"	950 sxs C1 "C"	TOC 2635'

24. LINER RECORD

25. TUBING RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-7/8"	10,720	10,642

26. Perforation record (interval, size, and number)

Lower Morrow perms 10,778-86, 8' net pay, 54 holes

10,806-12 6' net pay, 42 holes

Middle Morrow perms 10,703-14, 11' net pay, 67 holes

27. ACID, SHOT, FRACTURE CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL

AMOUNT AND KIND MATERIAL USED

10,703-14

23m667 70% CO2 Foam +1 ppg

holes

20/40 interprop

28. PRODUCTION

Date First Production

3-5-00

Production Method (Flowing, gas lift, pumping - Size and type pump)

Flowing

Well Status (Prod. or Shut-in)

SI

Date of Test

3-5-00

Hours Tested

24

Choke Size

64/64

Prod'n For Test Period

Oil - Bbl.

0

Gas - MCF

32

Water - Bbl.

0

Gas - Oil Ratio

Flow Tubing Press.

10

Casing Pressure

0

Calculated 24-Hour Rate

Oil - Bbl.

Gas - MCF

Water - Bbl.

Oil Gravity - API - (Corr.)

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Vented

Test Witnessed By

30. List Attachments

Logs, DS

31. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Starla Russell

Printed Name

Starla Russell

Title

Regulatory Analyst

Date 4-25-00

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 25 through 29 shall be reported for each zone. The form is to be filed in triplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn 9932	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka 10200	T. Pictured Cliffs	T. Perm. "D"
T. Yates	T. Miss 10886	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen 1738	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg 2114	T. Montoya	T. Mancos	T. McCracken
T. San Andres 2403	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta 3869	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinbry	T. Gr. Wash	T. Morrison	T.
T. Tubb 5445	T. Delaware Sand	T. Todilto	T.
T. Drinkard	T. Bone Springs	T. Entrada	T.
T. Abo 6062	T.	T. Wingate	T.
T. Wolfcamp 7523	T.	T. Chinle	T.
T. Penn	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....
No. 2, from.....to.....
No. 3, from.....to.....
No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet

No. 2, from to feet

No. 3, from to feet

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness in Feet	Lithology

From	To	Thickness in Feet	Lithology

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
811 South First, Artesia, NM 87210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised March 25, 1999

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL API NO. 30-015-30874
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. B-9563-8
7. Lease Name or Unit Agreement Name: Chase "21" State Com
8. Well No. 1
9. Pool name or Wildcat Undesignated Empire (Morrow) South
10. Elevation (Show whether DR, RKB, RT, GR, etc.) GR-3609

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. Type of Well:
Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Enron Oil & Gas Company

3. Address of Operator
P.O. Box 2267, Midland, TX 79702

4. Well Location
Unit Letter M : 660 feet from the South line and 810 feet from the West line
Section 21 Township 17S Range 29E NMPM Eddy County

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/> OTHER: WOC less than 18 hrs <input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>

12. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Proposed casing and cement program. ^{*} Unchanged as to casing and cement.

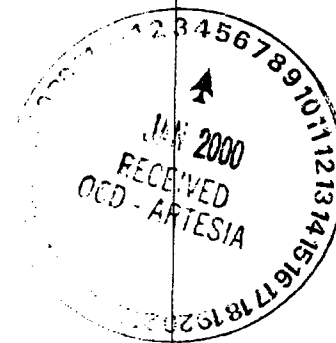
Request change of 18 hrs waiting on cement to:

Surface Casing: WOC 14 hrs

Intermediate Casing: WOC 12 hrs

Cement and additives previously approved.

* Operator to bring cement on
production string a 500' above shoe
on 8 5/8" casing
B6A



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

SIGNATURE Mike Francis TITLE Agent

DATE 1/4/00

Type or print name Mike Francis

Telephone No. 915/686-3714

(This space for State use) ORIGINAL SIGNED BY TIM W. GUM

APPROVED BY DISTRICT II SUPERVISOR TITLE B6A

DATE /-/-cc

Conditions of approval, if any: * Follow option 2 of Rule 107

Submit 3 Copies to Appropriate District

Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, NM 87505

Form C-103

Revised March 25, 1999

WELL API NO.

30-015-30874

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

B-9563-8

7. Lease Name Or Unit Agreement Name:

Chase "21" State Com

8. Well No.

1

9. Pool Name or Wildcat

Undesignated Empire (Morrow) South

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. Type of Well:

Oil Well ☒

Gas Well ☐

Other ☐

2. Name of Operator

EOG Resources, Inc.

3. Address of Operator

P.O. Box 2267, Midland, TX 79702

4. Well Location

Unit Letter M : 660 feet from the South line and 810 feet from the West line

Section 21 Township 17S Range 29E NMPM County Eddy

10. Elevation (Show whether DR, RKB, RT, GR, etc.)

11. 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 COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPN ☐

PLUG AND ☐

ABANDONMENT

CASING TEST AND CEMENT JOB ☒

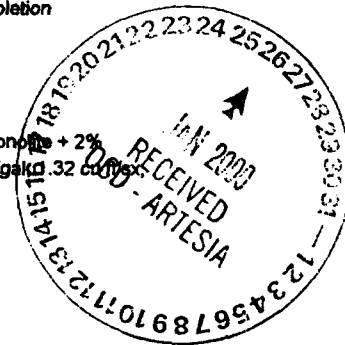
OTHER: ☐

Spud Well

12. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

1/23/00 - Spud well @ 8:00 a.m.

1/24/00 - Ran 11 jts, 42#/ft, H-40 casing to 481'. Cemented as follows: 1st Slurry 200 sx Premium Plus cement with 3% Econo + 2% CaCl2 + 1/4#/sx Flocele, weight 11.4#/gal, 2.88 cu ft/sx, 102.5 bbls. 2nd Slurry 150 sx Premium Plus cement, weight 14.8#/gal, 32 cu ft/sx, 33.2 bbls. Circulated 70 sx to pits. WOC 21-3/4 hrs. Tested casing to 600 psi - OK.



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

SIGNATURE Mike Francis

TITLE Agent

DATE 1/25/00

Type or print name Mike Francis

Telephone No. (915)686-3714

(This space for State use)

APPROVED BY Jim W. Evans

TITLE District Supervisor

DATE 2-4-00

Conditions of approval, None

Submit 3 Copies to Appropriate District

State of New Mexico
Energy, Minerals & Natural Resources

Form C-103

Revised March 25, 1999

Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 South First, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, NM 87505

WELL API NO.

30-015-30874

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

B-9563-8

7. Lease Name Or Unit Agreement Name:

Chase "21" State Com

8. Well No.

1

9. Pool Name or Wildcat

Undesignated Empire (Morrow) South

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. Type of Well:

Oil Well ☐ Gas Well ☒ Other ☐

2. Name of Operator

EOG Resources, Inc.

3. Address of Operator

P.O. Box 2287, Midland, TX 79702

4. Well Location

Unit Letter M : 660 feet from the South line and 810 feet from the West line

Section 21 Township 17S Range 29E NMPM County Eddy

10. Elevation (Show whether DR, RKB, RT, GR, etc.)

11. 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 COMPLETION ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: WOC less than 18 hrs ☒

12. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion

1/28/00 - Ran 60 jts 3-5/8", 32#, J-55 casing. Casing set at 2,688'. Cemented 8-5/8" casing as follows: Option 2 Rule 107G

1) Total sx used 80X; total volume 1160.4 cu ft. two (2) slurries run, Slurry #1 - 650 sx (1,476 cu ft) Interfill "C" with additive (1/4# sx Flocele); wt 11.9#/gal, 2.46 cu ft/sx. Slurry #2 - 150 sx (201 cu ft) Premium Plus with additive (2% CaCl2) wt 14.8#/gal, 1.34 cu ft/sx

2) Approximate temperature of cement when mixed 80 deg F.

3) Estimated minimum formation temperature in zone of interest - 93.76 deg F.

4) Estimate of cement strength at time of casing test - 1300 psi.

5) Actual time cement in place prior to starting test - 17-1/2 hrs.

Circulated 23 sx of cement to reserve pit.

Casing pressure tested to 2000# for 30 min. No pressure drop.

Typical performance data for cement used and temperature gradient map previously supplied.

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

SIGNATURE Mike Francis TITLE Agent DATE 2/4/00

Type or print name Mike Francis Telephone No. (915)686-3714
(This space for State use)

APPROVED BY Jim W. [Signature] DATE 2-14-00

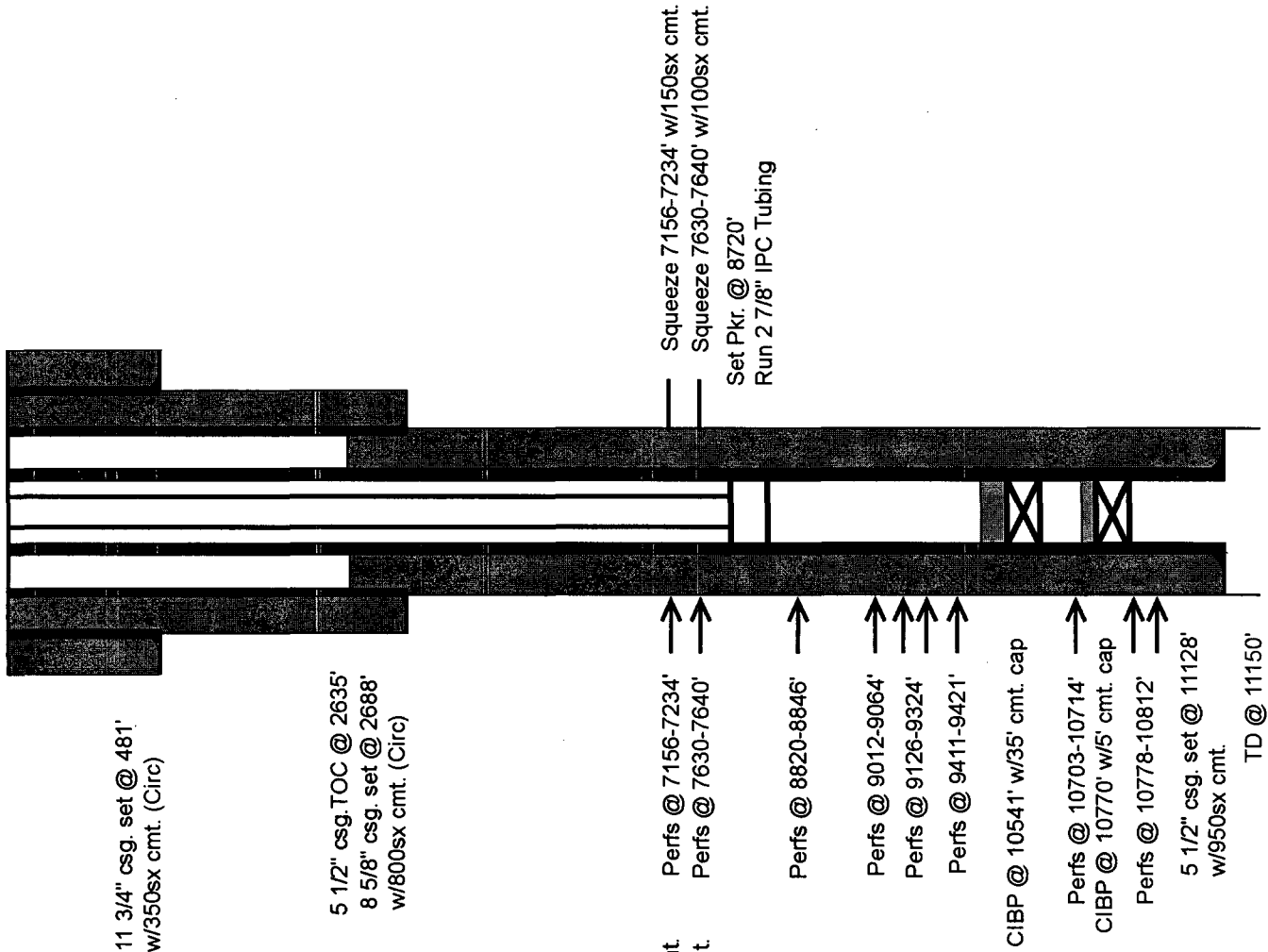
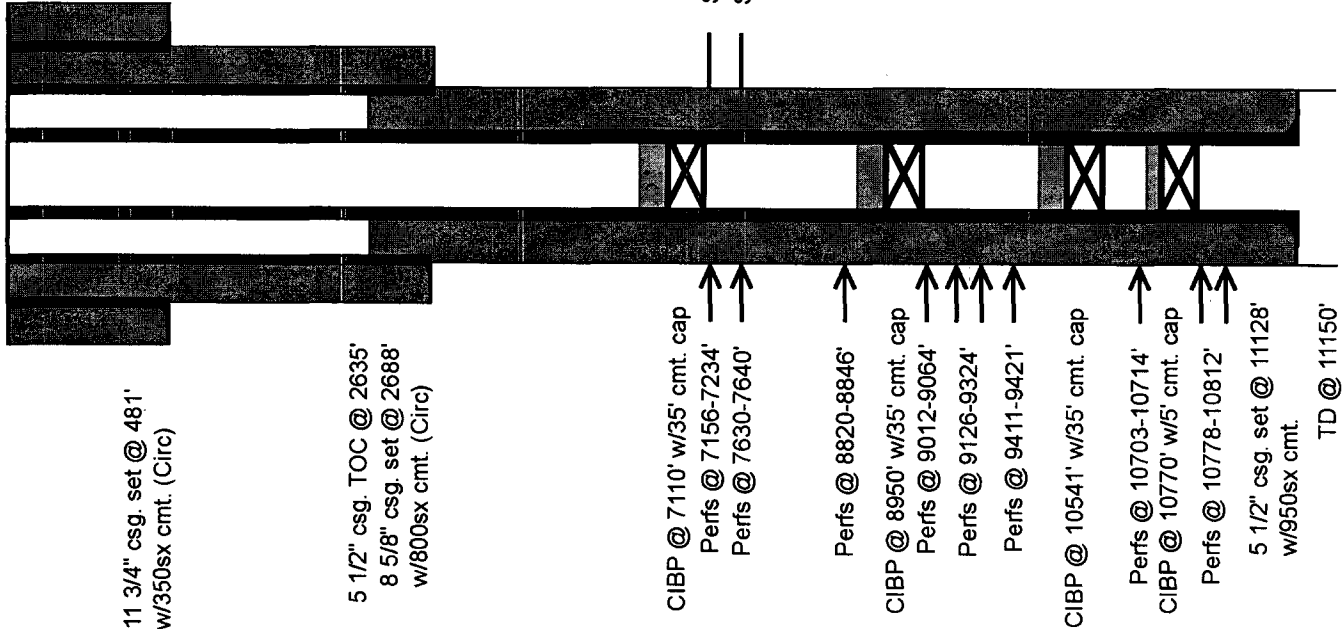
Conditions of approval, if any:

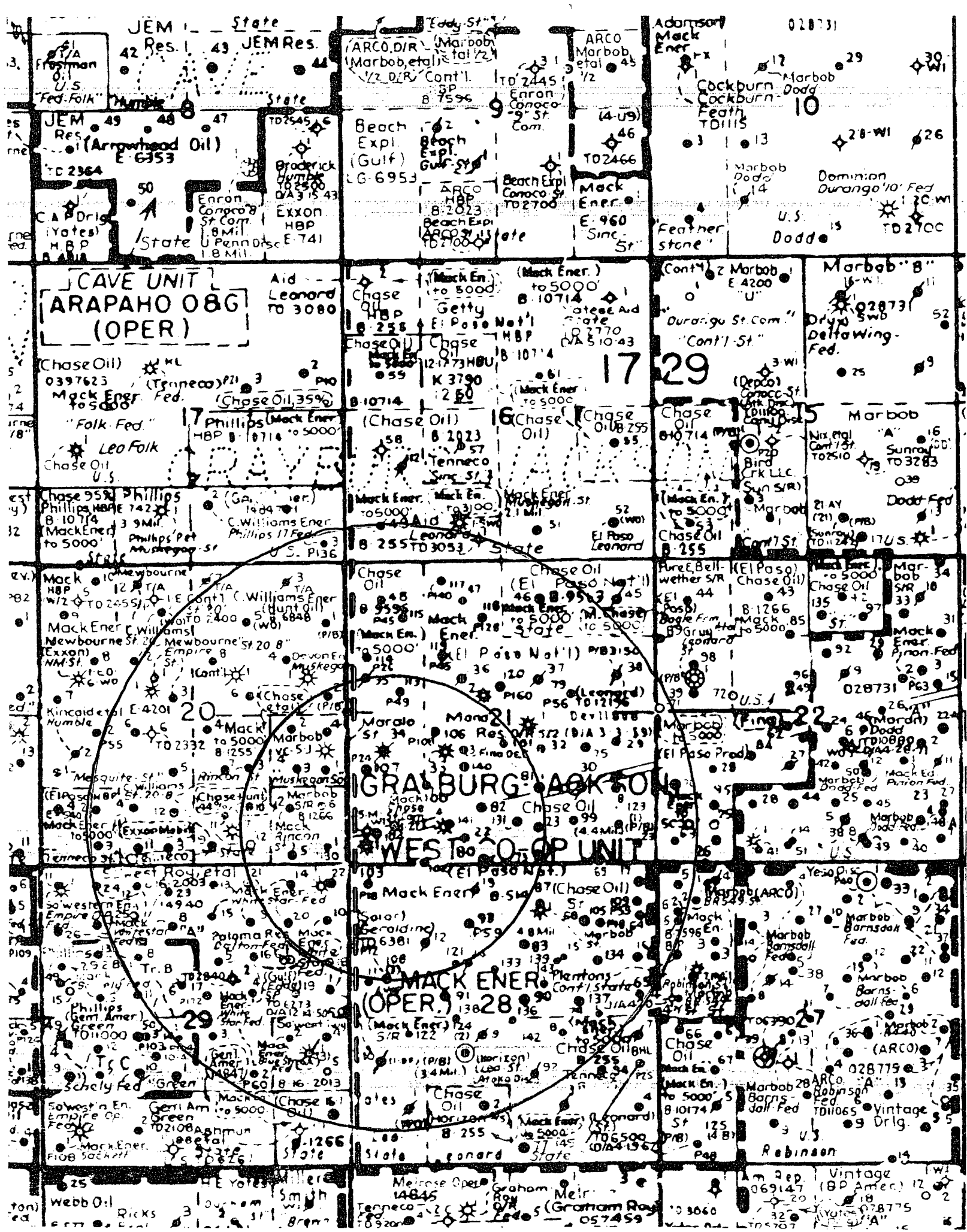
Chase 21 State Com #1

SH: 660' FSL & 810' FWL BH: 660' FSL & 810' FWL
Sec. 21-T17S-R29E

Before Conversion

After Conversion





VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;
Respectively, 2000 BWPD and 3000 BWPD
2. The system is closed or open;
Closed
3. Proposed average and maximum injection pressure;
100-300#
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water;
We will be re-injecting produced water X
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;
N/A X

VIII. GEOLOGICAL DATA

1. Lithologic Detail; **Carbonate**
2. Geological Name; **Upper Penn**
3. Thickness; **601'**
4. Depth; **8820-9421'**

IX. PROPOSED STIMULATION PROGRAM

1. To be treated with 1000 gallons 15% acid

X. LOGS AND TEST DATA

1. Well data has been filed with the OCD

XI. ANALYSIS OF FRESHWATER WELLS

1. N/A

Additional Information

Waters injected: Grayburg, San Andres, Paddock

XII. AFFIRMATIVE STATEMENT

RE: Chase 21 State Com #1

We have examined the available geologic and engineering data and find no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water.

Mack Energy Corporation

Date: 4-5-2005

Mack C. Chase
Mack C Chase, President

4/5/05

Legal Notice

Mack Energy Corporation, has filed an Application with the New Mexico Oil Conservation Division seeking authorization to inject produced salt water in the Chase 21 State Com #1, Section 20, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico. The water will be injected into the Cisco formation at a disposal depth of 8820-9421'. Water will be injected at a maximum surface pressure of 300 pounds and a maximum injection rate of 3000 BWPD. Any interested party with questions or comments may contact Jerry W. Sherrell at Mack Energy Corporation, Post Office Box 960, Artesia, New Mexico 88211-0960 or call (505) 748-1288. Objections to this application or requests for hearing must be filed with the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, within fifteen days of the date of the publication of this notice. Published in the Artesia Daily Press, Artesia, New Mexico.

Grayburg - San Andres
Water Analysis Report by Baker Petrolite

MACK ENERGY

G. J. WEST
WELL #145
WELLHEAD

Account Manager
RANDY ALLISON

Summary		Analysis of Sample 130731 @ 75°F					
Sampling Date	6/15/00	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date	6/30/00	Chloride	151850	4283	Sodium	61204	2662
Analyst	JOANNA RAGAN	Bicarbonate	78.0	1.28	Magnesium	10308	848
		Carbonate	0.00	0.00	Calcium	15546	776
TDS (mg/l or g/m ³)	240561	Sulfate	907	18.9	Strontium	60.0	1.37
Density (g/cm ³ or tonne/m ³)	1.162	Phosphate	N/A	N/A	Barium	0.70	0.01
Anion/Cation Ratio	1.00	Borate	N/A	N/A	Iron	42.0	1.50
		Silicate	N/A	N/A	Potassium	566	14.5
Carbon Dioxide					Aluminum	N/A	N/A
Oxygen					Chromium	N/A	N/A
					Copper	N/A	N/A
		pH at time of sampling		4.60	Lead	N/A	N/A
		pH at time of analysis			Manganese	N/A	N/A
		pH used in Calculations		4.60	Nickel	N/A	N/A

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000bbl										
Temp.	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ · 2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press.
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0.	-1.61		0.00	1.81	0.04	34.1	-0.80		0.36	0.20	11.0
100	0.	-1.52		-0.07		0.04	33.2	-0.81		0.17	0.12	13.2
120	0.	-1.42		-0.12		0.06	52.2	-0.82		0.01	0.01	15.4
140	0.	-1.32		-0.17		0.11	85.9	-0.81		-0.14		17.4

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

North Permian Basin Region
P.O. Box 740
Sundown, TX 79372-0740
(806) 229-8121
Lab Team Leader - Sheila Hernandez
(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	MACK ENERGY INCORPORATED	Sales RDT:	33512
Region:	PERMIAN BASIN	Account Manager:	WAYNE PETERSON (505) 910-9389
Area:	ARTESIA, NM	Sample #:	135092
Lease/Platform:	JENKINS 'B' LEASE	Analysis ID #:	28098
Entity (or well #):	14	Analysis Cost	\$40.00
Formation:	UNKNOWN <i>Loco Hills Paddock</i>		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 135092 @ 75 °F					
Sampling Date:	8/16/02	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	8/22/02	Chloride:	126680.0	3572.62	Sodium:	79767.1	3489.67
Analyst:	SHEILA HERNANDEZ	Bicarbonate:	497.8	8.16	Magnesium:	732.0	60.22
TDS (mg/l or g/m3):	214123	Carbonate:	0.0	0.	Calcium:	2336.0	118.87
Density (g/cm3, tonne/m3):	1.14	Sulfate	3696.0	76.95	Strontium:	37.0	0.84
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.1	0.
		Borate:			Iron:	26.0	0.94
		Silicate:			Potassium:	371.0	9.49
					Aluminum:		
Carbon Dioxide:	90 PPM	Hydrogen Sulfide:		14 PPM	Chromium:		
Oxygen:	0 PPM	pH at time of sampling:		7.8	Copper:		
Comments:		pH at time of analysis:			Lead:		
		pH used in Calculation:		7.8	Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.83	52.95	-0.10	0.00	-0.07	0.00	-0.28	0.00	0.27	0.00	0.06
100	0	1.48	56.65	-0.19	0.00	-0.09	0.00	-0.32	0.00	0.06	0.00	0.13
120	0	1.36	60.64	-0.26	0.00	-0.08	0.00	-0.34	0.00	-0.13	0.00	0.24
140	0	1.27	64.91	-0.33	0.00	-0.06	0.00	-0.35	0.00	-0.30	0.00	0.39

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

Jones, William V., EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Thursday, October 27, 2005 1:00 PM
To: Jones, William V., EMNRD
Subject: RE: Chase 21 State Com #1 SWD Application
Attachments: Chase21 SLO.tif; Paddock wtr.tif; grbg sa wtr.tif

Will, I hope this answers the questions.

1. DV Tool set @ 7990', cement was circulated below and above.
2. Glorietta-3867, Tubb-6066, Abo-6283, Wolfcamp-7246, Cisco-8472, Strawn-9932, Atoka-10166, Mssp-10886.
3. See attachment.
4. Cisco in this area is a disposal zone. When tested in this well, well went on a vacuum. Water saturation is 100%.
5. N/A.
6. See attachment.
7. Devon & Conoco, yes they were notified.

-----Original Message-----

From: Jones, William V [mailto:WVJones@state.nm.us]
Sent: Friday, April 29, 2005 9:42 AM
To: Jerry Sherrell
Subject: RE: Chase 21 State Com #1 SWD Application

Jerry:
 Hope you got these questions?

Have a nice weekend,

Will Jones

-----Original Message-----

From: Jones, William V
Sent: Monday, April 11, 2005 5:23 PM
To: Jerry Sherrell (E-mail)
Subject: Chase 21 State Com #1 SWD Application

Hello Jerry:

I received your application today to inject and have the following questions and requests:

- 1) Where is the DV tool in the 5-1/2 inch casing and was cement circulated below the DV tool?
- 2) Please have your geologist send the formation tops of formations in this wellbore - especially surrounding the injection interval.
- 3) Please send water analysis of local Grayburg, San Andres, and Paddock wells.
- 4) Please have your geologist talk about the productivity of the Cisco i.e. was it tested here, what is the typical water saturation.
- 5) If you have a water analysis in the Cisco in a nearby well, please send it.
- 6) Who is the surface owner? were they notified?
- 7) I found no wellbores within 1/2 mile at this depth. Who has the lease on the minerals in the Cisco within 1/2 mile? Were they notified?

Thank You,

William V. Jones

Engineering Bureau

Oil Conservation Division

Santa Fe

10/27/2005

Jones, William V., EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]
Sent: Thursday, October 27, 2005 3:13 PM
To: Jones, William V., EMNRD
Subject: RE: Chase 21 State Com #1 SWD Application
Attachments: Chase21 conoco.tif; Chase21 devon.tif

Will, I intended to attach these earlier.

Thanks, Jerry

-----Original Message-----

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Thursday, October 27, 2005 2:36 PM
To: Jerry Sherrell
Subject: RE: Chase 21 State Com #1 SWD Application

Jerry:
Sounds like you want me to re-activate this application?

Looks like all the questions are answered except for the notice issue:

I only saw notice to: Marbob, Clayton Williams, and the State Land Office

Please ask your landman to look at the 1/2 mile radius:

- 1) Make sure notice was sent to all the Cisco operators, and
- 2) if a tract does not have an operator, to all lessees, and
- 3) if a tract does not have a lessee, to all mineral interest owner

Thanks,

William V. Jones Engineering Bureau Oil Conservation Division Santa Fe

From: Jerry Sherrell [mailto:jerrys@mackenergycorp.com]
Sent: Thursday, October 27, 2005 1:00 PM
To: Jones, William V., EMNRD
Subject: RE: Chase 21 State Com #1 SWD Application

Will, I hope this answers the questions.

1. DV Tool set @ 7990', cement was circulated below and above.
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3. See attachment.
4. Cisco in this area is a disposal zone. When tested in this well, well went on a vacuum. Water saturation is 100%.
5. N/A.
6. See attachment.
7. Devon & Conoco, yes they were notified.

-----Original Message-----

10/27/2005

Cancelled 6/9/05

Jones, William V

From: Jones, William V
Sent: Thursday, June 09, 2005 5:15 PM
To: 'Jerry Sherrell (E-mail)'
Subject: RE: Chase 21 State Com #1 SWD Application

Jerry:

The questions below are still valid - but the notice issues will likely delay things more than the others.

- 1) I believe the surface owner is the State Land Office - would you please send proof of notice? ✓
- 2) Since no-one is an "operator" of the Cisco within 1/2 mile, please notify the companies holding leases in the Cisco within 1/2 mile
 (If the Cisco is not leased, you must notice all the mineral interest owners). ✓
- 3) the water analysis (Cisco, Grayburg, San Andres, and Paddock) ✓
- 4) the formation tops in the lower Permian and upper Penn (spanning above and below the Cisco). ✓
- 5) what is the typical water saturation in the Cisco here? is it productive anywhere near this area? ✓

Let me know,

Will Jones

From: Jones, William V
Sent: Friday, April 29, 2005 9:42 AM
To: 'Jerry Sherrell (E-mail)'
Subject: RE: Chase 21 State Com #1 SWD Application

Jerry:

Hope you got these questions?

Have a nice weekend,

Will Jones

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I received your application today to inject and have the following questions and requests:

- 1) Where is the DV tool in the 5-1/2 inch casing and was cement circulated below the DV tool? ✓
- 2) Please have your geologist send the formation tops of formations in this wellbore - especially surrounding the injection interval. ✓
- 3) Please send water analysis of local Grayburg, San Andres, and Paddock wells. ✓
- 4) Please have your geologist talk about the productivity of the Cisco i.e. was it tested here, what is the typical water saturation. ✓

6/9/2005

Jones, William V

From: Jones, William V
Sent: Friday, April 29, 2005 9:42 AM
To: 'Jerry Sherrell (E-mail)'
Subject: RE: Chase 21 State Com #1 SWD Application

Jerry:
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Have a nice weekend,

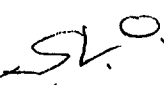

Will Jones

-----Original Message-----

From: Jones, William V
Sent: Monday, April 11, 2005 5:23 PM
To: Jerry Sherrell (E-mail)
Subject: Chase 21 State Com #1 SWD Application

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I received your application today to inject and have the following questions and requests:

- 7990
- 1) Where is the DV tool in the 5-1/2 inch casing and was cement circulated below the DV tool? 
 - 2) Please have your geologist send the formation tops of formations in this wellbore - especially surrounding the injection interval.
 - 3) Please send water analysis of local Grayburg, San Andres, and Paddock wells.
 - 4) Please have your geologist talk about the productivity of the Cisco i.e. was it tested here, what is the typical water saturation.
 - 5) If you have a water analysis in the Cisco in a nearby well, please send it.
 - 6) Who is the surface owner? were they notified?
 - 7) I found no wellbores within 1/2 mile at this depth. Who has the lease on the minerals in the Cisco within 1/2 mile? Were they notified? 

Thank You,

William V. Jones

Engineering Bureau

Oil Conservation Division

Santa Fe

4/29/2005



P.O. Box 960
Artesia, NM 88211-0960
Office (505) 748-1288
Fax (505) 746-9539

April 5, 2005

VIA CERTIFIED MAIL 7004 1160 0006 1810 8801
RETURN RECEIPT REQUESTED

Clayton Williams Energy, Inc.
6 Desta Dr. Ste. 3000
Midland, TX 79705-5520

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to convert the Chase 21 State Com #1, Sec. 21 T17S R29E well into produced water disposal well.

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Enclosures



P.O. Box 960
Artesia, NM 88211-0960
Office (505) 748-1288
Fax (505) 746-9539

April 5, 2005

VIA CERTIFIED MAIL 7004 1160 0006 1810 8818
RETURN RECEIPT REQUESTED

Marbob Energy Corporation
P.O. Box 227
Artesia, NM 88211-0227

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to convert the Chase 21 State Com #1, Sec. 21 T17S R29E well into produced water disposal well

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Enclosures



P.O. Box 2197
Artesia, NM 88211-0960
Office (505) 748-1288
Fax (505) 746-9539

April 19, 2005

VIA CERTIFIED MAIL 7004 2510 0004 3033 0075
RETURN RECEIPT REQUESTED

ConocoPhillips
P.O. Box 2197
Houston, TX 77252
Attn: Linda Hicks

Ladies and Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to convert the Chase 21 State Com #1, Sec. 21 T17S R29E well into produced water disposal well.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Enclosures



P.O. Box 966
Artesia, NM 88211-0966
Office (505) 748-1288
Fax (505) 746-9539

April 19, 2005

VIA CERTIFIED MAIL 7004 2510 0004 3033 0082
RETURN RECEIPT REQUESTED

Devon Louisiana Corporation
20 North Broadway #1500
Oklahoma City, Oklahoma 73102

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to convert the Chase 21 State Com #1, Sec. 21 T17S R29E well into produced water disposal well.

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Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Enclosures



P.O. Box 960
Artesia, NM 88211-0960
Office (505) 748-1288
Fax (505) 746-9539

October 27, 2005

VIA CERTIFIED MAIL 7004 2510 0004 3033 0105
RETURN RECEIPT REQUESTED

Patrick H. Lyons
State of New Mexico
Commissioner of Public Lands
P.O. Box 1148
Santa Fe, NM 87504-1148

Gentlemen:

Enclosed for your review is a copy of Mack Energy Corporation's application for approval to convert the Chase 21 State Com #1, Sec. 21 T17S R29E well into produced water disposal well

This letter will serve as a notice that Mack Energy Corporation has requested administrative approval from the NMOCD to convert this well into a water disposal well. If you have any objections, you must notify the Oil Conservation Division in Santa Fe in writing within fifteen (15) days of receiving this letter.

Sincerely,

MACK ENERGY CORPORATION

Jerry W. Sherrell
Production Clerk

JWS\

Enclosures