



marbob
energy corporation

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OIL CON DIV
61 JUL 23 PM 1:16

July 20, 2001

New Mexico Energy, Minerals &
Natural Resources Department
Oil Conservation Division
1220 South Saint Francis Street
Santa Fe, New Mexico 87504

Attention: Engineering Bureau

RE: Durango "15" State Com #1
660' FNL – 660' FWL, Section 15-17S-29E
Eddy County, New Mexico

(30-015-31557)

Gentlemen:

Enclosed herewith, is the Marbob Energy Corporation Application for Authorization to Inject concerning the above referenced well. Application is made pursuant to Rule 701C of the Division Rules and Regulations for Administrative Approval for Disposal into the Cisco formation. The waters to be disposed of will consist of produced waters from the Seven Rivers, Grayburg, San Andres, and Yeso/Paddock formations. There were no fresh water wells found within one mile of the proposed salt water disposal well. Publication of Marbob's intent to utilize the subject well for water disposal has been made in the Artesia Daily press, and copies of this Application have been mailed to each leasehold operator and surface owner within one half mile of the well via certified mail.

Marbob Energy Corporation respectfully request your approval of the before mentioned Application at the expiration of the fifteen day waiting period. If you find further information is needed, please contact Brian Collins in our office.

Sincerely,

Dean Chumbley
Land Department

DC/mm
Enclosures

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVER SHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
[DD-Directional Drilling] [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 - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [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

[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] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Brian Collins
 Print or Type Name

Brian Collins
 Signature

Engr
 Title

20 July 01
 Date

**BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION
APPLICATION FOR ADMINISTRATIVE APPROVAL
MARBOB ENERGY CORPORATION
APPLICATION FOR AUTHORIZATION TO INJECT**

DURANGO 15 STATE NO. 1

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APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? Yes No
- II. OPERATOR: Marbob Energy Corporation
ADDRESS: P. O. Box 227, Artesia, NM 88211-0227
CONTACT PARTY: Brian Collins PHONE: 505-748-3303
- 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.).
- *VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Brian Collins TITLE: Engineer

SIGNATURE: *Brian Collins* DATE: 20 July 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:
Delta Wing Federal #1 SWD Administrative Order SWD-643 17 September 1996

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 SHEETOPERATOR: Marbob Energy CorporationWELL NAME & NUMBER: Durango 15 State #1WELL LOCATION: 660' FNL - 660' FWL 0 15 17S 29E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICSee Attached
Wellbore SchematicWELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2" Casing Size: 13 3/8"
Cemented with: 375 sx. or - ft³
Top of Cement: Surface Method Determined: Circ 18 sx.Intermediate CasingHole Size: 12 1/4" Casing Size: 9 5/8"
Cemented with: 1050 sx. or - ft³
Top of Cement: Surface Method Determined: Circ 100 sx.Production CasingHole Size: 7 7/8" Casing Size: 5 1/2"
Cemented with: 1685 sx. or - ft³
Top of Cement: 1800' Method Determined: Cmt. Bond Log
Total Depth: 10900'Injection Interval8750' feet to 8900'(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2 7/8" Lining Material: PlasticType of Packer: Nickel plated double-grip retrievablePacker Setting Depth: 8700'Other Type of Tubing/Casing Seal (if applicable): N/A**Additional Data**

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

If no, for what purpose was the well originally drilled? Oil and Gas

Exploration

2. Name of the Injection Formation: Cisco

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

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Chester 10722-46' CIBP + 35' cmt @ 10700'; Morrow 10602-51' CIBP + 35' cmt @ 10550'; Atoika 10286-91' CIBP + 35' cmt @ 10200'; Canyon 9225-47' CIBP + 35' cmt @ 9180'.

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

Underlying: Morrow

Overlying: Yeso, San Andres

APPLICATION FOR AUTHORIZATION TO INJECT MARBOB ENERGY CORPORATION

DURANGO 15 STATE NO. 1

VII: Injection Well Data

1. Proposed Rate of Injection:
 1. Average daily rate of injection: 5,000 barrels
 2. Maximum daily rate of injection: 15,000 barrels
2. Type of System:

System will be closed
3. Anticipated Injection Pressure:

Proposed maximum injection pressure = 1750 psi
(0.2 psi/ft. x 8750' ft. = 1750 psi)
4. Source of Injection Water:

Refer to Administrative Order SWD-643
5. Disposal Zone Water Analysis:

Refer to Administrative Order SWD-643 dated 17 September 1996

VIII Geologic Data

Refer to Administrative Order SWD-643

IX Proposed Conversions / Stimulation Program

Will probably acidize Cisco interval 8750 – 8900' with 20,000 to 30,000 gallons 20% HCl acid.

X Logging Data

A copy of the porosity log across the injection interval is attached

XI Fresh Water Analysis

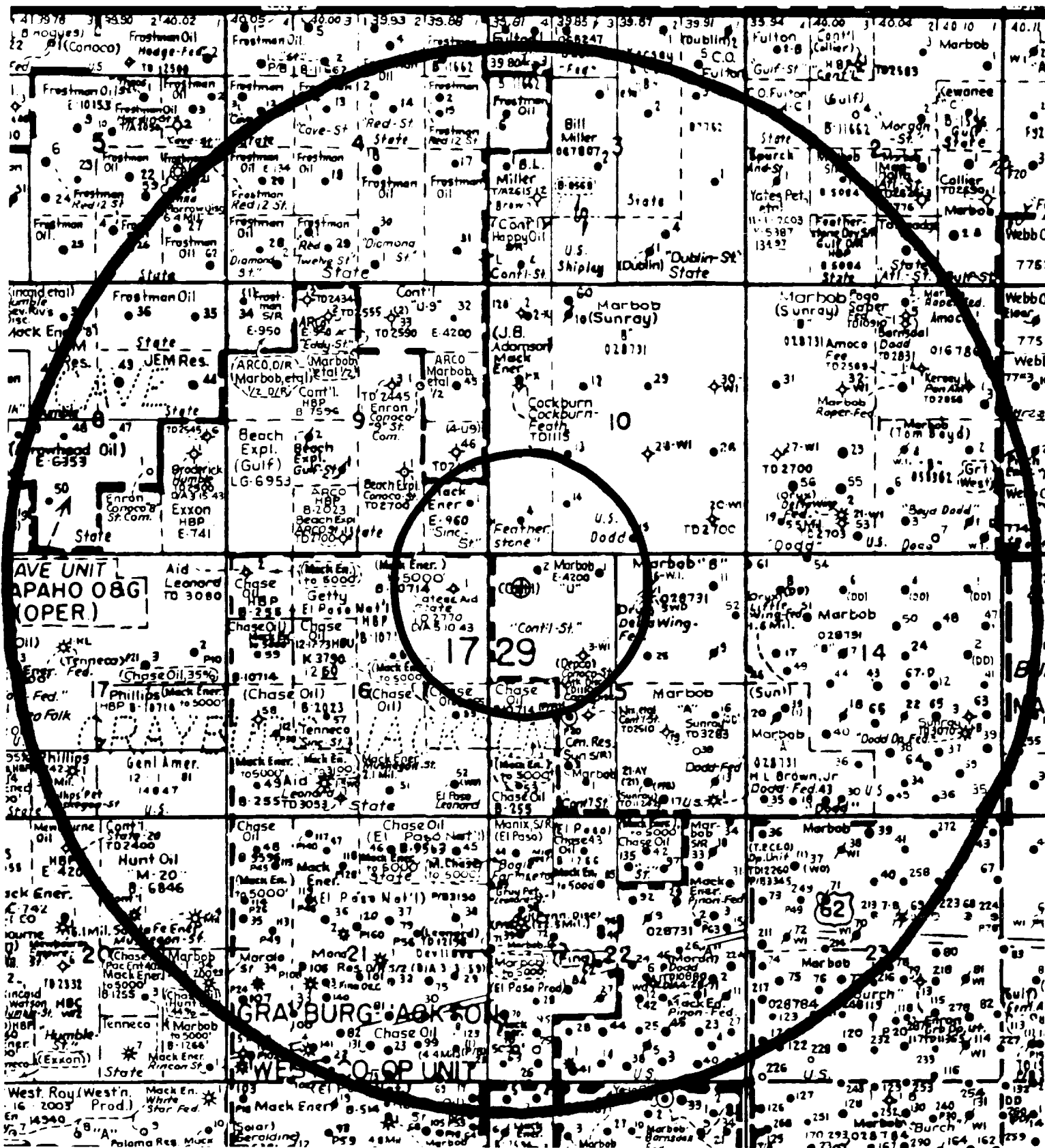
Administrative Order SWD-643

XII Open Faults

There is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII Proof of Notice

Proof of notice is attached



Area of Review Plat
for

Durango "15" State Com No. 1

660' FNL - 660' FWL

Section 15, Township 17 South, Range 29 East
Eddy County, New Mexico

Well: Durango 15 St. 1

Zero: 17.5' AGL

Location: 660' FNL, 660' FWL

D-15-17s-29e

Eddy, NM

KB : 3581.5'

GL : 3564'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 1/2"	48	H40	STC	440'
9 5/8"	36	J55	LTC	2684'
5 1/2	17	P110	LTC	1650'
	17	N80	LTC	9850'
	17	P110	LTC	10900'

17 1/2

12-382	100 SHEETS EYE-EASE	5 SQUARE
12-383	100 SHEETS EYE-EASE	5 SQUARE
12-392	100 RECYCLED WHITE	5 SQUARE
12-399	100 RECYCLED WHITE	5 SQUARE

THE NATIONAL BRAND

12 1/4"

7 7/8"

Before Conversion
→ SWD

DVE 5670'

8750-70' (4, pf)

Cisco

CIBP @ 9180'
+ 35' cont

9225-9247' (2 spF)

Canyon

CIBPe 10200'
+ 35' cont.

10286-91' (43pF)

Atoka

CIBPE 10550'
+35' out

10602-04', 10608'-10' (4,9 PF)
10646-51'

Morrow

CIBPe 10700'
+35 cont.

10722-10746' (4 spF) Chester

Chester

$5\frac{1}{2}'' @ 10900'$

1st: $300s \times 50/50 \text{ Po}_2 + 550s \times \text{PVL}$
2nd: $775s \times 50/50 \text{ Po}_2 + 60s \times \text{C}$

Circ 20 bb/s ant.

10900'

- Sketch Not To Scale -

kbcollins/

Well: Durango 15 St. 1

Zero: 17.5' AGL

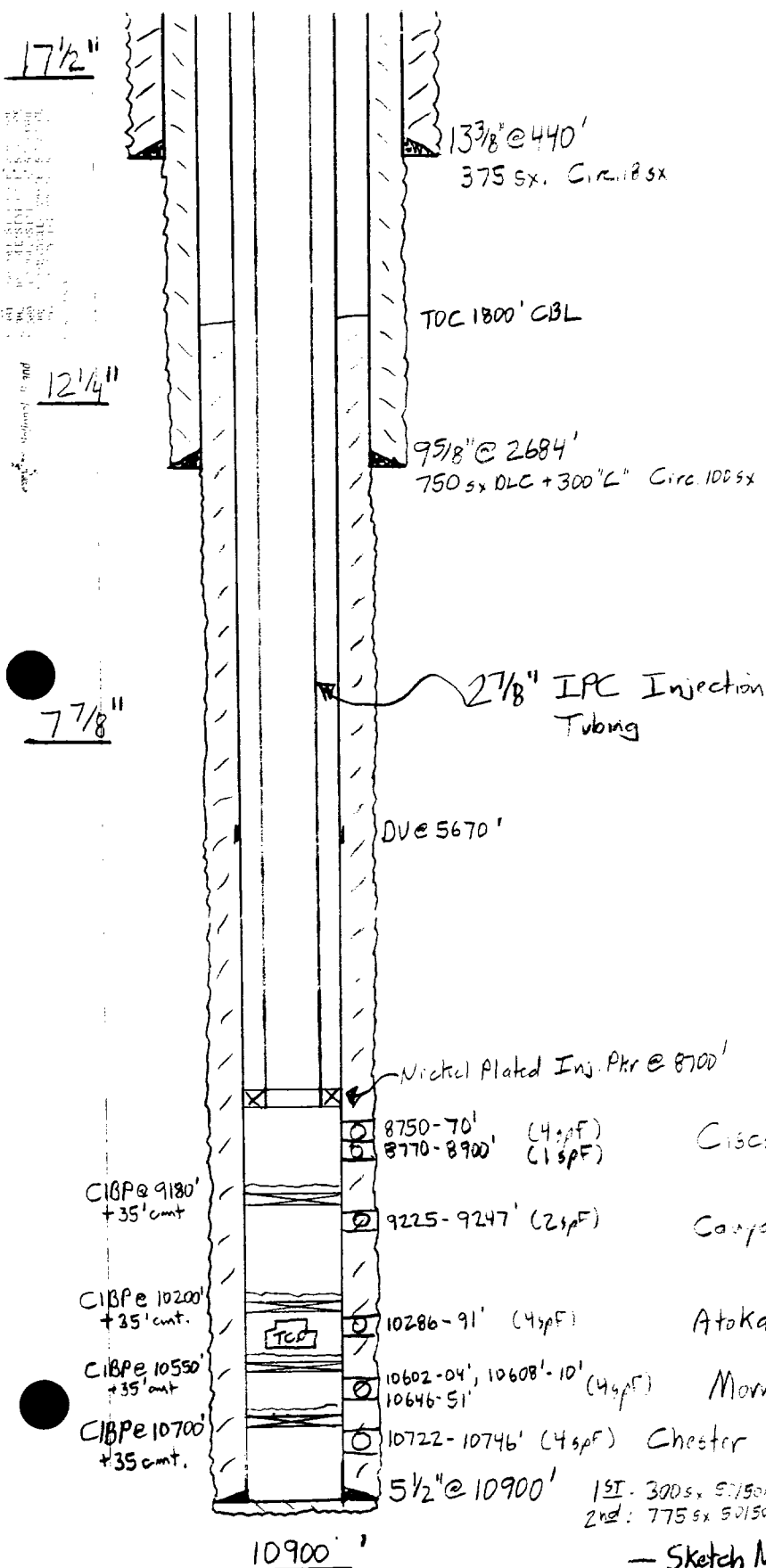
Location: 660' FNL, 660' FWL
D-15-17s-29e
Eddy, NM

KB: 3581.5'
 GL: 3564'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 1/2"	48	H40	STC	440'
9 5/8"	36	J55	LTC	2684'
5 1/2"	17	P110	LTC	1650'
	17	N80	LTC	9850'
	17	P110	LTC	10900'
2 7/8"	6.5	J55	EVE	8700'

IPC



After Conversion
to SWD

— Sketch Not To Scale —

KBCollins/

Well: Delta Wing Fed. 1 SWD

Zero: 14.7' AGL

Location: 1980' FEL, 810' FNL
15-17s-29e
Eddy NM

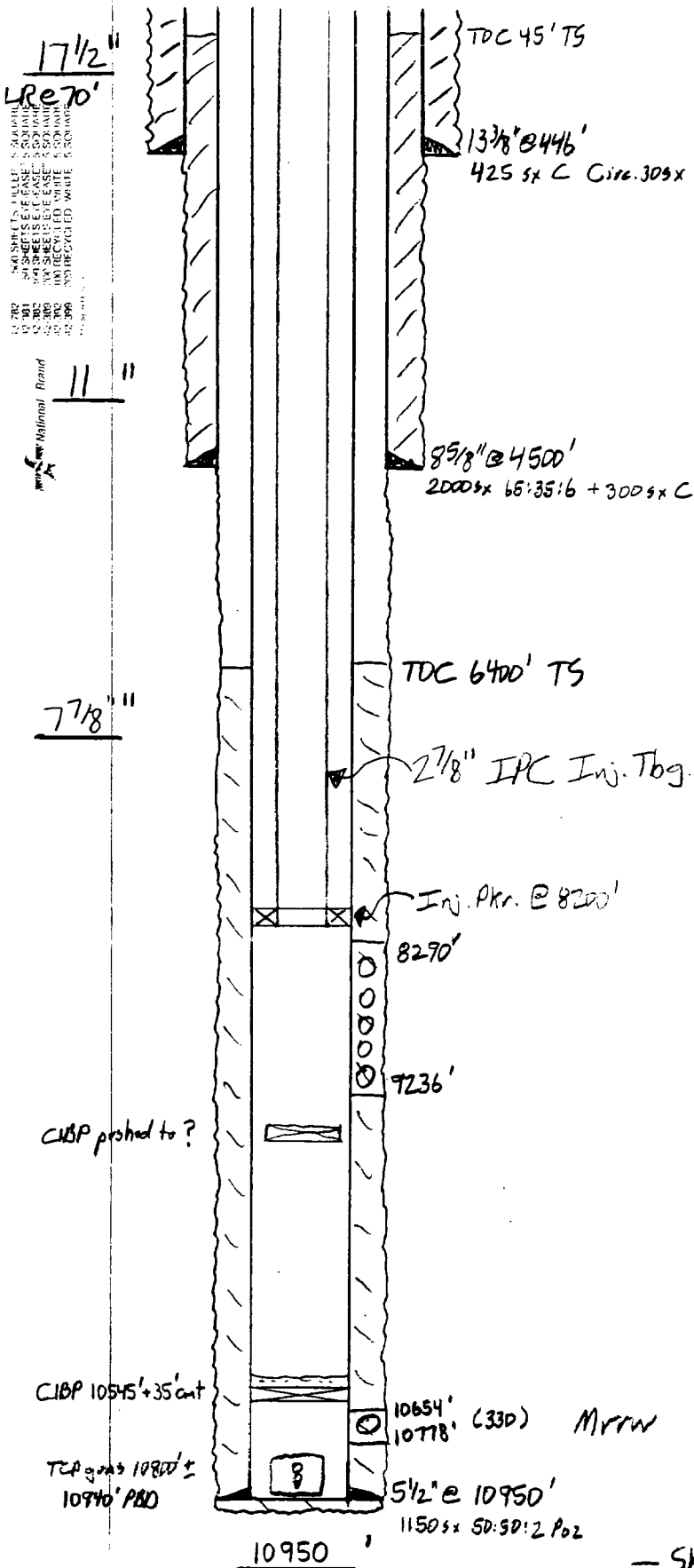
KB: 3605.5'
 GL: 3590.8'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	54.5	K55	STC	446'
8 5/8"	32	K55	STC	4500'
5 1/2"	17	K55	BTC	723'
	17	N80	LTC	10950'
			PC	Permalaten
2 7/8"	6.5	J55	EL	8200'

BHP: 6-4-90: 3552 psi @ 10654'

12-17-90: 1737 psi @ 10617'



- Sketch Not To Scale -

KBCollins /

**APPLICATION FOR AUTHORIZATION TO INJECT
MARBOB ENERGY CORPORATION**

DURANGO 15 STATE NO. 1

AFFIRMATIVE STATEMENT

I have examined all geologic and engineering data available for the Loco Hills field and find no evidence of open faults and other hydrologic connection between the disposal zone and any underground drinking water sources.

Name: Martin Joyce

Date: 7/20/01

Signature: 

Title: Geologist

ARTESIA DAILY PRESS
LEGAL NOTICES

Marbob Energy Corporation, Post Office Box 227, Artesia, New Mexico 88211-0227 has filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Durango 15 State Com No. 1 is located 660' FNL and 660' FWL, Section 15, Township 17 South, Range 29 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Seven Rivers, Grayburg, San Andres, and Yeso formations. The disposal water will be injected into the Cisco formation at a depth 8,750' - 8,900' at a maximum surface pressure of 1750 psi and a maximum rate of 15,000 BWPD. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Street, Santa Fe, New Mexico 87505 within fifteen (15) days of this notice. Any interested party with questions or comments may contact Brian Collins at Marbob Energy Corporation, Post Office Box 227, Artesia, New Mexico 88211-0227 or call 505/748-3303.

Published in the Artesia Daily Press, Artesia, New Mexico
_____, 1998.

SENDER: COMPLETE THIS SECTION

COMPLETE THIS

DELIVERY

SENDER: COMPLETE THIS SECTION

COMPLETE THIS

DELIVERY

SENDER: COMPLETE THIS SECTION

COMPLETE THIS

DELIVERY

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:

Conoco, Inc.
10 Desta Drive
Midland, TX 79705

Durango 15 Fed #1 Inj.

7001 0320 0001 7640 3475

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

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

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:

BP Permian Business Unit
P O Box 3092
Houston, TX 77253

Durango 15 Fed #1 Inj.

7001 0320 0001 7640 3468

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

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

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:

Chase Oil Corporation
P O Box 1767
Artesia, NM 88211-1767

Durango 15 Fed #1 Inj.

² 7001 0320 0001 7640 3451

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

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

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:

E.O.G. Resources
P O Box 2267
Midland, TX 79702

Durango 15 Fed #1 Inj.

2.

7001 0320 0001 7640 3444

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

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**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:

New Mexico State Land Office
P O Box 1148
Santa Fe, NM 87504-1148

Durango 15 Fed #1 Inj.

2.

7001 0320 0001 7640 3437

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)

B. Date of Delivery

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

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

Date Application Received:

7/23/01

Date of Preliminary Review:

(Note: Must be within 10-days of received date)

7/25/01

Results:

Application Complete

X

Application Incomplete

Date Incomplete Letter Sent:

7/25/01

Deadline to Submit Requested Information:

8/1/01 - Rec'd 8/6/01

Phone Call Date:

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

8/2/01

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)