Ş.	5/11/04 Sugare pUVJ04/3250677 RECEIVED
ENI	ATE OF NEW MEXICO ERGY, MINERALS AND NATURAL SOURCES DEPARTMENTOil Conservation Division 1220 South St. Francis Dr.APR 2 6 2004 Revised June 10, 2003 Santa Fe, New Mexico 87505OIL CONSERVATION
	APPLICATION FOR AUTHORIZATION TO INJECT SION
1.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? X Yes No
11.	OPERATOR: MARBOB ENERGY CORPORATION
	ADDRESS: P 0 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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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
	NAME: Brian Collins TITLE: Engineer SIGNATURE: DATE: 15 Apr 04
*	E-MAIL ADDRESS: <u>engineering@marbob.com</u> 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:

: *

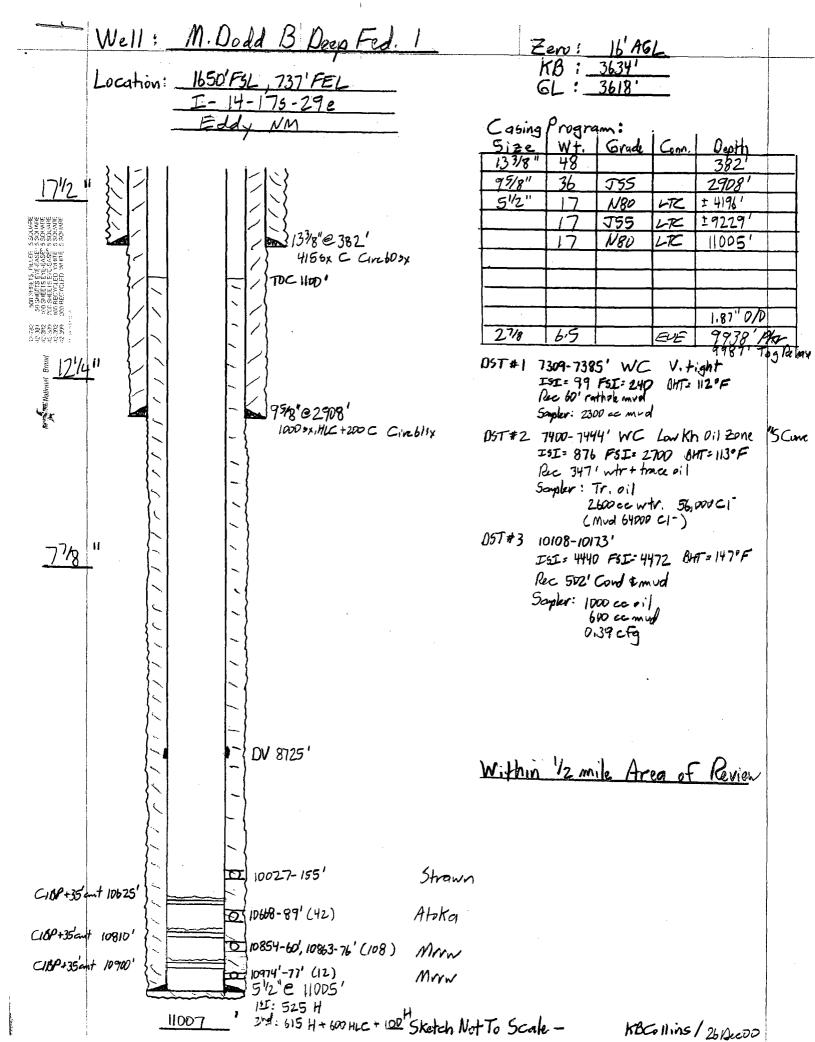
Application for Authorization to Inject M Dodd B Deep No. 2 SWD Unit H, Section 14-T17S-R29E

V. Map is attached.

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- VI. One well within the 1/2 mile radius area of review penetrates the proposed injection zone. Wellbore schematic for M Dodd B Deep Federal #1 is attached.
- VII. 1. Proposed average daily rate = 5000 BWPD Proposed maximum daily rate = 20,000 BWPD
 - 2. Proposed maximum injection pressure = 1803 psi (0.2 psi/ft)
 - 3. System is closed
 - 4. Source of injection fluid will be San Andres & Yeso produced water. Water analysis is attached
 - 5. Disposal zone water analysis is attached. There will be no compatibility problems.
- VIII. The injection zone is the Upper Penn from 9015' to 9400' and is composed of dolomite. Underground sources of drinking water will be shallower than 425 feet deep.
 - IX. The proposed injection zone will be acidized with 25,000 gallons 20% HCL acid
 - X. Logs are filed with the Division. A section of the neutron-density log is attached.
 - XI. There are no fresh water wells within 1 mile of the proposed SWD well.
- XII. After examining available geologic and engineering data, 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 is attached.

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Side 1 NIECTION WE	IN FECTION WELL DATA SHEET	•
OPERATOR: Marbob ENERAY Corp.		
2	10,2	
FEL	H H BECTION	175 29e Township Range
WELLBORE SCHEMATIC	NELL CONS	WELL CONSTRUCTION DATA Surface Casing
	Hole Size: $17^{1/2}$ "	Casing Size: 133/8" @ 425'
	Cemented with: 400	f1 ³
	Top of Cement: Surface	Method Determined: circula fed
	Intern	Intermediate Casing
See a Hached BEFORE	•.	
& AFTER wellbore schematics	Hole Size: $12^{1/4}$ "	Casing Size: 75/8" @ 4532
	Cemented with: 1950	
	Top of Cement: Sur Face	Method Determined: circulated
	Produ	Production Casing
	Hole Size: $\mathcal{S}^{\mathcal{F}/\mathcal{H}^{"}}$	Casing Size: 51/2" @ 11195'
	Cemented with: 1902	
	Top of Cement: 3500'	Method Determined: Temperatur Suney
	Total Depth: 11) 85'	
	Inje	Injection Interval
	9015 fe	feet to 9400
•	(Perforated or Op	(Perforated or Open Hole; indicate which)

.

INJECTION WELL DATA SHEET

Tubing Size: $27/8^{4}$	Lining l	Lining Material: $\rho_{1,\alpha,\beta_{1,C}}$	P)a	stic
Type of Packer: Nickel plated IOK double avin retrievable	бX	double	ario	retrievable
Packer Setting Depth: 8965' ±	ł		>	
Other Type of Tubing/Casing Seal (if applicable):_	licable)		3	

Additional Data

No X	nil and gas	
tion? Yes	ell originally drilled?	Upper Penn
Is this a new well drilled for injection	If no, for what purpose was the well originally drilled? $0^{1/2} = 2^{1/2} = 3^{1/2}$	Name of the Injection Formation:

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. 5 Chematic. Name of Field or Pool (if applicable): Wellbore see altached

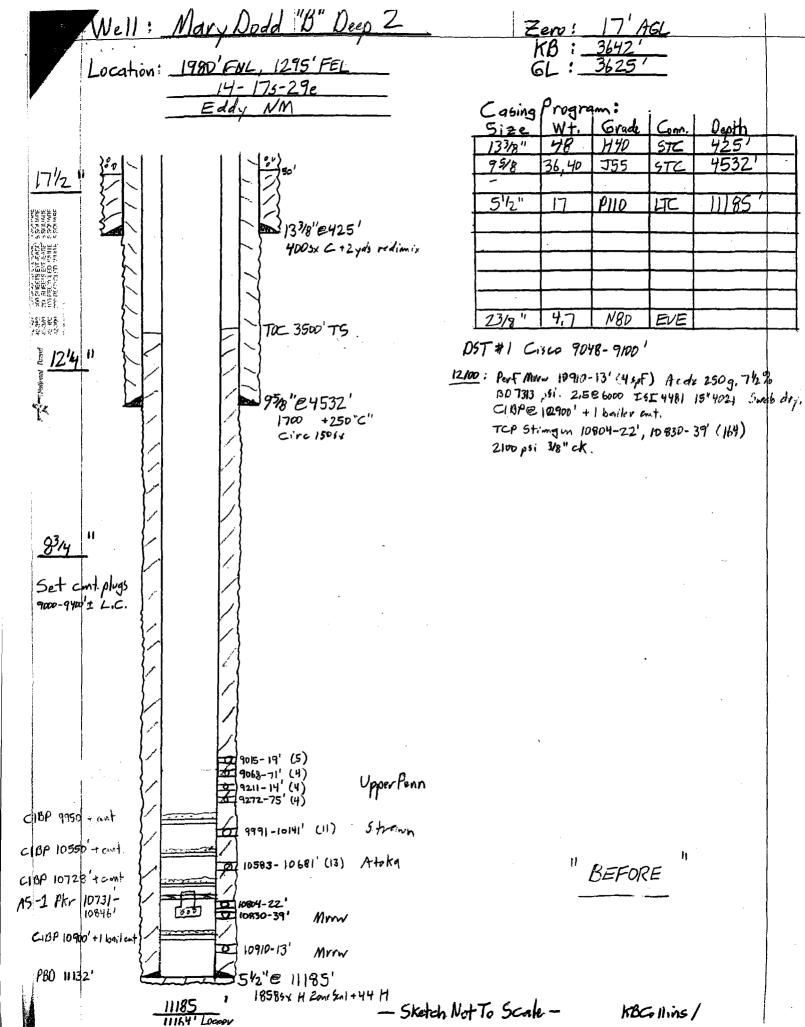
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Give the name and depths of any oil or gas zones underlying or overlying the proposed ± 10,000 Strawn injection zone in this area: Un dev lying, ± 10800' Monow

s.

Grayburg - San Andres I 2500 ± 4000 Yeso Vina Over 1

Side 2



KBGollins /

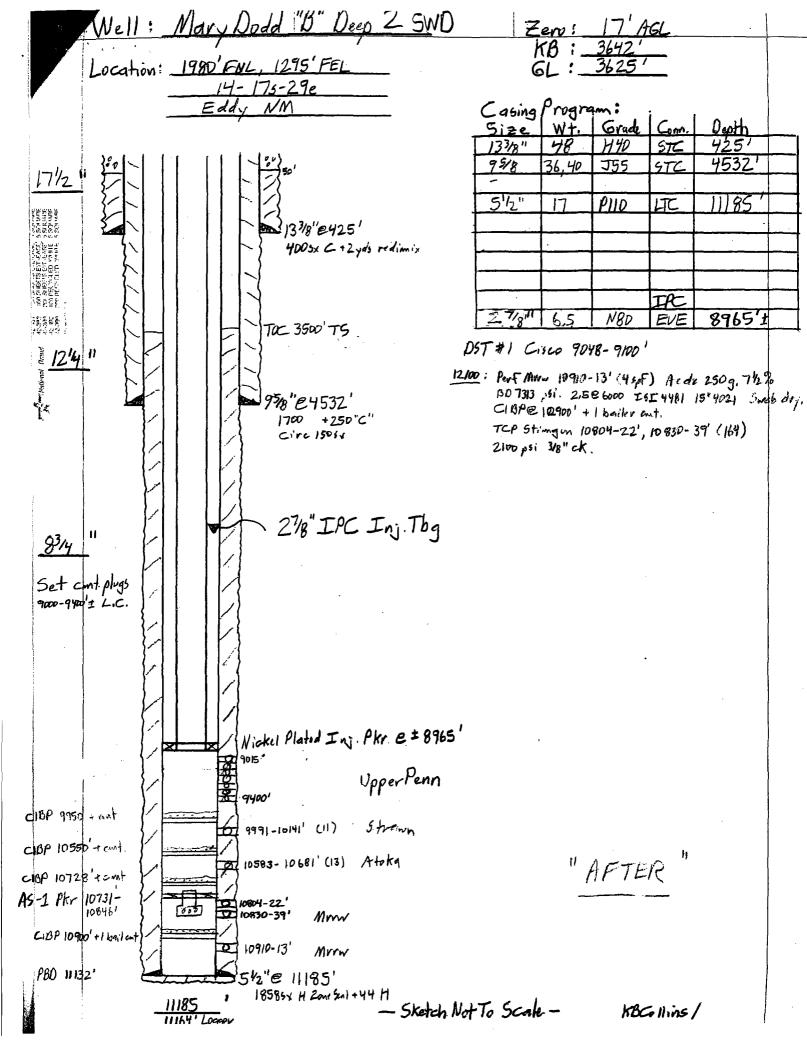
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Death

4251

453Z'

11185



Deoth

4257

453Z'

11185

8965'1

	HALLIBURTO	N DIVISION LA	BORATCTY		EXH	IIBI	TT A	
•		BURTON SER		(Sectio	on N	/II, C-1	08
	LABO	RATORY REPO	DRT	No.	W16	57 (<u>& W168-9</u>	3
ro Marbob Ener	gy Corporation		Dat	te	May 2	20,	1993	
P. O. Box 3	04		This report is the property of	Math				
Artesia, NM	i 88210		the report are properly of hereof, nor a copy thereof, a hereor, nor a copy thereof, a hereor a provide used in the course of regular to amployees, thereof recording	la be publi I al laborat scieness op	ihed or discl ory manage parations by :	osed a ment, iny pe	vehout linst securi is may however, rearing concernie	vig .be
Submitted by			Date Rec					
Well No		Depth	Foi	rmati	on			<u> </u>
			Sou	Jrce_				
-	Burch Keely				Mary	Do	dd A	
Resistivity	0.066 @ 70°				0.0	50	@ 70°	
Specific Gravity	1.0979 @ 70°			•	1.1	250	@ 70°	
рН	7.0				7.0			
Calcium	4,379			•	3,3	32		
Magnesium	2,081			·	2,8	90		
Chlorides	84,000			<u></u>	111,0	00		-
Sulfates	1,000				4	00		-
Bicarbonates	976				1,4	03		_
Soluble Iron	0				0			-
								
			-					-
								_
Remarks:	Produced Wa	ter Ana	ily ses					
	Respec) ((ma cfully subm	itted		. •			

Analyst: Eric Jacobson - Operations Engineer

HALLIBURTON SERVICES

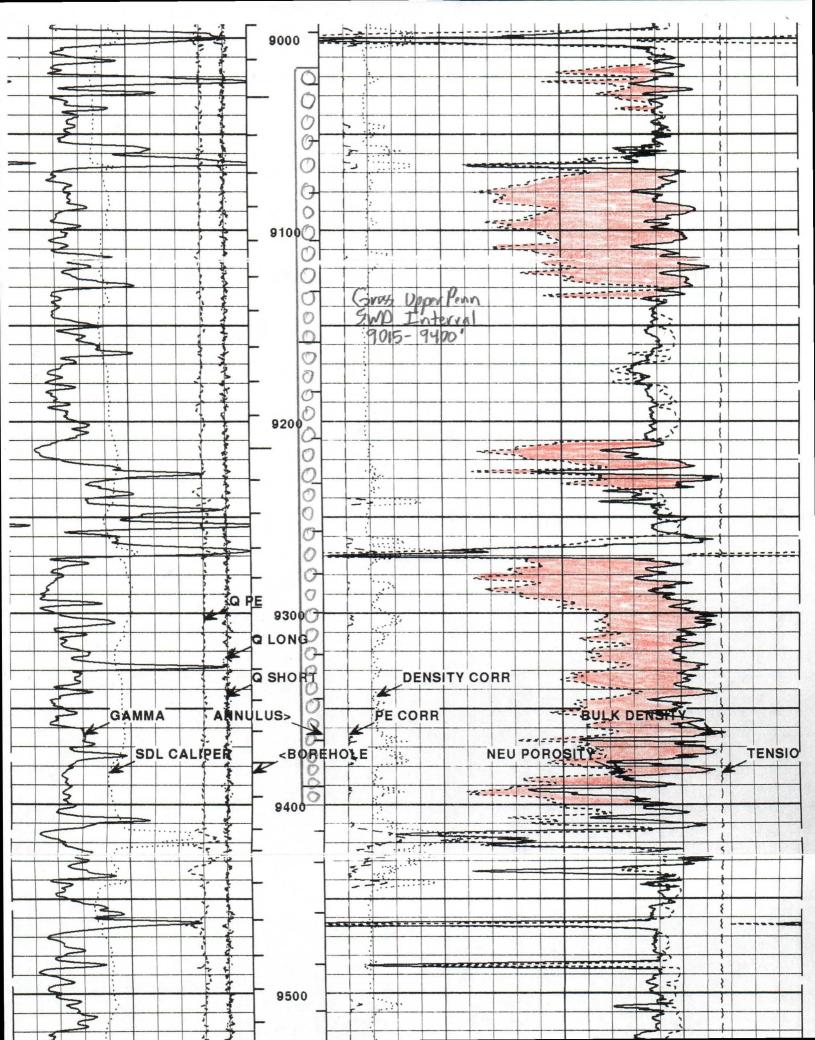
NOTICE:

This report is for information only and the content is limited to the sample described. Halfiburton makes no warranties, express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halfiburton shall not be liable for any loss or damage, regardless of cause, including any act or omission of Halfiburton, resulting from the use hereof

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P. O. BOX 1468	Martin Water Lab	oratories, Inc, 🙀	UL 11 1994	709 W. INDIANA
MONAHANS. TEXAS 79756 PH. 943-3234 OR 563-1040			11 12 24	MIDLAND, TEXAS 79701 PHONE 683-4521
	RESULT OF WATE	R ANALYSES	MIDLAN9941	•
ro: Mr. Keith Nory	1101	LABORATORY NO.	N:1067 7941	9
P. 0. Box 10340, Midland	TW 70700			
<u>1. 0. 201 105 0, 105 10</u>		RESULTS REPORT	EU7-0-	<u> 74</u>
COMPANY Pogo Produ	icing Company	LEASE	Sabre Federa	1_#1
SECTION BLOCK SURVEY		<u>Eddy</u> s	TATEN	<u>M</u>
SOURCE OF SAMPLE AND DATE TAKE		7 //7 R	1 17, 79,	
NO.1 <u>Produced water - ta</u>	iken from Sabre Fede	eral #1. D-	1-115-270	<u>. </u>
NO. 2	·····			
NO.3	7 1. 2			
NO.4 <u>Hnalysis</u> st	Injection ton	e Water	(From nea	arby well)
REMARKS:				/
	CHEMICAL AND PHYSI			
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0119			
pH When Sampled	6.96			+
Bicarbonate as HCO ₃	1,525			+
Supersaturation as CaCO,				
Undersaturation as CaCO ₃				
Total Hardness as CaCO,	3,050			
Calcium as Ca	880			
Magnesium as Mg	207	····		
Sodium and/or Polassium	3,453			
Sulfate as SO.	2,400			
Chloride as Cl Iron as Fe	58.0		·	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	13,294	•		
Temperature *F.			· · ·	+
Carbon Dioxide, Calculated				+
Dissolved Oxygen, Hydrogen Sulfide	954	····		
Resistivity, ohms/m at 77* F.	0.558			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
	····			+
				+
	Results Reported As Mill			- <u></u>
Additional Determinations And Remarks We a	are not familiar with		c location of	this well as
the zone involved herein;	but in comparing wi	th our genera	1 records in	this county
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Artesia Daily Press P. O. Box 190 Artesia, NM 88211-190

> Re: Legal Notice Salt Water Disposal Well

Gentlemen:

Enclosed is a legal notice regarding New Mexico Oil Conservation Division C-108 Application for Authorization to Inject for a salt water disposal well.

Please run this notice and return the proof of notice to the undersigned at Marbob Energy Corporation, P. O. Box 227, Artesia, NM 88211-0227.

Sincerely,

Brian Collins Petroleum Engineer

BC/dlw

enclosure

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 M Dodd B Deep No. 2 SWD, is located 1980' FNL and 1295' FEL, Section 14, Township 17 South, Range 29 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the San Andres & Yeso formations. The disposal water will be injected into the Upper Penn formation at a depth of 9015' - 9400' at a maximum surface pressure of 1803 psi and a maximum rate of 20,000 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 , 2004.



EOG Resources, Inc. P. O. Box 2267 Midland, TX 79702

> Re: Application to Inject M Dodd B Deep 2 SWD <u>Township 17 South, Range 29 East, NMPM</u> Section 14: 1980 FNL 1295 FEL Eddy County, New Mexico

Gentlemen:

Enclosed for your review is a copy of Marbob Energy Corporation's application to convert the referenced well into a saltwater disposal well. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter. If you have no objections to our application, please indicate below and return one copy of this letter to our office.

Please do not hesitate to contact us should you have any questions.

Sincerely,

Men

Brian Collins Petroleum Engineer

BC/dlw enclosure

EOG Resources, Inc. has no objection to the proposed disposal well:

By:	
Title:	
Date [.]	



ConocoPhillips P. O. Box 2197 WLS 6106 Houston, TX 77252

> Re: Application to Inject M Dodd B Deep 2 SWD <u>Township 17 South, Range 29 East, NMPM</u> Section 14: 1980 FNL 1295 FEL Eddy County, New Mexico

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Please do not hesitate to contact us should you have any questions.

Sincerely,

Brian Collins Petroleum Engineer

BC/dlw enclosure

ConocoPhillips has no objection to the proposed disposal well:

By:	
Title:	
Date:	



Hanson Energy R342 S. Haldeman Rd. Artesia, NM 88210

> Re: Application to Inject M Dodd B Deep 2 SWD <u>Township 17 South, Range 29 East, NMPM</u> Section 14: 1980 FNL 1295 FEL Eddy County, New Mexico

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Please do not hesitate to contact us should you have any questions.

Sincerely,

Alu

Brian Collins Petroleum Engineer

BC/dlw enclosure

Hanson Energy has no objection to the proposed disposal well:

By:	
Title:	
Date [.]	



Webb Oil Company 2409 Cerro Rd. Artesia, NM 88210

> Re: Application to Inject M Dodd B Deep 2 SWD <u>Township 17 South, Range 29 East, NMPM</u> Section 14: 1980 FNL 1295 FEL Eddy County, New Mexico

Gentlemen:

Enclosed for your review is a copy of Marbob Energy Corporation's application to convert the referenced well into a saltwater disposal well. As a requirement of the New Mexico Oil Conservation Division, we are notifying you because you have been identified as an operator or surface owner. Any objections must be submitted in writing to NMOCD, 1220 S. St. Francis Drive, Santa Fe, New Mexico 87505. Objections must be received within fifteen (15) days of receipt of this letter. If you have no objections to our application, please indicate below and return one copy of this letter to our office.

Please do not hesitate to contact us should you have any questions.

Sincerely,

Brian Collins Petroleum Engineer

BC/dlw enclosure

Webb Oil Company has no objection to the proposed disposal well:

By:	
Title:	
Date:	

Form 3160-5 (September 2001) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					FORM APPROVED OMB No. 1004-0135 Expires January 31, 2004 5. Lease Serial No. NMLC028731B 6. If Indian, Allottee or Tribe Name		
SUBMIT IN TRIPLICATE - Other instructions on reverse side					7. If Unit or CA/Agreement, Name and/or No.		
1. Type of Well Image: Oil Well Signal Gas Well Image: Other 2. Name of Operator MARBOB ENERGY CORPORATION 3a. Address P O BOX 227, ARTESIA, NM 88210 505-748 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SECTION 14-T17S-R29E 1980 FNL 1295 FEL, UNIT H			ude area code))3	 8. Well Name and No. M DODD B DEEP FEDERAL #2 9. API Well No. 30-015-31041 10. Field and Pool, or Exploratory Area GRAYBURG; CISCO 11. County or Parish, State EDDY COUNTY, NM 			
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA							
TYPE OF SUBMISSION	TYPE OF ACTION						
X Notice of Intent Alta Subsequent Report Cas Char Char	er Casing ing Repair ange Plans invert to Injection (clearly state all pertinent recomplete horizontally, g be performed or provide tions. If the operation resumment Notices shall be file pection.) ON PROPOSES TO	ive subsurface loca the Bond No. on f lits in a multiple c ed only after all re CONVERT	Temporarily A Water Disposal estimated starting date of titions and measured and t ile with BLM/BIA. Requirements, including recompletion quirements, including recompletion child well to the start of	bandon any proposed work rue vertical depths uired subsequent r b in a new interval lamation, have be	Other		
14. I hereby certify that the foregoing is true and Name (Printed/Typed)	i correct						
			Title ENGINEER				
Signature milalle	in	Date	APRIL 16, 20	004			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE							
Approved by Conditions of approval, if any, are attached. Approval of this notice does not warran certify that the applicant holds legal or equitable title to those rights in the subject I which would entitle the applicant to conduct operations thereon. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any States any false, fictitious or fraudulent statements or representations as to any matter with			Title Office on knowingly and willfull is jurisdiction.	Dat y to make to any			

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