ŕ f		500 hur 102/55387
-		NSE ENGINEER LOOGED IN TYPE ID APP NO.
	•	ABOVE THIS LINE FOR DIVISION USE ONLY
		NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 18 FM 2 03
		ADMINISTRATIVE APPLICATION CHECKLIST
	THIS CHECKLIST IS M Ication Acronym	IANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
	[DHC-Dow [PC-P	Indard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] Inhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] Inhole Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] alified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF A [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication NSL NSP SD
	Chec [B]	k One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
	[D]	Other: Specify
[2]	NOTIFICAT [A]	TON REQUIRED TO: - Check Those Which Apply, or Does Not Apply 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 AC	CURATE 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.

Inte

BRIAN COLLINS

Signature

- PETROLEUM ENGINEER Title

Z7 Avg09 Date

bcollins@marbob.com e-mail Address

SWD - 11 96

Print or Type Name

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? X Yes No
II.	OPERATOR: MARBOB ENERGY CORPORATION
	ADDRESS: P O BOX 227, ARTESIÁ, NM 88211-0227
	CONTACT PARTY:
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?YesNo 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:
	SIGNATURE: DATE: 27.4vg 09
*	E-MAIL ADDRESS: <u>bcollins@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:

C-108 Application for Authorization to Inject MYOX 21 SWD #1 1980' FNL, 660' FWL E-21-T25S-R28E, Eddy County

Marbob Energy Corporation proposes re-enter the captioned well for salt water disposal service into the Delaware Sand from 3500' to 4850'.

- V. Map is attached.
- VI. One well within the ½ mile radius area of review penetrates the proposed injection zone. ✓ Wellbore schematic is attached.
- VII. 1. Proposed average daily injection rate = 2000 BWPD Proposed maximum daily injection rate = 5000 BWPD
 - 2. Closed system
 - 3. Proposed maximum injection pressure = 700 psi (0.2 psi/ft. x 3500' ft.)
 - 4. Source of injected water will be Delaware Sand and Bone Spring Sand produced water. No compatibility problems are expected. Analyses of Delaware and Bone Spring waters from analogous source wells are attached.
- VIII. The injection zone is the Delaware Sandstone, a fine-grained sandstone from 3500' to 4850'. Any underground water sources will be shallower than 532'.
 - IX. The Delaware sand injection interval will be acidized with approximately 20 gal/ft of 7 ½ % HCl acid. If necessary, the injection interval may be fraced with up to 300,000 lbs. of 20/40 mesh sand.
 - X. Well logs are filed with the Division. A section of the dual laterolog resistivity log showing the injection interval is attached.
 - XI. There is one fresh water well within a mile of the proposed SWD well. Water analysis from the well is attached.
- XII. After examining the available geologic and engineering data, no evidence was found 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.

Side I INJECT	INJECTION WELL DATA SHEET			
OPERATOR: // arbub Energy Carp				
WELL NAME & NUMBER: MYOX 21 SWD No. 1	1 CFSrmerly Hammond 1	(1 pram		
WELL LOCATION: 1980 FNL (60' FWL FOOTAGE LOCATION	E UNIT LETTER	2/ SECTION	255 TOWNSHIP	28e Range
WELLBORE SCHEMATIC		<u>WELL CONSTH</u> Surface Casing	WELL CONSTRUCTION DATA Surface Casing	-1
See alloched before and after	Hole Size:		Casing Size: <u>858" c 532</u> '	e 532'
schematics. /Ilarbob proposes	Cemented with: 70	SX.	or	ffl3
to reenter this well, clean out to Hain' an 5110"	Top of Cement: Surface	aci	Method Determined: Circula hod	Circulated
to SWD in the Delaware 3500-4850'		Intermediate Casing	e Casing	
	Hole Size:		Casing Size:	
	Cemented with:	SX.	or	ft ³
	Top of Cement:		Method Determined:	
		Production Casing	ı Casing	
	Hole Size:		Casing Size:	
	Cemented with:	SX.	or	ft ³
	Top of Cement:		Method Determined:	
	Total Depth: 49/0	,0		
		Injection Interval	Interval	
	3500'	feet	feet to 4850'	
	(Pe	rforated or Open H	(Perforated or Open Hole; indicate which)	

٠

۱

INJECTION WELL DATA SHEET

Lining Material: IPC or Duoline 20 Type of Packer: 10K nickel plated double grip retrievable NIA Other Type of Tubing/Casing Seal (if applicable): Packer Setting Depth: 3450' ± Tubing Size: 27/8"

Additional Data

1. Is this a new well drilled for injection? Yes X No If no, for what purpose was the well originally drilled? 0il nud gas.

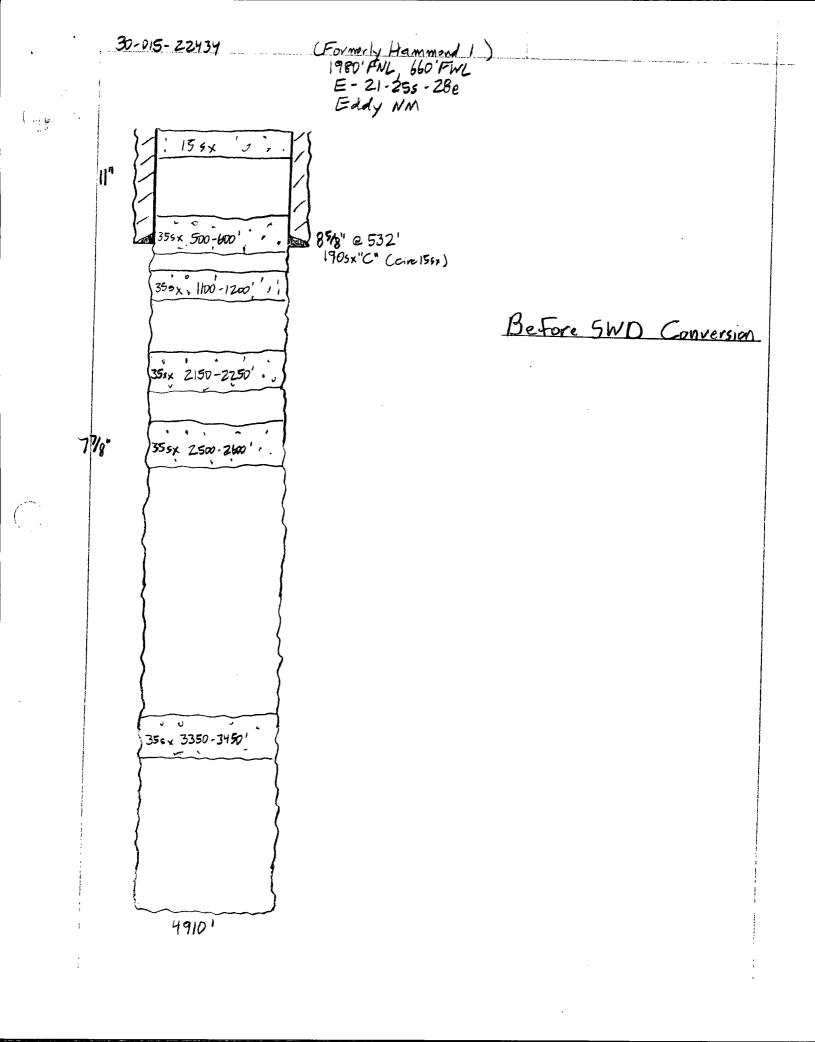
- 2. Name of the Injection Formation: Oe|aware Saud
 - 3. Name of Field or Pool (if applicable): San Loren 20
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.

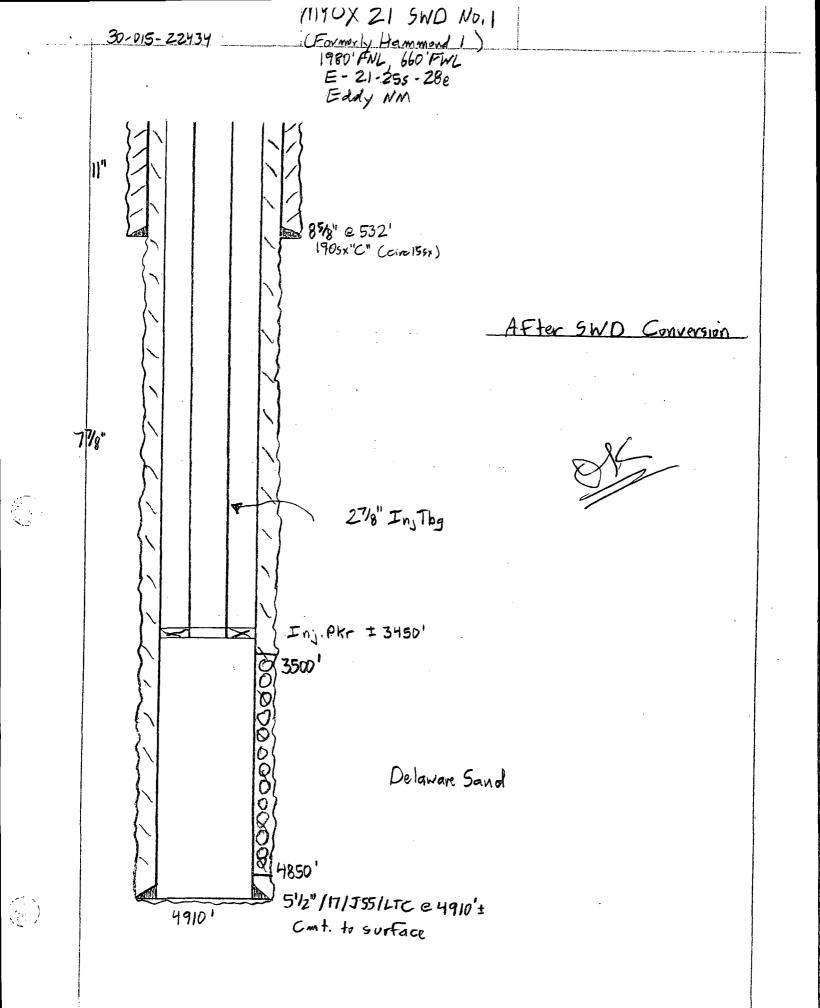
See wellbore schematic

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

Underlying! Possible Bone Spring 6500-8500', Passible Penn 710500' Possible Strawn Ill800', Possible Atoka Il2,100' Possible Morrow = 12,500' OVER Ning: None

Side 2







• •

MAP

2007 New St 7 2052 7 2053 4000 54 TD 2600 1 10 10 10 10 10 10 10 10 10 10 10 10	Slote	Магьоь 217206.115411 В5052 U.S. Рогдие Forms	(Morr, Disc) 2.4 Mil HBP U.S. 17222 International/Mins & Chem(S)	Arcaster TD 2813 Arcaster TD 2813 Sarta Feterer. U.S. Twister Delta Orlg. (*ro Org. •	T/A6750 , 2 "Tiraho CNG St." Stat
BCK Yates Pet.etal Occidental	OGX Res.	40.62 4140.50 3140.38 2140.26 1 Sowestn.Ener.Y2 J. Bruce BHL (Devon) 110-1-2005	40.36 4/40.38 4/40.50 21/40.65 4/40.50 4/40.50 4/40.50 4/50 4/50 4/50 4/50 4/50 4/50 4/50 4/	40.6' 4140 48 3140 35 2'40 22 7 Douthwestin a church	40.14 4 40.10 3]- (Siete OE,G./z) (Phillips) 2 1
1 5+ 4.5769 25 4 1 5+ 4089 5t + 2000 Full - Recovery	VA-2775 21198 E 0. Burgett - Rich Bass St.	(Devon) 10-1-2006 VA-2533 Bran Oil V-5284 5233 Bran Oil ジャルアマット 105533 105533	153 2 (VA 1997) Marhob (Marbob 1997) Nat bob 1/452 4 (Karbob 1997)	Devine Ener 4 5007 2	98128
Scarning C. Scarning C. Martin Scarning C. Martin Scarning C.	±0.249€ 0/A7-25 €2 ↔ 5	4	Survey Sent 2 Marbob 6 "Stu	Salt Prow 2 U.S.	AN SINGU
Occudental 40 81 6 11:9:2008 Ock Res 9:2:2005	Occidental I 13 2008 OGX Res.	S.4./ 1 /7	····· ··· · · · · · · · · · · · · · ·	(HNG) (HNG) (Roneder) (HNG) (Roneder)	
De(+a	2 1·2008 VA-2807 243.75	Sec." 1 174442	SF ST SOWEST		1 1 1
State state de constante de con	DeltaDrig. State	" Eogle 4 St." State BHL	BHL 2 44 3 340 BHL ,	(15920) DeltaDrig. State	<i>u.s.</i>
³ et.etal J Bruce (J. Bruce) , 2005 12: 1, 2007 (OGX Russ) 219 VA:2740 VA: 0740	Occidental (· 13 2008		But Soundawn 3,4) 1-4 120-00192 (Soundawn 3,4) 1-4 150 wistin En Li (Sounda fe Ener.) Chaptonroll	A BHL Nearburg Sailoraw Joy B. Leck, Est.	¥ Katherine L. Smith
i2 (0412) (0412) (112201) (112201) (112201) (1233) (1242) (124		<u>i (ma e are</u>	BU	Oile.Gos Oper 1	Joy B. Leck, Est.
12 5tore 10(X Bes 06X Bes	Wright & Davis	9	P62 "Delta Drig. "Redtailed Hawk P	TP/B)Co Op Roy	Ponhandle 12
9:2005 34 Com. (V40) (Amoco) (V40) (State)	A Pecos-Irrig To 935	Sonto Fe Ener.	Devoni Southwin Enervie U.S.	A BC I / BARSHIT	Ponhandle Flog- Redfern G.H.Smith
50.3230 (D/A 6:2:78)		Sonta Fg Ener. Delta Fge Engas 1064:05, Petos Irr. 0/A1:75:94 To 3043 Da 11:15:44	10417 Shrike ION 1285 Marbob	Part Disc. Soil Disc. Atoks Disc. Base Disc. Part CW Williams Jeby	CWilliams
te Delta Drig. Delta Drig. State	Delta Drlg. Yates Pet, etal	Delto Orlg. Featherstone Foutherstone	Stote T. stotei	BHL Jay B.Leck, Est.	J.B.Leck
2-1-2008 1 - 19 - 2008 1 - 19 - 2008 2 - 1-2009 2 - 1-2009 2 - 1-2009 2 - 1-2009 2 - 1-2009	2 I 2008 VA-2808 11945	5 2009 5-1-2009 VA-3104 VA-3121 551 01 381 25	(So we str Ener) (- V-6854	Mucoind HBP Jr. 12 M.I.	00
	Flag. Red Arm Deltg TO 4600 0/4 2:45_	SAN LC		St. Com (ビンコン・ ドルコン・ マンジン TO 3) アン りょう 54	S.S. S.Light,
Deitd Drig Deity Drig Story 13	Occidental 17	Marbob Converte Liswo 16 Government	5 Store	14	De Toword
LOUSCHUTE 2-1-2608 1-13-2008 IS-1-2009 VA-2809 V-7184 1-9243	Aidridge etal Skipot S	2/A 5 15 82	Amocol So west	Neorburg (JTD Res) 11 - 1 - 2014 11 - 1 - 2014 1129 20 500 ℃	a.
\$32213 Garage Marbab Miros Fee Com Sisis	Aidridge etcl Signal St TO 2657 DIA 7:0 56 Qetter Dete	25	Store) Cher roiseso: 1.1.2008 Walo2780 2530 28 Store Store	N J	Light Mins 2
SE 26 1	Delta Drig. State Featherstone	Featherstone	Davion	Chevron HBP	
HP- 5 · I · 2006 VB·812 VA · 2467 69502	5-1-2009 VA-3122 687 59	VA- 3106 551 == 	6 · I · 2008 100848 15 22 15 22 15 22 15 23 15 25 15 25 1	13413	\downarrow
State	Prito Ecio	LaRue & Muncy Hommond 105200 DA4:15:78 21			
	Frother Store	0447578 21	22	Pogo Prod	Pogo Prod.
76.30	5-1-2009 VA-3122 607 50 DUA4-10-75			Aldridge, HRP etat 13413 Slonal-Fed. 187594 178994	HBP 34 3
Deito Drig Del Stele	State Deiro Drig.	Delta Drig.	Delta Dila State	U.S.	R.S. Light M Deleword
Chesapeake 5 1 2006 VA. 2455 10 2325 10 235 10 235	Devon 3 · (· 2008	Yates Pet.etai	Yates Pet.,etal	Pogo Prod	Un
	100550 140 <u>88</u>	18768 Pet.etai 2.:1.:2009 VA:3057 HIL <u>90</u> I-S:FD	Pet. , etal 2 · 1 · 2009 VA · 3055 1 [32 89	13413	HBP IGIO
25 HNG	Delta Drigo U.S	Gut CO Ford 57 DVA 1-25:528	Deira Drag 27	(here Mere Corp.) Dersture Zeri How Even How Even Ho	
sapeake 102273 Marbob	Marbob Ener.	Yates Pet, etal 2 - 1 - 2003 3328	Yates Pet, etal 1, 2009 VA. 3036		Pogo Prod
1 - 2006 0/41 22-85 1 - 1 - 2016 - А. 2469 156 155 156 155 etal 4345 etal 4345	VB-813 675	Alridge etal 138.05 Scanol: St. 2, 1	VA 3056 132 <u>83</u>	A dridge e'al Signal-Fed	·····································
.a State an 20 The state		10 2473 3/45 29 54 State	State	* D 2 6 4 5 U S	2.5
Chesapeake Chalfant Marbab En	Yotes OGX Res. Yatzs Pet. eta. Pet. 2009 8 1. 2009 8 1. 2009 V 8:575	Yates Pet.etal 8 · 1 · 2009 VB·576	Marbab 7 - 1 - 2009	I Pago Prod. 1934 V: 4152	Yotes Pet. (12 1 2010 VB 807
VA.22460 VG.814 4260 VB.814 125 02 70 20 71 687 50 10 20 71 687 50	V8.5:5 252.98	309 3 <u>8</u>	v-7101 1 87 <u>59</u>		356 <u>93</u>
	32	33		35	
Christpeake 5 - 1 - 2006 - VA - 2456 15190	Gladys Aldridge, etal	riates Pet.etai B (2009 V8:569 19392	Marbob 7 - 1 - 2003 V 7085 310 00 - 285	°So.Malaga St.″	Yates 12 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
00.04 T	Bingham S gnof. State Nurtie D. 5, 3312 4			re river	
State State		State Yates Pet. etal	5.3%	3'ore	Stat (Marbob
es.1/2 16028 71/2010 V 7464 V 7441 2007 \$ 800 \$ 25397 1 17350	Yotes Pet, etdl OGX Res. 7 · 1 · 2010 7 · 1 · 2010 V:7463 V-7440 \$212 50 173 50	7 1 2010 TD2502 V-7462 Allor Co	Yates Pet, etal 7 1 2010 V-7461 \$23125 \$22518 \$22518	Ydtes Pet, etal 7 1 - 2010 V8-694 \$23125 Ydtes Pet, etal 7 1 - 2010 V8-674 \$22519 Madda Ener	Yates Pet.
20	(Pres)	7.1 ≥2010 V-7439 \$225 <u>18</u>	A d sge etol 21 State (1)		7 1 2010 VB 693 1228 57
APP 33 32 3 6 Jupilee Ener.	(778) (478) (478) (479) (479) (490) (400) (4	4	3	(Morbob) 2	
J How Hollow Fee an Sport Disc. Carlinez Jasso 7	(F. Apole St (H)) (Br. Spr. Disc.) (F8)		Yates (*AGA Flower St. 7 (Madaot) / Flower Dr. Ut.)		
u. 5. State			"Flower-St." State	View Mary Mary	
vot. Energen JGX Res. Yates Pet, etal	MARBOB ENERG MYOX 21		Yates Pet.etal	Featherstone	E0G Res. 6-1-2004 93198
Nat Res 163 95 532500	Sec. 21-T2	25S-R28E	Allor Co. 7 1 2010 71 2010 VB-695 VB-677 \$23125 \$225 <u>18</u> Defana River Ut River Ut	Moore US.	93198 4500
	1980 FNL Eddy Cou		Prover Ut Prover Ut Prover Ut Del Disc C 7-11-PA Prover Ut Del Disc C 7-11-PA Prover Ut Del Disc C 7-11-PA	2 (Del Disc)	
Chalfant Chalfant 5 Ub028 2016		anty, NW Preside Billed In In	.10 (Marbob)	11 Vigune Moore Clark \$2 D6 55 84 D/A 5 2 84	L
\$ 800 99 39 71 # Hanson Partilips.Sr 17246			Vonder Ivan Store TD 2806	1000 Iny 1000 51 - TD 350 D/AT 22 87	W Moore Clark-Jupmon (E.Charman) Clark Ld.C, Dev.) TD 35.93 DVA 2.28-79
U.Ş Tozakası Duarosis State	State	Store 26	28	Del. Riv Unit	07-2 28-79

VI.

Wells Within ½ Mile Radius Area of Review That Penetrate Proposed Injection Zone

Well: MYDX 21 St 8 Zen: 17,5'AGL KB: 3020,5' Location: 660'FNL 330'FNL 61 : 3003 D-21-255-28e ĺ (_____* Casing Program: EddyNM 30-015- 37034 Grude Depth Conn. Size Wt. 48 133/8" J55 5TC 95/8" J55 STC 36 Z360' 171/2 71 $\overline{23}$ NBD LTC 6526. 86991 3131/8"@ 360 P110 LTC 22 400 5x "C" (cir 63 5x) 6.5 J55 7718" <u> 88888</u> 4 EVE TOC 1700'TS 12/1 and the later 95% @ 2360' 5255x HLC+2505x"C" (cir 545x) Vithin 12 Mile Radius Area of Review 8314 11 DV 5712' 155. 4505x Super H (circ 1335x) 2nd: 6505x HLC+ 1005x "H" 0 8446-57' (36) Harkey Sd FC 8660' 7"0 8699' 8700 CULL N.LT C. J. 1.0.0.0.1

VII.

WATER ANALYSIS

HALLBURTON

PERMAIN BASIN OPERATIONS LABORATORY WATER ANALYSIS REPORT HOBBS, NEW MEXICO

COMPANY	Marbob					REPORT DATE		W09-055 July 12, 2009	
						DISTRICT	-	Artesia	
			-([)elaw:	NR P	roduced			
SUBMITTED BY				V	Vater				
SUDIVITIED DI						and the second difference of the second differ			
WELL			DEPTH	./	(FORMATI	ON		
COUNTY	······		FIELD	Þ		SOURCE		- <u></u>	
TANK	<u></u>								
SAMPLE	Black River		Sp	anish Ceda	1	Wtr. Well C-0051	6		
Sample Temp.	70	°F		70	۴	70	°F		۴
RESISTIVITY	15.8		·	0.054		3.41			
SPECIFIC GR	1.000			1.154		1.002			
рH	7.85			5.43		7.33			
CALCIUM	750	mpl		30,000	mp1	1,000	mpl		mpi
MAGNESIUM	300	mpl		17,100	m p ł	450	mpl		mpl
CHLORIDE	104	mpl		140,306	mpl	240	_mpl		mpl
SULFATES	Light	mpl		Light	mpt	Heavy	mpl		mpl
BICARBONATES	153	mpl		61	mpl	262	_ mpi		mpl
SOLUBLE IRON	0	mpl		25	mpl	0	_ mpl		mpl
<cl< td=""><td><u>N</u></td><td></td><td></td><td>N</td><td></td><td><u> </u></td><td></td><td></td><td></td></cl<>	<u>N</u>			N		<u> </u>			
Sodium		iqm			mpl		_mpl	<u></u>	mpl
TDS		mp!			mpl		_ mpl		inpl
JIL GRAVITY	@	[*] F		@	F [°] F	@	°F	@	°F
REMARKS		· _ · _ · _ · _ · _ · _ · _ · _							

This report is the property of Halliburton Company and heither it nor any liant thereof nor a copy thereof is to be published or disclosed without first ecuring the express written approval of laboratory management, it may divever, be used in the course of regular business operations by any person in concern and employees thereof receiving such report from Halliburton Co.

MPL = Milligrams per litter Resitivity measured in _ Ohm/m2/m

ANALYST

HALLBURGN

PERMAIN BASIN OPERATIONS LABORATORY WATER ANALYSIS REPORT HOBBS, NEW MEXICO

COMPANY	Marbob				REPO DATE DISTR		W08-156 November Hobbs	25 2008
SUBMITTED BY		Bone Pro lu	e Spring	Sand ter				
WELL Save	DA 21 Fed. #1	DEF	РТН LD		FORM			
SAMPLE		-				<u> </u>	·	
Sample Temp. RESISTIVITY SPECIFIC GR	70 0 06 8 1 095	^F 		°F 				.e
	6.5 3 7500	mpl		mpl		mpl		n
	<u> </u>	lam		mpl		mpl		n
	83125 Light	mpl mpl		mp)		fqm		nn
BICARBONATES	231	mpi mpi		mpl npl		mpi mpi		n ۳
SOLUBLE IRON	0	mpl		mpi		mpi mpi		ייי ת
CL	Negative	- ·		F'				······································
Sodium		mpl	0	mpt	0	mpl		0 n
DS		mpl	0	mpl	0	mpl		0
DIL GRAVITY		F		F		`F		g +
EMARKS			_			-		
				·				

is report since proceety of the Human Campany and rether than any an thereof for all boy thereof is to be madished or discused without first thing the riker as written another of aboratory management it may while the contract of the second of the second states of at the synamy senser. internet in the second second second Automation as

.

.

MPL : Milligrams per mer Pesitivity measured in Commin2 m

ANALYST MAMBIN

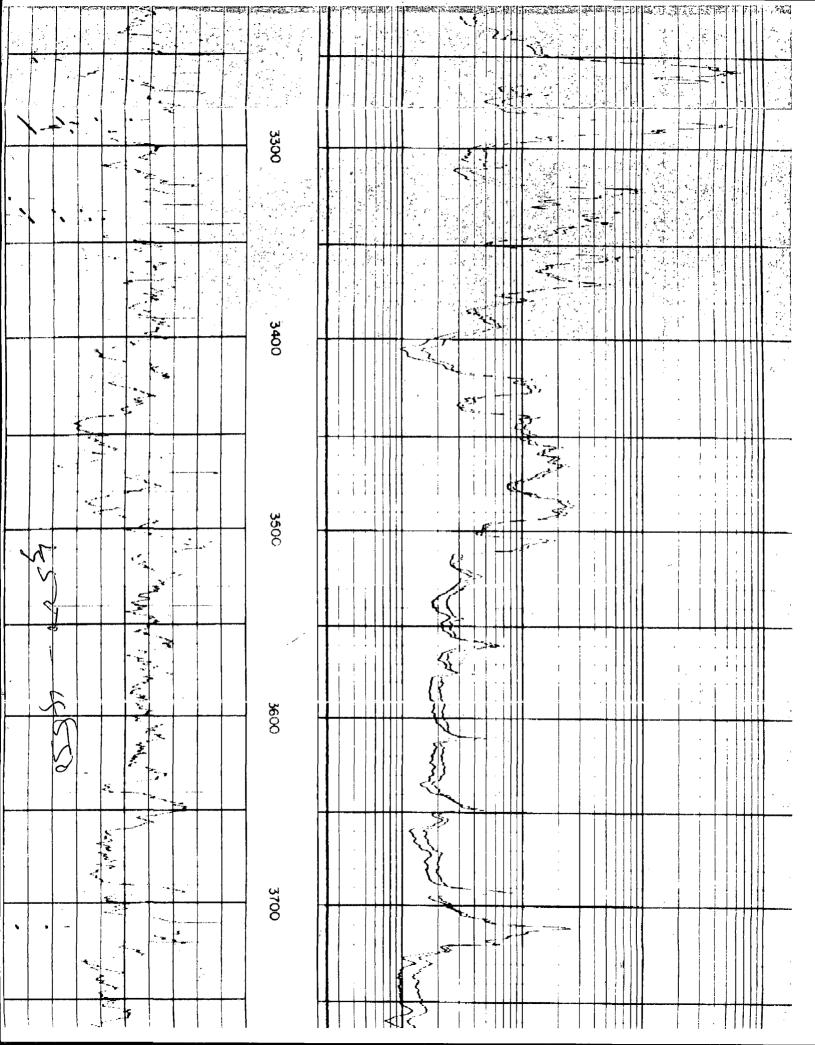
X.

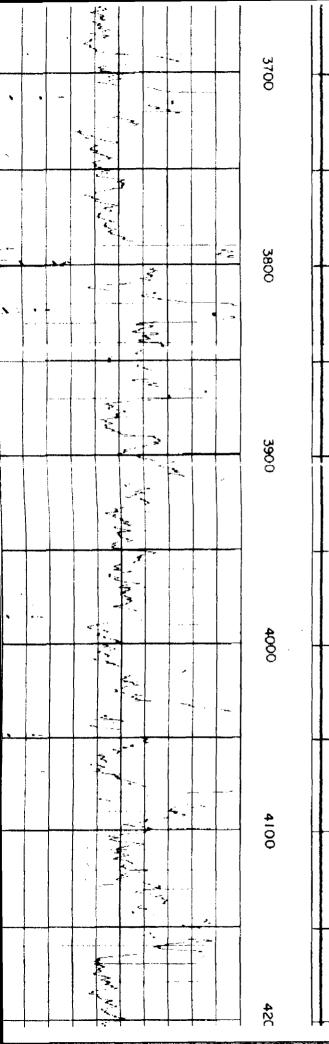
Dual Laterolog Across Across Proposed Delaware Sand Portion of Injection Interval

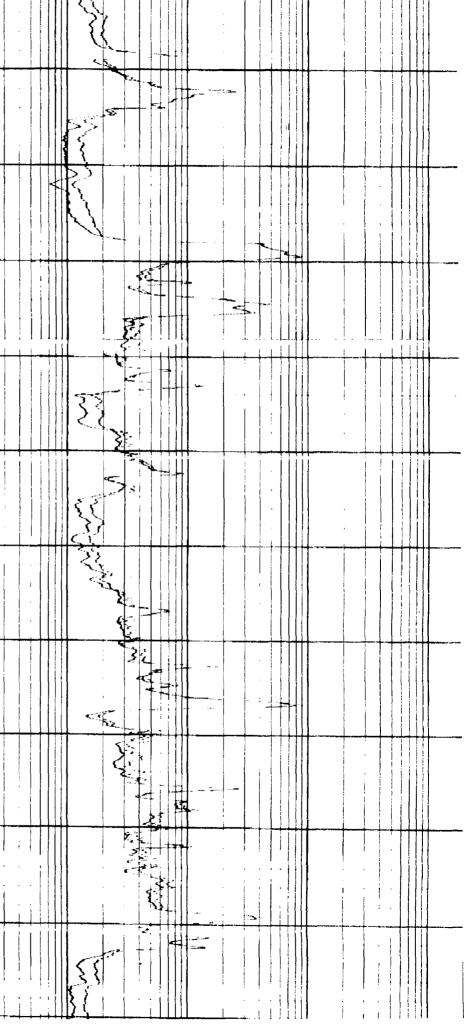
Recorded By Witnessed By	Equip. No. and Local Jon	Max. Rec. Temp. De(), F.	Time Since Circ.	Rm @ BHT	Source of Rmf and Rmc	Rime @ Meast. Terrip.	Amf @ Meas. Tem 3.	Rm @ Mees, Temp.	Source of Sample	pH and Fluid Loss	Density and Viscouity		Type Fluid in Hole	Bit Size	Cashing-Logger	CessingDriller	Top Logged Interval	Bottom Looped Interval	Depth-Looger	Denth_Driller			Driting Measured from	Log Measured from	Permanent Datum								,		FILE NO.					「うちち」	3
MC A TEE	6123 HUBBS	105°F	HUUR	1.023@ 105*F	MEAS .	•	.034@ 72 .	2		9.5 118.600	10.1 40	R	SALT GEL	7 7/8"		9 	2400	11875	4873	1010		2 - 2 N - 7R		<u>к.</u> в.			SEC 21	1980'ENL	LOCATION:	COUNTY		FIELD	WELL		COMPANY_						
		ŕ		Ē		•F	°F	°F @		<u>к</u>						8								10 8.			TWP 25-5	FNL & 660'FWL		EUUY		WILDCAT		HAMMUND N	LARUE & M				o mma) `
		Ŧ		•F		Fr Ø		°F		8						9								Ft. Above Permanent Datum DF	Bev . 2994		RGE 28-E	F₩Ľ		STATE_		Bert.	NO - 1	- - -	MUNCY	12.15			N X))
		4.		- 71 (2)		•F		F		8						()									KB 300t			BHC AL/GR	Other Services	NEW MEXICO				,				0	DONORAN		•
FOI	ا ما حرار							-		8		TH		ADI	**	A 1410		• c	0117		48 T	Q A	- R	ICO	MMEN	i De	D \$74	NDANE				Equi		anti				.*#		{	
REN	<u>ک</u> ا	SН	A L E P	(CU	R١	/E	R V 1 64	YE N 1 9	E	RR	ER UP Ç.	<u>Te</u>	p D	Q Q	D N	<u>ON</u> MA		RE N		A G	[SEG			R S T E	eries f un No . O. ool No lec. No anel n).). D.	01 91 3 3	22 NE 593 794	59 76	3	50 NE 59 20	30		13 ON 95	05 E 939 41 C				
Char Date Dept	n-0	<u>San</u> Irilk	npie er	<u>9 N</u>	0.	or	Ad	Idit		al S	am	pier			· · · · · · · · · · · · · · · · · · ·							Тур	e Lo	9			Dep	th		cale	Ch	le Up		10			Scal	• D	own	Hole	, , , ,
Den pH Sour Rm (F	luic of S		pie					Ø)		сс • F							cc °F		Run	No			To		Туре			ulpr nd T		t Dat		Pos	ition			01	lher		
Rm(Rmc Sour	@ N @ I Ce	Aea Mea R	8. T 19. 1 mf	'en Fan	np. np.		•		0	<u>}</u> }		* F * F							•F •F					SE.			BO VE					EN									
Rmf Rmc	@ E	HT	·						0	2		۹ ۴ ۲				@			°F °F																						

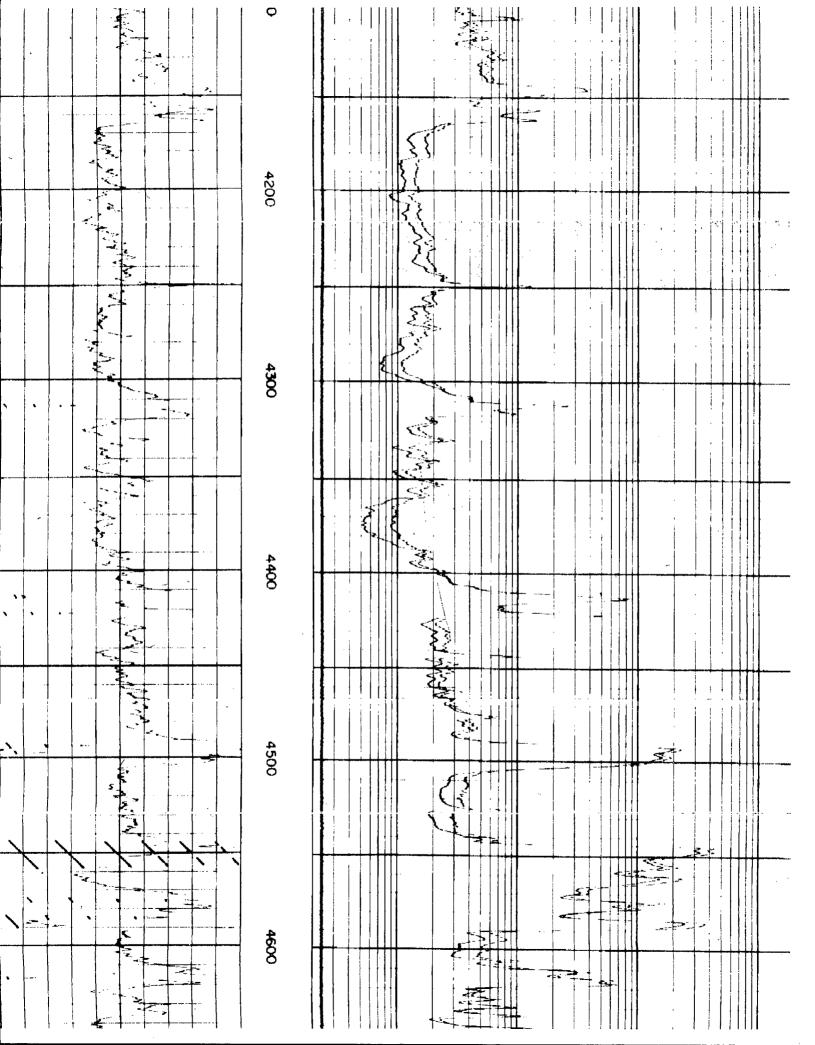
DETECTOR TYPE SCINT. DETECTOR LENGTH 6"

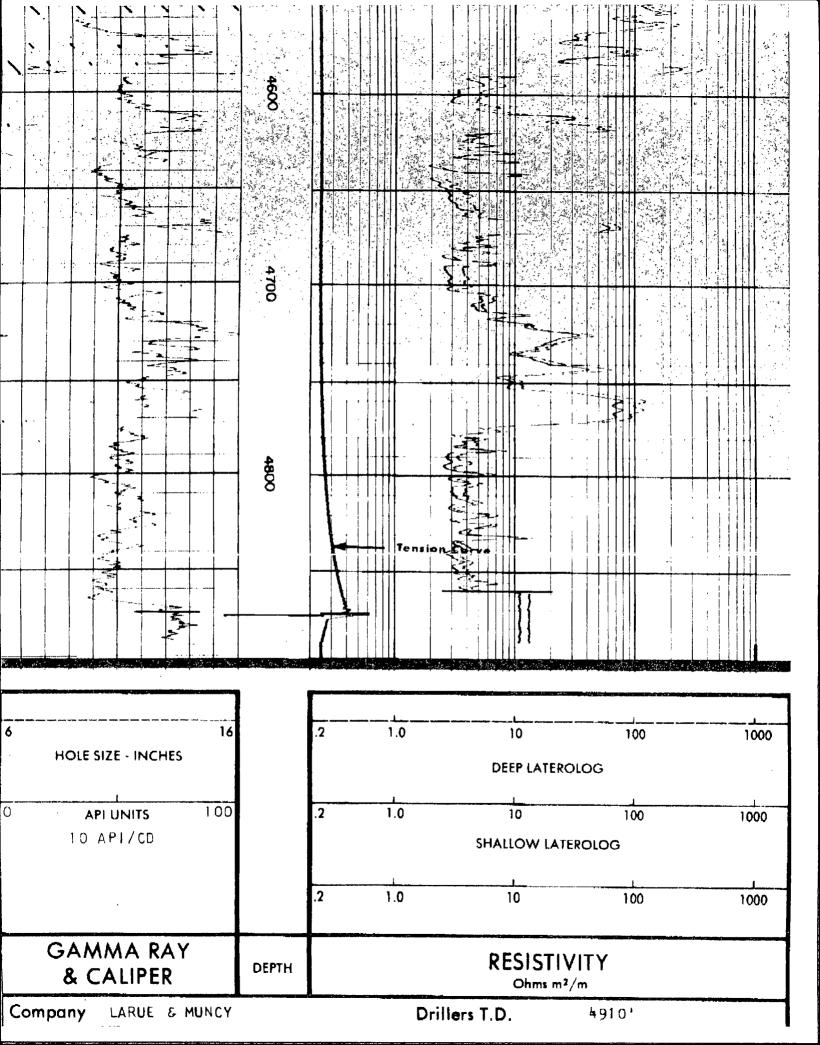
BEAM WIDTH 24"













Fresh Water Sample Analyses

PERMAIN BASIN OPERATIONS LABORATORY WATER ANALYSIS REPORT HOBBS, NEW MEXICO

HALLIBURTON

COMPANY	Marbob						REPORT DATE	-	<u>W09-05</u>	9 / 30, 2009	
	Stoc	k w	ater	Well			DISTRIC	Т	Hobbs		
	SE/4	NE/4	-se/4	- Sec. 20		;-28	2				
SUBMITTED BY						.					
WELL Stoc	k Tanks		DEPTH			\backslash	FORMAT	ΓΙΟΝ			
COUNTY			FIELD				SOURCE	Ξ			
SAMPLE	5-26S-28C			C-2160 5-S	_	(203413				
Sample Temp.	70	°F		70	°F		70	°F			٦°
RESISTIVITY	15.8			3.41			3.41				
SPECIFIC GR.	1.000			1.002	_		1.002				
рН	8.57			8.12	_	÷	7.89				·····
CALCIUM	700	mpl		1,000	mpl		1,150	mpl			 mpl
MAGNESIUM	390	mpl		750	mpl		750	mpl			mpl
CHLORIDE	45	mpl		1,222	mpl		316	mpl			 mpl
SULFATES	Light	mpl		Moderate	mpl	M	oderate	mpl			mpl
BICARBONATES	170	mpl		366	mpl		292	 mpl			 mpl
SOLUBLE IRON	0	 mpi		0	mpl		0	 mpl			 mpl
KCL	Negative			Negative		N	legative				
Sodium		 mpl			mpl			mpl		0	 mpl
TDS		mpl			mpl			mpl		0	mpl
OIL GRAVITY	@	°F		@	°F		@	°F		@	°F
REMARKS											

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management: it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Co.

.

MPL = Milligrams per litter Resitivity measured in: Ohm/m2/m

ANALYST: JH

New Mexico Office of the State Engineer

Point of Diversion by Location

(dilatters are 1=NW 2=NE 3=SW 4=SE)

	pth	ter	06		96			
(in feet)	Depth Depth	Well Water	205	150	176			
	Ľ	Finish Date	04/08/1965	09/10/1975	01/20/1975			
in meters)		Y Start Date	3551338* 04/04/1965	3554004* 07/15/1975 09/10/1975	3553268* 01/15/1975 01/20/1975	3553267	3551935*	· · · · · · · · · · · · · · · · · · ·
(NAD83 UTM in meters)		×	585470	586843	584733	584733	585669	•
(quarters are smailest to largest) (999	Source 6416 4 Sec Tws Rng	4 3 28 25S 28E	1 22 25S 28E	Shallow 4 2 4 20 25S 28E	4 2 4 20 25S 28E	28 25S 28E	
		Grant						
(acre ft per annum)		basin Use Diversion County POD Number	3 ED C 01278	3 ED C 01522	3 ED <u>C 01573</u>	3 ED C 03413 POD1	ED <u>C 12781</u>	•
(acre ft	Sub	basin Use Dive	STK	DOM	PRO	STK	STK	
		WR File Nbr	C 01278	C 01522	C 01573	C 03413	C 12781	

Record Count: 5

POD Search:

POD Basin: Carlsbad

PLSS Search:

Range: 28E Township: 25S Section(s): 16, 17, 20, 21, 22, 28, 29

Sorted by: File Number

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability for any particular purpose of the data. *UTM location was derived from PLSS - see Help

7/22/09 10:33 AM

Page 1 of 1



E-mailed 09/12/09

August 18, 2009

Artesia Daily Press P. O. Box 190 Artesia, NM 88211-0190

> Re: Legal Notice 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,

 \mathcal{L}_{c}

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 MYOX 21 #1, is located 1980' FNL 660' FWL, Sec. 21, Township 25 South, Range 28 East, Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware and Bone Spring formations. The disposal water will be injected into the Delaware formation at a depth of 3500-4850' at a maximum surface pressure of 700 psi and a maximum rate of 5000 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 575-748-3303.

Published in the Artesia Daily Press, Artesia, New Mexico , 2009.



September 16, 2009

Devon Energy Corporation 20 N. Broadway, Ste. 1500 Oklahoma City, OK 73102-8260

> Re: Application to Inject MYOX 21 SWD #1 <u>Township 25 South, Range 28 East, NMPM</u> Section 21: 1980 FNL 660 FWL, Unit E Eddy County, New Mexico

Ladies and Gentlemen:

Enclosed for your review is a copy of Marbob Energy Corporation's application to convert the referenced well to salt water disposal. 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.

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

Sincerely,

Brian Collins Petroleum Engineer

BC/dlw enclosure

Jones, William V., EMNRD

From: Sent: To: Subject: Attachments: Debora Wilbourn [geology@marbob.com] Wednesday, September 23, 2009 2:35 PM Jones, William V., EMNRD MYOX 21 SWD #1 Proof of Notification.pdf

Proof of notification

Debora L Wilbourn, GeoTech <u>geology@marbob.com</u> Marbob Energy Corporation PH 575-748-3303

This inbound email has been scanned for malicious software and transmitted safely to you using Webroot Email Security.

 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 mallplece, or on the front if space permits. 1. Article Addressed to: 	COMPLETE THIS SECTION OF OF LIVERY A. Bignature X
DEVON ENERGY CORPORATION 20 N BROADWAY STE 1500 OKLAHOMA CITY, OK 73102-8260	Service Type Definition Mail Definition Mail Registered Definition Merchandise Insured Mail Definition C.O.D.
	4. Restricted Delivery? (Extra Fee)
2. Article Number 7006 (Transfer from service label)	0810 0000 8979 7367

Jones, William V., EMNRD

From: Sent: To: Subject: Attachments: Debora Wilbourn [geology@marbob.com] Tuesday, September 22, 2009 7:50 AM Jones, William V., EMNRD Myoxx 21 #1 Affidavit of Publication.pdf

Affidavit of Publication

Debora L Wilbourn, GeoTech <u>geology@marbob.com</u> Marbob Energy Corporation PH 575-748-3303

This inbound email has been scanned by the MessageLabs Email Security System.

	f Publication	
STATE OF NEW MEXIC	0	
County of Eddy:		
GARY D. SCOTT		being duly
sworn,says: That he is th	e PUBLISHER	of The
Artesia Daily Press, a da	ily newspaper of general	
circulation, published in E	English at Artesia, said county	
and county and state, an	d that the here to attached	
······	Legal Notice	
was published in a regula	ar and entire issue of the said	
Artesia Daily Press,a dail	y newspaper duly qualified	
for that purpose within th	e meaning of Chapter 167 of	
the 1937 Session Laws	of the state of New Mexico for	
1 Consecutive	week/days on the same	
day as follows:		
First Publication	September 15, 2009	
Second Publication		
Third Publication		
Fourth Publication		
	nkett	
Subscribed and sworn to	before me this	
15 Day	September	2009
OFFICIAL Jo Morgan NOTARY P		
My comm	ission expires:	
_ A Mu	egan	
Notary Public	; Eddy County, New Mexico	

Copy of Publication:



Marbob Energy Corporation, Poet Office Box 227, Artesia Mexico, 88211-0227, has filed Form C-100 (Application for Authorization to inject) with the New Medco **Oil Conservation** Division seeking administrative approval for a seit water disposal well. The proposed well, the MYOX 21 #1, is located 1980' FNL 660' FWL Sec. 21, Township 25 South, Range 28 East. Eddy County, New Mexico. Disposal water will be sourced from area wells producing from the Delaware and Bone Spring formations. The disposal water will be injected into the Delaware formetion at a depth of 3500-4650' at a maximum surface pressure of 700 psi and a maximum rate of 5000 BWPD. Any interested party who has an objection to live must the notice in white the OI Curation Enteion, 1220 South Saint Francia Street, Serita Fe, New Mexico, \$7505, within fillion (15) days of this notice. Any interested party with questions of com-Mints may contact Brian Collina at Marbob Energy Corporation, Post Office Box 227, Artesia, New Mexico 88211-0227, or cell 575-748-3303. Published in the Artasia Daily Press, Artesla, NM, September 15, 2009 1 Legal No. 20845