STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OCCUPANTION DIVISION

2013 MAR 11 P 4: 24

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF NEW MEXICO SALT WATER DISPOSAL CO., INC. FOR AUTHORIZATION TO INJECT

Case No. 14960

SUPPLEMENTATION OF RECORD

Applicant New Mexico Salt Water Disposal Co., Inc. hereby supplements the hearing record with the filing of its Amended C-108 Application for Authorization to Inject. The amended application is attached hereto as Exhibit A.

Respectfully submitted,

HINKLE, HENSLEY, SHANOR & MARTIN, LLP

Gary W. Larson

Post Office Box 2068

Santa Fe, NM 87504-2068

(505) 982-4554

Counsel for New Mexico Salt Water Disposal Co., Inc.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 11th day of March, 2013 I served a true and correct copy of the foregoing *Supplementation of Record* via email to:

Justin Johnson
Diamond & Half, Inc.
P.O. Box 367
Tatum, NM 88267-0367
jljohnson@leaco.net

Gary W. Larson

New Mexico Salt Water Disposal Company, Inc.

Amended C-108 Application

As per OCD Case No. 14960 Hearing March 7, 2013 Santa Fe, New Mexico

Represented by Gary W. Larson Hinkle, Hensley, Shanor & Martin, L.L.P. 505-982-4554

Rory McMinn, VP 575-622-3770 Ext. 307

Amended application by Kay Havenor, PhD, CPG 575-626-4518 March 10, 2013

New Mexico Salt Water Disposal Company, Inc. State 28 #1 API: 30-025-25558 Unit I, Sec 28, T10S-R34E Lea Co., New Mexico



STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE:Storage	Secondary R	lecovery	Pressure M	faintenance		x
	Application qual	lifies for administrative	approval? x	Yes	No	,	
П.	OPERATOR: _	New Mexico Salt Wat	ter Disposal Co.,	Inc. OGRID	15878		
	ADDRESS:	P.O. Box 1518; Ross	well, AM 88202				
	CONTACT PAR	RTY: Rory McMinn 5	575/622-3770 Ext.	307 or 575/6	26-7100 Ce11	PHONE: _	
Ш.		Complete the data require Additional sheets may be			for each well prop	posed for injection.	
IV.	Is this an expans If yes, give the D	sion of an existing proje Division order number a	ect?	Yes X ct:	No		
V.	Attach a map tha drawn around ea	nt identifies all wells and ch proposed injection w	d leases within two rell. This circle iden	miles of any pro tifies the well's	oposed injection varea of review.	well with a one-hal	f mile radius circle
VI.	Such data shall it	on of data on all wells on clude a description of a plugged well illustration	each well's type, co	nstruction, date			
VII.	Attach data on th	ne proposed operation, is	ncluding:				
	 Whether the Proposed ave Sources and a produced wa If injection is 	erage and maximum dai system is open or close erage and maximum injet an appropriate analysister; and, s for disposal purposes inalysis of the disposal zero.	d; ection pressure; of injection fluid ar into a zone not prod	nd compatibility	with the receiving	one mile of the pro	posed well, attach
*VIII.	depth. Give the with total dissol	te geologic data on the geologic name, and dep ved solids concentration to be immediately under	th to bottom of all uns of 10,000 mg/l o	inderground sou r less) overlying	urces of drinking	water (aquifers con	taining waters
IX.	Describe the proj	posed stimulation progra	am, if any.			;	
*X. resubi	Attach appropria	te logging and test data	on the well. (If we	il logs have bee	en filed with the I	Division, they need	not be
*XI.		al analysis of fresh water sal well showing location				d producing) within	n one mile of any
XII.	Applicants for di and find no evid drinking water.	sposal wells must make ence of open faults or a	an affirmative state ny other hydrologic	ement that they connection between	have examined av ween the disposal	vailable geologic and zone and any unde	nd engineering data erground sources of
XIII.	Applicants must	complete the "Proof of	Notice" section on	the reverse side	of this form.		
XIV.	Certification: I hand belief.	nereby certify that the in	nformation submitte	d with this appl	lication is true and	d correct to the bes	t of my knowledge
	NAME:		Rory McMinn		TITLE: _vi/	ce President	
	SIGNATURE: _	RL			DA	ATE: <u>Jamuary 10,</u>	2013
*	If the information	ESS: rmcminn@read-s n required under Section late and circumstances of	ns VI, VIII, X, and	u . 1.	een previously su	*	t be resubmitted.

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, 1220 South St. Francis Dr., 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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: No	ew Mexico Salt Water Disposal Com	pany, Inc.		(OGRID	15878)
WELL NAME & NUM	BER: State 28 #1			30-025-25558	
WELL LOCATION:	1980' FSL & 660' FEL	I		10S 34E	
	FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE
<u>WELLBO</u>	RE SCHEMATIC		PROPOSED WELL	CONSTRUCTION DA	<u>ITA</u>
See attached diagram			Surface	e Casing	
		Hole Size:	15"	Casing Size: <u>12-3/4</u>	,,,
		Cemented with:	SX.	or <u>144</u>	ft ³
		Top of Cement:	Surface	_ Method Determine	d: Opr
			Intermedi	ate Casing	
		Hole Size:	9 -3/4 "	Casing Size: 8-5/8"	
		Cemented with:	350 sx.	or	ft ³
		Top of Cement:	Surface	_ Method Determined on Casing	l: Opr
		Hole Size:	7-5/8"		N-80 to 4;206'
			222 <u>5</u> sx.		_
		Top of Cement:	3,900	Method Determined	l:TS
		Total Depth:1		n Interval	
		From	5,588'	To 5,560'	
		(Peri	Forated or Open Hole; i	ndicate which) Perf	orated

INJECTION WELL DATA SHEET

INJECTION WELL DATA SHEET

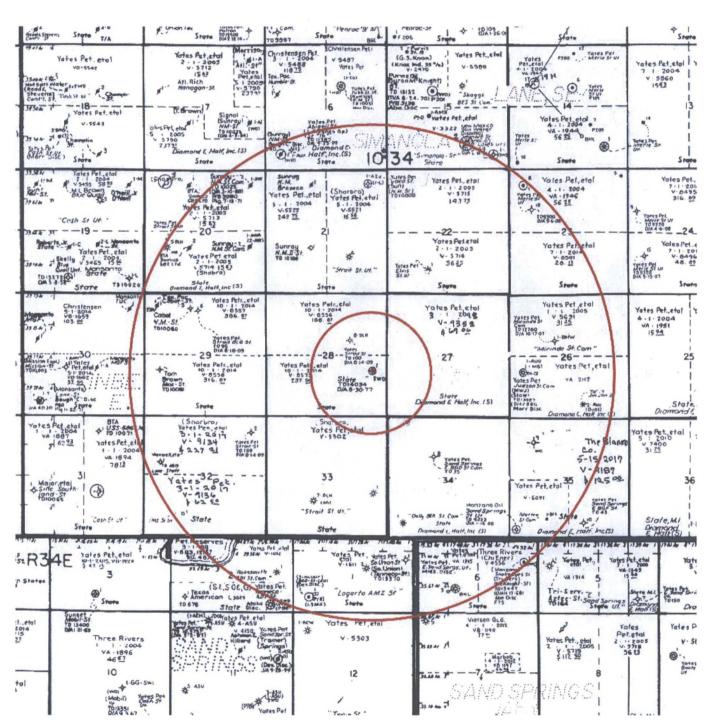
bing Size: 2-3/8" 4.7# J-55 Lining Material: Seal-Tite	
pe of Packer: 2-3/8" x 4-1/" nickel-plated	
cker Setting Depth: Approx 5,550 ft	
her Type of Tubing/Casing Seal (if applicable):	
Additional Data	
Is this a new well drilled for injection? Yes X No	
If no, for what purpose was the well originally drilled? Devonian wildcat converted to Devonian SWD-	<u>-206</u>
Name of the Injection Formation: Glorieta	
Name of Field or Pool (if applicable):	
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 well detail in Item VI, below.	
Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: None in AOR '	

State 28 #1

1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Area of Review ½-Mile AOR and 2-Mile Radius



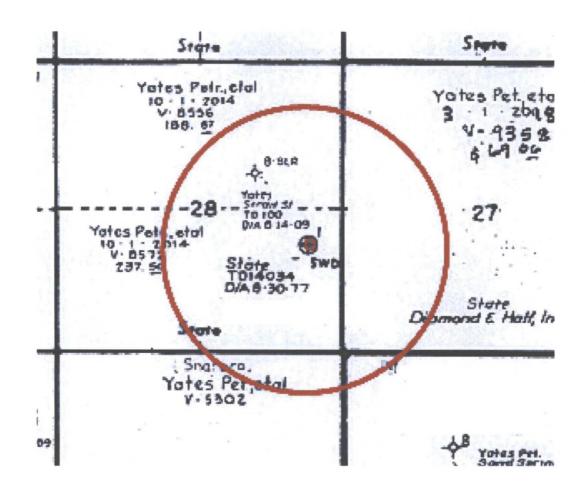
Land data as of February 15, 2013

Amended C-108 prepared by Geoscience Technologies, Kay Havenor, PhD, CPG

1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Enlarged View of AOR



New Mexico Salt Water Disposal #1 State 28 State 28 #1 1980' FSL & 660 FEL Unit I, Sec. 28, T10S-R34E Lea Co., NM

Item VI: Data on wells in AOR that penetrate the proposed injection interval:

API	WELL_NAWE	STATUS	SDIV	SEC	TWN	RANGE	FIG NS	FIG EW	OCD	OPERATOR	加田	LAND	PLUG_DATE	SPUD	Elevel IV	VD_DEPTH
3002525558	STATE 28 001	Active	1	28	10.05	34E	1980 S	650 E	1	NEW MEXICO SALT WATER DISPOSAL	S	S		26-Aug-77	4203	14024

1. 3002525558 New Mexico Salt Water Disposal, Inc., State $28 \, \#1$, OCD Unit I, Sec. 28, T10S-R34E, Lea Co., 1980' FSL & 660' FEL. KB 4223' GL 4203 Spud 6/17/1977. 15" hole set $12^{-3}4''$ @427' w/450 sx cmt, circ 55 sx. $9^{-3}4''$ hole set $8^{-5}8''$ 24/28/32# $8^{-5}8''$ @4,206' w/1350 sx cmt, circ to surface. 7-78'' hole to 13,531' set $4^{-1}2''$ N-80 w/DV @10,001' stage 1 w/1100 sx cmt, stage 2 w/1125 sx cmt, TOC 3,900' TS. Drilled OH w/3-34'' bit to TD 14,024'. DST 13,431'-531' open 1 hr, rec 2500' WB + 6560' sulf wtr. Perf $4^{-1}2''$ 13,424'-13,531'. Acidized perfs and OH. Completed as SWD-206. SI Dec 2012 due to tbg blockage, failure and inability to recover tbg and pkr below 5,900'.

Note: 3002538862 Yates Petroleum Corp. Strait BLR State Com #8, OCD Unit G, Sec. 28, T10S-R34E, Lea Co., 1980' FNL & 1650' FEL, was a lease-holding well drilled to TD of 100'. Hole filled w/pea gravel, top 10' w/1-cubic yard cement. P&A 8/14/2009.

Item VII:

- 1. The maximum injected volume anticipated is to be 3,500 BWPD. Average anticipated is 1,700 BWPD.
- 2. Injection will be through a closed system.
- 3. Maximum injection pressure is expected to be 1,167 psi, or as adjusted for top perforation.
- 4. Sources will be produced water. Theses will be compatible with waters in the disposal zone.
- 5. NM WAIDS analysis produced water from the overlying San Andres in Legacy Reserves Lane B3, Sec. 1, 10S-R33E, API 30-025-00975, located 5.1 miles NE of the subject well. TDS 84,547 mg/L. These and similar waters are expected to be chemically compatible with waters in the proposed Glorieta disposal interval.

STIFF DAVIS METHOD SCALE CALCULATION

Lease/Well		General Character	рН		0	Total hardness						
		100	Specific Gr	avity	0	Resistivity			Total Dissolved Solid		84547	
lons mg/L	103000000000000000000000000000000000000				10000							
Ca ⁺⁺ 0		Mg ⁺⁺	1	Na ⁺	0	Ba ⁺⁺	0	Fe ⁺⁺	0	Sr ⁺⁺	0	
CO3=		HCO ₃	107	SO ₄ =	211	CF	51580	ОНГ	0			

State 28 #1

1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Item VIII:

Disposal will be into the Permian Glorieta Formation underlying the San Andres Formation. The lithology is generally a white, fine- to medium-grained siliceous to anhydritic and/or calcareous sandstone. Logs show the Glorieta in the subject well suggest good porosity and permeability. The Glorieta in this area is not known to be productive of hydrocarbons.



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Well Drill Dates & Depths)

No PODs found

POD Search:

POD Basin: Lea County

Basin/County Search:

County: Lea

UTMNAD83 Radius Search (in meters):

Easting (X): 643940

(Northing (Y): 3698330

Radius: 805

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, or suitability for any particular purpose of the data.

2/24/13 11.31 AM

ACTIVE & INACTIVE POINTS OF DIVERSION

Review of the records of the NM OSE show no known water wells within the AOR of this application. Several applications for drilling water have been filed in the 1-mile review area, but no drilling, completion or other data has been recorded.

The surface geology of the greater area, including the 2-mile radius as shown in Applicant's C-108 application is Quaternary Ogallala Formation deposits of lower Pliocene to middle Miocene age with surficial Recent blow sands. Potable waters in the greater area are confined to the Ogallala. In the subject area the Ogallala waters are protected by both the surface and intermediate casing strings which were both cemented to the surface. The base of the Ogallala in this area is approximately 65' and rests on Cretaceous sandstones and clay.

Item IX:

Operator may attempt to acidize the Glorieta after evaluating formation perforation.

Item X:

Log intervals of the subject well are attached in the original C-108 application. No logs are on file with OCD. Read & Stevens, Inc have agreed to file copies of this well's logs to the Hobbs District 1 office.

Item XI:

Available OSE records in the 1-mile area surrounding the proposed SWD show no domestic or livestock wells. Please note Item VIII above.

New Mexico Salt Water Disposal #1 State 28 State 28 #1 1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

30-025-25558

Item XII:

There is no geological evidence of open faults, fractures or hydrological connection between the disposal zone and any possible underground sources of protectable water.

Addendum:

Operator formation tops: Rustler Anhydrite 2200', T/salt 2250', B/salt 2800', Yates 2550', San Andres 4254', Glorieta 5580', Tubb 7040', Abo 7827', Wolfcamp 9193', Penn (Cisco) 9910', Canyon 10454', Strawn 11110', Atoka 11614', Mississippian 12560', Woodford 13336, Devonian 13420.

New Mexico Salt Water Disposal #1 State 28 State 28 #1 1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Present Shut-in Configuration of State 28 #1

PRESENT COMPLETION DIAGRAM FOR SWD-206

API: 30-025-25558

Operator: New Mexico SWD Company

State 28 Well No: 1

KB: 4223 Location: Sec 28, T10S-R34E Lea Co., NM GL: 4209 Footage: 1980 FSL, 660 FWL Original Surface Csg Size: 12-3/4" Set @: 427 Sxs cmt: 750 Circ: 55 sx TOC: Surface 15" Hole Size: 4-1/2" TOC 3900 TS 4206 Original Intermediate Csg Size: 8-5/8" Set @: 4206 Sxs cmt: 450 Circ: Yes TOC: Surface Hole Size: 9-3/4" **Original Production Csg** Size: 4-1/2" Set @: 13531 Sxs cmt: 1) 1100 sx, 2) 1125 sx Circ: No TOC: 3900' TS T/Fish 5900 Hole Size: 7-7/8" Attempted recovery unsuccessful DV 10001 Top Siluro-Devonian 13424 13531 OH 3-3/4" 12970 TD 14021

Not to scale

State 28 #1

1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Proposed Glorieta SWD Configuration of State 28 #1

PROPOSED COMPLETION DIAGRAM FOR SWD

API-

30-025-25558

Operator: New Mexico SWD Company

Lease:

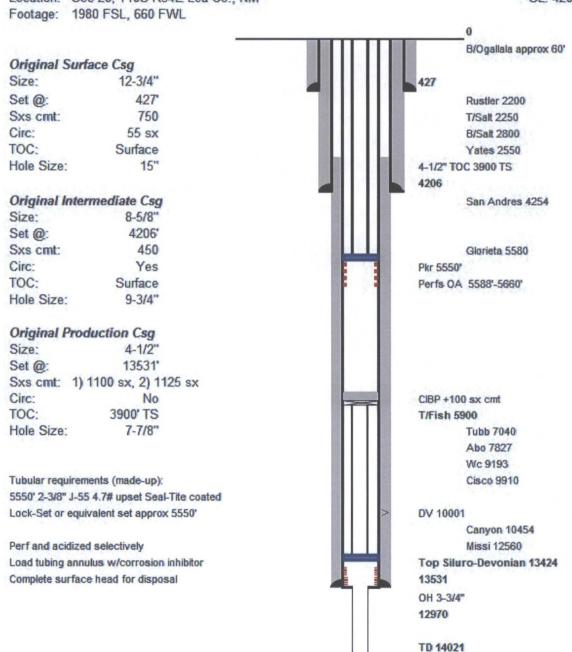
State 28

Well No: 1

KB: 4223

Location: Sec 28, T10S-R34E Lea Co., NM

GL: 4209



Not to scale

1980' FSL & 660 FEL

Unit I, Sec. 28, T10S-R34E Lea Co., NM

Item XIII: Notices:

Minerals Owner:

State Land Office P.O. Box 1148 Santa Fe, NM 87504

Surface Owner:

State Land Office P.O. Box 1148 Santa Fe, NM 87504

Surface Owner Sec. 27

Justin Johnson Diamond & Hall, Inc. P.O. Box 367 Tatum, NM 88267-0367

Operators:

Yates Petroleum Corporation 105 S. 4th St. Artesia, NM 88210

All of Sec. 27, 28 and 33

Note: Sec. 34 is unleased SLO minerals as of the New Mexico SWD Company's date of notifications.

New Mexico Salt Water Disposal #1 State 28 State 28 #1 1980' FSL & 660 FEL Unit I, Sec. 28, T10S-R34E Lea Co., NM

Item XIII: Legal Publication

Legal Notice January 9,10,11, 12,13, 2013

New Mexico Salt Water Disposal Company, Inc.; P.O. Box 1518; Roswell, NM 88202 is making application to the Oil Conservation Division; 1220 S. St. Francis Drive, Santa Fe, NM 87505 Attention:Richard Ezeanyim, Bureau Chief to change the disposal zone within the following well:

API # 30-025-25558 State 28 #001 Unit Letter I, 1980' FSL & 660' FEL, Section 28 T10S and R34E Lea County, NM

Current disposal zone -Devonian 13,424' to 14, 024' Proposed disposal zone -Glorieta 5,588 to 5,660

Comments should be sent to the OCD at the above address. #27831

Advertising Receipt

Hobbs Daily News-Sun

201 N Thorp P. O. Box 936 Hobbs, NM 88241

Phone: 575-393-2123 Fax: 575-397-0610

READ & STEVENS, INC. JOHN MAXEY P.O. BOX 1518 ROSWELL, NM 88202 Cust #: a0107570
Ad #: 00107194
Phone: (575)622-3770
Date: 01/08/2013

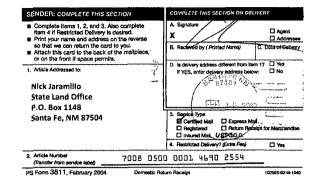
Ad taker: C2 Salesperson: 01

Sort Line: 27831 Classification 671

Description	Start	Stop	ins.	Cost/Day	Total
07 07 Daily News-Sun	01/09/2013	01/13/2013	5	22.47	112.35
AFF2 Affidavits (Legals)					6.00
BOLD bold					1.00

New Mexico Salt Water Disposal #1 State 28 State 28 #1 1980' FSL & 660 FEL Unit I, Sec. 28, T10S-R34E Lea Co., NM

Item XIII: Certified Mail Receipts



(Domestic Mail C	Service re D MAIL: RE Only; No Insurance 6 I C I A L	Coverage Provided) at www.usps.com;
DFF	: 46	
	3.10	Postmark 83
Return Receipt Fee	255	Postmark Hors
Restricted Debugy Feb		FEB 1 5 2013
(Endorsement Required) (C) (C) (Total Postage & Fees	\$ 6.11	THE STATE OF THE S
Epot To	State Land Office	- IN-P
Street, Apr. No.; or PO Box Mo. City, State, ZiP+4	P.O. Box 1148 Santa Fe, NM 87504	
PS Form 3800 August 2	006	See Payers for instruction:

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete Items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired. Pint your name and address on the sevene Pint your name and address on the sevene Attach this card to the back of the mailpiece, or an the front if space permits. Article Addressed to: Kathle Porter Yates Petroleum Corp. 105 S. Fourth St. Artesia, NM 88210	Supplier X
	I Insured Mail C.C.O.D. 4. Restricted Delivery? (Extra Fee) D Yes
2. Article Number 7008 05	00,0001 4690 2530
PS Form 3811, February 2004 Domestic F	Return Receipt 102595-02-44-1540



SENDER: COMPLETE THIS SECTION	ON	COMPLETE THIS !	SECTION ON DEL	IVERY
Complete items 1, 2, and 3, Also or item 4 if Restricted Delivery is desired in the print your name and address on the so that we can return the card to you Attach this card to the back of the items.	ed. e reverse ou.	A. Signature A. Signature B. Received by (Pr	Miles Inted Name)	☐ Agent ☐ Addresse C. Date of Deliver 2/19/(3
or on the front if space permits. 1. Article Addressed to:		D. is delivery address if YES, enter deli	s different from its very address belo	m 17 🗆 Yes
Justin Johnson				
P.O. Box 367				
Tatum, NM 88267-0367		3. Septice Type Certified Mail Registered insured Mail		sil elpt for Merchandled
		4. Restricted Delive	ry? (Extra Fee)	C) Yes
2. Article Number (Transfer from service label)	7008 05	00 0001 46	90 2547	

