Form 3160-5 (August 1999)	U. D STATES DEPARTMENT OF THE INTERIO BUREAU OF LAND MANAGEMEN RY NOTICES AND REPORTS O	OR 1	. M. Oil Cor 325 N. French obbs, NM - 38				
Do not use t abandoned w	6. If Indian, Allottee or Tribe Name						
SUBMIT IN TF	RIPLICATE - Other Instructions	ON revers	8\$/de	7. If Unit or CA/Agree	ment, Name and/or No.		
2. Name of Operator	Other			8. Well Name and No.	·		
Manzano Oil Cor	poration			Appleseed Fed Sam #1 9. API Well No.			
3a. Address	3b. P1	none No. (includ		30-025-20377			
	Roswell, NM 88202 (!	505) 623	-1996	10. Field and Pool, or Exploratory Area			
1980' FNL & 660			-	Featherstone Bone Spring 11. County or Parish, State			
Sec 17, T2OS, R	35E			Lea County, NM			
12 CHECK AL	PROPRIATE BOX(ES) TO INDIC	ATE NATI	DE OF NOTICE DE				
			· · · · · · · · · · · · · · · · · · ·	FORT, OR OTHER			
TYPE OF SUBMISSION			PE OF ACTION				
Notice of Intent	Acidize Deep	p e n ture Treat	 Production (Start/F Reclamation 	-	Shut-Off		
Subsequent Report		Construction	Recomplete	C Well I Other	ntegrity		
		and Abandon	Temporarily Aban				
Ginal Abandonment Notice	Convert to Injection D Plug	Back	A Water Disposal				
Attach the Bond under which t following completion of the inv testing has been completed. Fi determined that the site is ready	ectionally or recomplete horizontally, give su he work will be performed or provide the B olved operations. If the operation results in inal Abandonment Notices shall be filed onl for final inspection.) for water disposal pe	ond No. on file a multiple com ly after all requ	with BLM/BIA. Required pletion or recompletion in irements, including reclam	d subsequent reports sha	Il be filed within 30 days		
	,						
					\triangleright		
14. I hereby certify that the foregoir Name (Printed/Typed)	ng is true and correct						
Allison Hernande	2	Title	Engineering	g Technician			
Signature Aller	Demandy_	Date	5/02/00				
	THIS SPACE FOR FED	ERAL OR ST	ATEOFFICEUSE				
Approved by (ORIG, SGD.)	GARY GOUBLEY	3FTDO	UM ENGINEER	l Datc	*** * * <u>1993</u> -		
Conditions of approval, if any, are	attached. Approval of this notice does not I or equitable title to those rights in the su	warrant or	fice				
Title 18 U.S.C. Section 1001 and Tit States any false, fictitious or fraudule	le 43 U.S.C. Section 1212, make it a crime in statements or representations as to any ma	for any person k tter within its ju	nowingly and willfully to risdiction.	make to any department	or agency of the United		

5 GWW

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abanden a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present

productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c); and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, Bureau Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240 and the Office of Management and Budget, Interior Desk Officer, (1004-0135), Office of Information and Regulatory Affairs, Washington, D.C. 20503.



5.00 1 # # # # #

Water Production & Disposal Information

In order to process your disposal request, the following information must be completed:

- 2. Amount of water produced from all formations in barrels per day 60 BWPD
- Attach a current water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates. (One sample will suffice if the water is commingled) Attached.
- 4. How water is stored on the lease 500 bbl fiberglass tank
- 5. How water is moved to the disposal facility Flowline
- 6. Identify the Disposal Facility by:
 - A. Facility operators name Manzano Oil Corporation
 - B. Name of facility or well name & number Appleseed SWD #2
 - C. Type of facility or well (WDW)(WIW)etc. WDW
 - D. Location by 1/4 1/4 NESE Section 17 Township 20S Range 35#
- 7. Attach a copy of the State issued permit for the Disposal Facility

Attached.

Submit to this office, **414 W. Taylor, Hobbs, NM 88240**, the above required information on a Sundry Notice, form 3160-5. Submit 1 original and 5 copies, within 20 days from receipt of notice. (This form may be used as an attachment to the Sundry Notice). Call at (505)393-3612 if you have any questions.





Oilfield Solutions, Inc. 2614 S.C.R. 1257, Midland, Tx. 79706

WATER ANALYSIS REPORT

Company: Location: Source: Data Samula	MANZANO APPLESEED # 1	Sampled By: Analysis Date: Salesman:	L Chem April 18, 2000 Louis Edgett		
Date Sampled: April 7, 2000					

AN	ANALYSIS		mg/L			EQ. WT.		MEQ/L	
				6.00	===		5 Z Z		**********
1. 2.	pH Specific Constitut BD/6D f			1.097					
	Specific Gravity 80/60 f.			legative					
3.	Hydrogen Sulfide			lot Determined					
· • 4.	Carbon Dioxide			lot Determined					
5.	Dissolved Oxygen		г		1	17.0	_	0.00	
6.	Hydroxyl (OH-)			0	1	30.0		0.00	
7.	Carbonale (CO3=)			•	<i>'</i>	51.1		6.60	
8.	Bicarbonate (HCO3-)			88,980	,	35.5		2,505.48	
9.	Chloride (Cl-)			3,109		48.8		63.71	
10.	Sulfate (504=)			3,103	,	40.0	-	GD.71	
11.	Calcium (CA++)			11,703	1	201	=	582.24	
12.	Magnesium (Mg++)			3,842	1	12.2	Ξ	314.92	
13.	Sodium (Na+)			38,631	1	23.0	•	1,679.63	
14.	Barium (Ba+→)		1	Vot Determined					
15.	Total Iron (Fe)			0.00					
16.	Dissolved Solids			146,668					
17	Filterable Solids								
18.	Total Solids			146,6 68					
19.	Total Total Hardness As CaCO3			45,040					
20.	Suspended Oil								
21.	Volume Filtered (ml)								
2 7.									
22 .	Resistivity @ 75 F. (calculated)	0.053 /cm.							
23 .	CAC03 Saturation Index								
	@80 F.	-0.1638							
	@100 F.	0.1462		PROBABLE MIN					-
	@120 F.	0.4062		COMPOUND	Ð	2. WT:	X	MEQ/L	= mg/L
	@140 F.	0.7662					*********		
	@160 F.	1.1162		Ca(HCO3)Z		81.04		6.60	535
				CaSO4		6 8.07		63.71	4,337
24.	Calcium Sulfate	1,547	mg/L	CaCl2		55.50		511.93	28,412
	soluoility @ 90 F.			Mg(HCO3)2		73.17		0 00	0
				MgSO4		60.19		0.00	0
				MgCL2		47.62		314.92	14,995
				· NaHCO3		84.00		0.00	0
				NaSO4		71.03		0.00	Ô
				NaCl		58.45		1,679.63	98,191
Cher	niet								

Chemist: ______







NEW MEXICO EN RGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131



ADMINISTRATIVE ORDER SWD-670

APPLICATION OF MANZANO OIL CORPORATION FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Manzano Oil Corporation made application to the New Mexico Oil Conservation Division on June 18, 1997, for permission to complete for salt water disposal its Appleseed SWD Federal Well No.2 located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 17, Township 20 South, Range 35 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;

(2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;

(3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and

(4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Manzano Oil Corporation is hereby authorized to complete its Appleseed SWD Federal Well No.2 located 1980 feet from the South line and 660 feet from the East line (Unit I) of Section 17, Township 20 South, Range 35 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Yates and Seven Rivers formations at approximately 3935 feet to 4065 feet through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 3900 feet.





Administrative Order SWD-670 Manzano Oil Corporation August 15, 1997 Page 2

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 787 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Yates or Seven Rivers formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

<u>PROVIDED FURTHER THAT</u>, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.





Administrative Order SWD-670 Manzano Oil Corporation August 15, 1997 Page 3

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 15th day of August, 1997.

WILLIAM J. LEMAY, Director

WJL/BES/kv

xc: Oil Conservation Division - Hobbs Bureau of Land Management - Carlsbad



