

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED  
OMB No 1004-0135  
Expires: January 31, 2004

## 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.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
**CHI OPERATING, INC.**3a. Address  
**212 N. Main, Midland, TX 79702**3b. Phone No. (include area code)  
**432-685-5001**4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**NWNW 12 T19S R30E****OCT 09 2008**

OCD-ARTESIA

5. Lease Serial No.

**NMNM0560353**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

**MUNCHKIN FEDERAL 6 FACILITY**

9. API Well No.

**30015 33881**

10. Field and Pool, or Exploratory Area

11. County or Parish, State

**Eddy**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

## WATER DISPOSAL AND PRODUCTION INFORMATION:

Water from this facility comes from the Delaware formation. Water from the Munchkin #6, #8, #9, #10, and #12 are all produced through heater treaters and metered into their own 500 barrel storage tanks on their own locations, then pumped to the three 500 barrel storage tanks on the Munchkin 1 battery, where it is metered and pumped directly in a line to the T-Bone SWD #950 (certification attached). Location of disposal is Oxy T-Bone Federal Well No. 1 (API 30-015-32122) located 660 feet from the North line and 1,980 feet from the West line of Section 33, T18S, R31E, Eddy Co., NM

Water analysis is attached.

ACCEPTED FOR RECORD

OCT 14 2008

Gerry Guye, Deputy Field Inspector  
NMOC-District II ARTESIA14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)**PAM CORBETT**Title **REGULATORY CLERK**

Signature

*Pam Corbett*

Date

**08/26/2008**

ACCEPTED FOR RECORD

OCT 9 2008

/s/ JD Whitlock Jr

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)



Catalyst Oilfield Services  
 11999 E Hwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

## Water Analysis Report

Company:	Chi Operating Inc	Sample #:	10852
Area:	Artesia	Analysis ID #:	1090
Lease:	Munchkin		
Location:	8		0
Sample Point:	Wellhead		

		mg/l		meq/l	mg/l		meq/l
<b>Sampling Date:</b>	8/26/2008	<b>Anions</b>			<b>Cations</b>		
<b>Analysis Date:</b>	9/3/2008	<b>Chloride:</b>		154169.4	<b>Sodium:</b>		69386.1
<b>Analyst:</b>	Mitchell	<b>Bicarbonate:</b>		61.1	<b>Magnesium:</b>		3552.6
<b>TDS (mg/l or g/m3):</b>	248406.3	<b>Carbonate:</b>			<b>Calcium:</b>		20944.2
<b>Density (g/cm3):</b>	1.173	<b>Sulfate:</b>		290.0	<b>Strontium:</b>		
<b>Hydrogen Sulfide:</b>					<b>Barium:</b>		
<b>Carbon Dioxide:</b>	24.00				<b>Iron:</b>		0.6
<b>Comments:</b>					<b>Manganese:</b>		2.270
		pH at time of sampling:		5.9	<b>Conductivity (micro-ohms/cm):</b>		226500
		pH at time of analysis:			<b>Resistivity (ohm meter):</b>		.0442
		pH used in Calculation:		5.9			
		Temperature @ lab conditions (F):		75			

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Values Generated at the Given Conditions (Values of 0.00 are not shown)											
Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		
	°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	
80		-0.28	0.00	-0.39	0.00	-0.34	0.00	0.00	0.00	0.00	0.00
100		-0.20	0.00	-0.46	0.00	-0.35	0.00	0.00	0.00	0.00	0.00
120		-0.12	0.00	-0.53	0.00	-0.34	0.00	0.00	0.00	0.00	0.00
140		-0.04	0.00	-0.58	0.00	-0.30	0.00	0.00	0.00	0.00	0.00



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## Water Analysis Report

Company:	Chi Operating Inc	Sample #:	10848
Area:	Artesia	Analysis ID #:	1091
Lease:	Munchkin		
Location:	9		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	8/26/2008	Chloride:	151166.1	Sodium:	71218.4
Analysis Date:	9/3/2008	Bicarbonate:	36.7	Magnesium:	3586.8
Analyst:	Mitchell	Carbonate:		Calcium:	17639.8
TDS (mg/l or g/m3):	244070	Sulfate:	420.0	Strontium:	
Density (g/cm3):	1.17			Barium:	
				Iron:	0.9
Hydrogen Sulfide:				Manganese:	1.250
Carbon Dioxide:	24.00				
Comments:		pH at time of sampling:	5.7		
		pH at time of analysis:			
		pH used in Calculation:	5.7		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	223400
				Resistivity (ohm meter):	.0448

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Values tabulated at the given conditions. Amounts of solids in 100 cc liq.											
Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	-0.75	0.00	-0.28	0.00	-0.24	0.00	0.00	0.00	0.00	0.00	
100	-0.67	0.00	-0.36	0.00	-0.25	0.00	0.00	0.00	0.00	0.00	
120	-0.59	0.00	-0.42	0.00	-0.23	0.00	0.00	0.00	0.00	0.00	
140	-0.51	0.00	-0.48	0.00	-0.20	0.00	0.00	0.00	0.00	0.00	



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## Water Analysis Report

Company: Chi Operating Inc Sample #: 10851  
Area: Artesia Analysis ID #: 1088  
Lease: Munchkin  
Location: 6 0  
Sample Point: Wellhead

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	8/26/2008	Chloride:	158173.8	Sodium:	70408.8
Analysis Date:	9/3/2008	Bicarbonate:	36.7	Magnesium:	3001.2
Analyst:	Mitchell	Carbonate:		Calcium:	23195.4
TDS (mg/l or g/m3):	255060.2	Sulfate:	240.0	Strontium:	
Density (g/cm3):	1.177			Barium:	
Hydrogen Sulfide:				Iron:	1.1
Carbon Dioxide:	32.00			Manganese:	3.230
Comments:		pH at time of sampling:	5.8		
		pH at time of analysis:			
		pH used in Calculation:	5.8		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	226700
				Resistivity (ohm meter):	.0441

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		
	°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount		
80		-0.56	0.00	-0.43	0.00	-0.39	0.00	0.00	0.00	0.00	0.00
100		-0.48	0.00	-0.51	0.00	-0.40	0.00	0.00	0.00	0.00	0.00
120		-0.40	0.00	-0.57	0.00	-0.38	0.00	0.00	0.00	0.00	0.00
140		-0.32	0.00	-0.63	0.00	-0.34	0.00	0.00	0.00	0.00	0.00



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## Water Analysis Report

Company:	Chi Operating Inc	Sample #:	10849
Area:	Artesia	Analysis ID #:	1087
Lease:	Munchkin		
Location:	10		0
Sample Point:	Wellhead		

		mg/l		meq/l	mg/l		meq/l
<b>Sampling Date:</b>	8/26/2008	<b>Anions</b>			<b>Cations</b>		
<b>Analysis Date:</b>	9/3/2008	<b>Chloride:</b>		155671.1	<b>Sodium:</b>		68164.7
<b>Analyst:</b>	Mitchell	<b>Bicarbonate:</b>		61.1	<b>Magnesium:</b>		6183.0
<b>TDS (mg/l or g/m3):</b>	248795	<b>Carbonate:</b>			<b>Calcium:</b>		18492.0
<b>Density (g/cm3):</b>	1.173	<b>Sulfate:</b>		220.0	<b>Strontium:</b>		
				4.58	<b>Barium:</b>		
Hydrogen Sulfide:					<b>Iron:</b>		1.0
Carbon Dioxide:	20.00				<b>Manganese:</b>		2.140
Comments:		pH at time of sampling:		6.2			
		pH at time of analysis:					
		pH used in Calculation:		6.2			
		Temperature @ lab conditions (F):		75	<b>Conductivity (micro-ohms/cm):</b>		225400
					<b>Resistivity (ohm meter):</b>		.0444

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Values Calculated at the Given Conditions: Amounts of Solids in 100 cc.											
Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	-0.03	0.00	-0.55	0.00	-0.51	0.00	0.00	0.00	0.00	0.00	
100	0.05	0.55	-0.62	0.00	-0.51	0.00	0.00	0.00	0.00	0.00	
120	0.13	1.10	-0.68	0.00	-0.49	0.00	0.00	0.00	0.00	0.00	
140	0.21	1.66	-0.73	0.00	-0.45	0.00	0.00	0.00	0.00	0.00	



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## Water Analysis Report

Company:	Chi Operating Inc	Sample #:	10850
Area:	Artesia	Analysis ID #:	1085
Lease:	Munchkin		
Location:	5		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	8/26/2008	Chloride:	154169.4	Sodium:	69736.0
Analysis Date:	9/3/2008	Bicarbonate:	48.9	Magnesium:	3230.6
Analyst:	Mitchell	Carbonate:		Calcium:	21161.3
TDS (mg/l or g/m3):	248629.9	Sulfate:	280.0	Strontium:	
Density (g/cm3):	1.173			Barium:	
Hydrogen Sulfide:				Iron:	1.2
Carbon Dioxide:	38.00			Manganese:	2.540
Comments:		pH at time of sampling:	5.6		
		pH at time of analysis:			
		pH used in Calculation:	5.6		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	226300
				Resistivity (ohm meter):	.0442

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Values Calculated at the Given Conditions      Amounts of Scale in lb/1000 gal											
Temp	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	-0.67	0.00	-0.40	0.00	-0.35	0.00	0.00	0.00	0.00	0.00	
100	-0.59	0.00	-0.47	0.00	-0.36	0.00	0.00	0.00	0.00	0.00	
120	-0.51	0.00	-0.54	0.00	-0.35	0.00	0.00	0.00	0.00	0.00	
140	-0.42	0.00	-0.59	0.00	-0.31	0.00	0.00	0.00	0.00	0.00	



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Mark E. Fesmire, P.E.**  
Director  
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-950

### APPLICATION OF JUDAH OIL FOR PRODUCED WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

#### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Judah Oil made application to the New Mexico Oil Conservation Division on October 8, 2004, for permission to utilize for produced water disposal its Oxy T-Bone Federal Well No. 1 (API No. 30-015-32122) located 660 feet from the North line and 1,980 feet from the West line of Section 33, Township 18 South, Range 31 East, NMPM, Eddy 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 is hereby authorized to utilize its Oxy T-Bone Federal Well No. 1 (API No. 30-015-32122) located 660 feet from the North line and 1,980 feet from the West line of Section 33, Township 18 South, Range 31 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Grayburg and San Andres formations through perforations from 3,980 feet to 4,310 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of the injection interval.

Administrative Order SWD-950  
Judah Oil  
November 19, 2004  
Page 2 of 3

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**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.

As part of the conversion to injection, the operator shall plug back the well with a cast iron bridge plug and cement to within 200 feet of the bottom of the intended injection interval. In addition, the operator shall estimate the initial reservoir pressure of the injection interval and submit this in writing to the Division (referencing SWD-950).

After installing injection tubing, 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 or an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

The wellhead injection pressure on the well shall be limited to no more than 796 psi. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

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 injection formation. 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 Artesia district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia 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.

**PROVIDED FURTHER THAT,** jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall provide written notice of the date of commencement of injection to the Artesia district office of the Division.



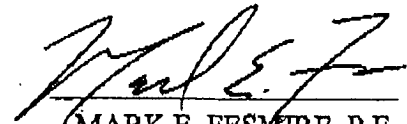
*Administrative Order SWD-950*  
*Judah Oil*  
*November 19, 2004*  
*Page 3 of 3*

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The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

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 19th day of November 2004.

  
MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia  
Bureau of Land Management – Carlsbad



Number 08CD4212  
Page 1 of 2

☒ Certified Mail - Return  
Receipt Requested  
7007302000020649078

☐ Hand Delivered Received  
by

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NOTICE OF INCIDENTS OF NONCOMPLIANCE

Identification

IID	
Lease	NMNM0560353
CA	
Unit	
PA	

Bureau of Land Management Office CARLSBAD FIELD OFFICE				Operator CHI OPERATING INCORPORATED			
Address 620 E GREENE STREET CARLSBAD NM 88220				Address P O BOX 1799 MIDLAND TX 79702			
Telephone 575-234-5911				Attention			
Inspector DE MONTIGNY				Attn Addr			
Site Name MUNCHKIN FEDERAL	Well or Facility 6	1/4 1/4 Section NWNW 12	Township 19S	Range 30E	Meridian NMP	County EDDY	State NM
Site Name	Well or Facility	1/4 1/4 Section	Township	Range	Meridian	County	State

THE FOLLOWING VIOLATION WAS FOUND BY BUREAU OF LAND MANAGEMENT INSPECTORS ON THE DATE AND AT THE SITE LISTED ABOVE

Date	Time (24 - hour clock)	Violation	Gravity of Violation
07/22/2008	09:30	43 CFR 3162.1(a), ONSHORE ORDER #3.III.1.1.	MINOR
Corrective Action To Be Completed By	Date Corrected	Assessment for Noncompliance	Assessment Reference
08/22/2008		\$250.00	43 CFR 3163.1(a)(2)

Remarks

FAILURE TO COMPLY "NOTICE OF INCIDENTS OF NONCOMPLIANCE: NUMBER 08CD421, ISSUED 05/13/08 TO BE CORRECTED BY 06/20/2008. PROVIDE FACILITY DIAGRAM FOR MUNCHKIN FACILITY #6.

IF YOU HAVE ANY QUESTIONS, CONTACT CHERYL DE MONTIGNY AT (505) 234-5911.  
(Remarks continued on following page(s).)

When violation is corrected, sign this notice and return to above address.

Company Representative Title Eng. Tech Signature Pam Cabell Date 8/20/08

Company Comments

WARNING

Bureau of Land Management  
RECEIVED

Incidents of Noncompliance correction and reporting timeframes begin upon receipt of this Notice or 7 business days after the date it is mailed, whichever is earlier. Each violation must be corrected within the prescribed time from receipt of this Notice and reported to the Bureau of Land Management office at the address shown above. Please note that you already may have been assessed for noncompliance (see amount under "Assessment for Noncompliance"). If you do not comply as noted above under "Corrective Action To Be Completed By" you may incur an additional assessment under (43 CFR 3163.1) and may also incur Civil Penalties (43 CFR 3163.2). All self-certified corrections must be postmarked no later than the next business day after the prescribed time for correction.

Section 109(d)(1) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the Federal Land Management Regulations at Title 43 CFR 3163.2(f)(1), provides that any person who "knowingly or willfully" prepares, maintains, or submits, false, inaccurate, or misleading reports, notices, affidavits, record, data, or other written information required by this part shall be liable for a civil penalty of up to \$25,000 per violation for each day such violation continues, not to exceed a maximum of 20 days.

REVIEW AND APPEAL RIGHTS

A person contesting a violation shall request a State Director review of the Incidents of Noncompliance. This request must be filed within 20 working days of receipt of the Incidents of Noncompliance with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Lands Appeals, 801 North Quincy Street, Suite 300, Arlington VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Signature of Bureau of Land Management Authorized Officer <u>[Signature]</u>		Date <u>7/22/08</u>	Time <u>11:10</u>
FOR OFFICE USE ONLY			
Number 15	Date	Assessment \$250.00	Penalty Termination