Form £160-5 (Jui

Facility Name: Halfway Facility

NMOCD Permit Number: R9166.

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR

N.M. Oil ans. Division

FORM APPROVED

CIST

0.2824 Budget Bureau No. 1004-0135

	OF THE INTERIOR Adams NM	U-4864 Expires: March 31, 1993		
	AND MANAGEMENT Artesia, NM	5. Lease Designation and Serial No. LC 029387B		
Do not use this form for proposals to drill	AND REPORTS ON WELLS  or to deepen or reentry to a different reser R PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name		
	N TRIPLICATE	7. If Unit or CA, Agreement Designation		
1. Type of Well Oil Gas Well Other		8. Well Name and No. West Shugart '30' Federal #1		
2. Name of Operator Concho Resources Inc.  3. Address and Telephone No.	9. API Well No. 30015-29166			
110 W. Louisiana, Ste 410; Midland, Tx 79701  4. Location of Well (Footage, Sec., T., R., M., or Survey Desi 1980' FNL & 1980' FWL, Sec. 30, T-18S, R-318	10. Field and Pool, or Exploratory Area North Shugart Morrow  11. County or Parish, State			
1900   NE & 1000   We, 000, 00,		Eddy, NM		
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA		
TYPE OF SUBMISSION	TOTAL OF ACTION			
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water  (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)		
13. Describe Proposed or Completed Operations (Clearly st directionally drilled, give subsurface locations and meas Concho Resources Inc. respectfully requests a so that our method of disposal will be considered.  Name of Formation Producing Water on the Least Amount of Water Produced from each Formation Is Water Disposed Into a Pit? No How is Water Stored on Lease? 2 - 500 bbl fith How is Water Moved to Disposal Facility? True Operator of Disposal System: Controlled Recompositions and measurements.	ease: Shugart Wolfcamp West on Daily: Shugart Wolfcamp West25 BPD perglass tanks ock	ted date of starting any proposed work. If well is at to this work.)*  e. The following information is provided  OCD RECEIVED  ARTESIA		

WATER ANALYSIS ATTACHED

Legal Location: S/2 N/2 and N/2 S/2 Sec. 27, T-20S, R-32E, Lea County, New Mexico

## SEE ATTACHED FOR CONDITIONS OF APPROVAL

	COMPLICA					
14. I hereby certify that the folegoing is true and correct		Production Analyst	Date	04/16/99		
(This space for Federal or State office use)  Approved by  ORIG SGD LES BABYAK		PETROLEUM ENGINEER	Date	MAY 13 1999		
Approved by Conditions of approval, if any:	Tiue					

Title 18 U.S.C. Section 1001, makes 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.

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#### MILLER CHEMICALS, INC.

Post Office Box 298 Artesia, N.M. 88211-0298 (505) 748-1919 Office (505) 746-1918 Fax

### WATER ANALYSIS REPORT

Company : CONCHO RESOURCES Date : 4-19-99
Address : Date Sampled : 4-17-99
Lease : WEST SHUGART 30 FED. Analysis No. : 2021

Well : #1 Sample Pt. : HEATER

	ANALYSIS			mg/L		· meq/L
1.	₽Ħ	6.1				
2.	H25	o				
3.	Specific Gravity	1.050				
4.	Total Dissolved Soli	ds		60468.6		
5.	Suspended Solids			NR		
6.	Dissolved Oxygen			NR		
7.				NR		
8.	Oil In Water			NR		
9.						
10.	• • • • • •					
11.			HCO3	85.0	HC03	1.4
12.	Chloride		Ċ1	37488.0	C1	1057.5
13.	Sulfate		504	625.0	504	13.0
14.	Calcium		Ca	6000.0	Ca	299.4
15.	Magnesium		Mg	1704.2	Mg	140,2
16.	Sodium (calculated)		Na	14536.4	Na	632.3
17_	Iron		Fe	30.0		
18.	Barium		Ba	0.0		
19.	Strontium		Sr	0.0		
20.	Total Hardness (CaCo	03)		22000.0		

#### PROBABLE NINERAL COMPOSITION

"milli equivalents per Lit		Compound	Equiv wt	X meq/L	= mg/L
•	++				
1 2991 *Ca < *HCO3	1 1	Ca (HCQ3) 2	81.0	1,4	113
/>	11	Ca504	60.1	13.0	886
! 140; *Hg> *504	1 131	CeCl2	55.5	285.0	15014
[/		Mg (HCO3) 2	73.2		
632  *Na> *Cl	1057	NgSO4	60.2		
++	+=====+	MgC12	47.6	140.2	6674
Saturation Values Dist. Wa	ter 20 C	<b>ЖаНСОЗ</b>	84.0		
CaC03 13	mg/L	Na2904	71.0		
CaSO4 * 2H2O 2090	mg/L	NaCl	58.4	632.3	36951
Ba504 2.4	mg/L				

REMARKS:

### SCALE TENDENCY REPORT

Company : CONCHO RESOURCES Date : 4-19-99
Address : Date Sampled : 4-17-99
Lease : WEST SHUGART FEDERAL Analysis No. 2021

Lease : WEST SHUGART FEDERAL Analysis No. : 2021
Well : 61

Sample Pt. : HEATER Analyst : SIEVE TIGERT

#### STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO3 Scaling Tandancy

S.I. = -0.5 at 70 dag. F or 21 deg. C S.I. = -0.4 at 90 deg. f or 32 deg. C S.I. = -0.4 at 110 deg. f or 43 deg. C S.I. = -0.3 at 130 deg. f or 54 deg. C S.I. = -0.2 at 150 deg. f or 66 deg. C

# CALCIUM SULFATE SCALING TENDENCY CALCULATIONS (Skillman-McDonald-Stiff Method) Calcium Sulfate

S = 1865 at 70 deg. F or 21 deg C S = 1980 at 90 deg. F or 32 deg C S = 2054 at 110 deg. F or 43 deg C S = 2073 at 130 deg. F or 54 deg C S = 2064 at 150 deg. F or 66 deg C

Respectfully submitted, STEVE TIGERT