Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR

IN.M. OII Cons. Division `625 N. French Dr. Hobbs, NM 88240

	DUDE ALLOET AND MANAGEMENT	7.			,		
BUREAU OF LAND MANAGEMENT					5. Lease Serial No.		
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an					NM-01218		
abandoned we	ell. Use Form 3160-3 (APD) for suc	ch proposals.		: 6. It India :	n, Allottee or Tribe Name —		
SUBMIT IN TR	IPLICATE - Other instructions	on reverse side		7. If Unit	or CA/Agreement, Name an	dror No.	
1. Type of Well				CA	SW-77		
 Type of Well □ Gas Well) Other			8. Well N	lame and No.		
2. Name of Operator			· · · · · · · · · · · · · · · · · · ·	1	tt Hall B #2		
Yates Drilling Co	ompany			9. API W			
3a. Address		one No. (include area o	code)		5-20035		
	105 South 4th St., Artesia, NM 88210 505-746-0308 Location of Well (Footage, Sec., T., R., M., or Survey Description)				nd Pool, or Exploratory Arc Delaware West	1	
4. Location of Well (1 bonnge, Dec.	, 1., I., II., or survey Description				y or Parish, State		
	FSL & 1997' FWL						
	on 30-19S-32E				ounty, NM		
12. CHECK AP	PROPRIATE BOX(ES) TO INDIC	CATE NATURE O	F NOTICE, R	EPORT, O	R OTHER DATA		
TYPE OF SUBMISSION		TYPE OI	FACTION				
	☐ Acidize ☐ Deep	реп	Production (Star	t/Resume)	Water Shute Off		
Notice of Intent	Alter Casing Frac	ture Treat	Reclamation		■ Well Integrity		
Subsequent Report		Construction	Recomplete		Other		
	1 —	and Abandon	Temporarily Ab	andon			
Final Abandonment Notice	Convert to Injection Plug	, Back	Water Disposal				
following completion of the invitesting has been completed. Fi determined that the site is ready This well prod	he work will be performed or provide the Be volved operations. If the operation results in inal Abandonment Notices shall be filed on for final inspection.) uces approximately 17 bb. k on location. A produce	n a multiple completion ly after all requiremen ls. water per	ts, including recl	in a new inte lamation, have	erval, a Form 3160-4 small be been completed, and the completed and the completed are the completed.	e filed onc	
Water will be	hauled by I&W, Inc. to th	he following:	p. namen on	No. of the control of			
Tennessee SWD				APPROVED			
200	tion 21-19S-31E			7,			
Eddy County, NM NM# R-8173							
212211			į	JUN	1 6 200 2		
			!	:			
					Y GOURLEY		
				PETROL	EUM ENGINEER	i	
14. I hereby certify that the forego Name (Printed/Typed)	ing is true and correct						
Karen J. Lei	shman	Title En	ngineering	Technic	cian		
Signature Karen	2 Leiskman	Date 5-	-31-02				
7	THIS SPACE FOR FE	DERAL OR STATI	E OFFICE US	E			
Approved by		Title		•	Date		
Conditions of approval if any are	e attached. Approval of this notice does no gal or equitable title to those rights in the	ot warrant or subject lease Office					
		OTTICE			* 4		

which would entitle the applicant to conduct operations thereon.



MILLER CHEMICALS, INC.

Post Office Box 298 Artesia, N.M. 88211-0298 (505) 746-1919 Artesia Office (505) 393-2893 Hobbs Office (505) 746-1918 Fax

WATER ANALYSIS REPORT

Company : YATES DRILLING CO. Date : 5/20/02
Address : ARTESIA, NM Date Sampled : 5/20/02
Lease : ELLIOTT HALL "B" Analysis No. : 00438
Well : #1
Sample Pt. : WATER TANK

	ANALYSIS			mg/L		* meq/L
1.	рн	5.1				
2.	H2S	0				
3.	Specific Gravity	1.170				
4.	Total Dissolved Solid	S		274412.9		
5.	Suspended Solids			NR		
6.	Dissolved Oxygen			NR		
7.	Dissolved CO2			NR		
8.				NR		
9.	2					
10.	Methyl Orange Alkalin	ity (CaC				
11.	Bicarbonate		HCO3	183.0	HCO3	3.0
12.	Chloride		Cl	172956.0	Cl	4878.9
13.	Sulfate		SO4	100.0	SO4	2.1
14.	Calcium		Ca	20800.0	Ca	1037.9
15.	Magnesium		Mg	9049.1	Mg	744.5
16.	Sodium (calculated)		Na	71304.8	Na	3101.6
17.	Iron		Fe	20.0		
18.	Barium		Ва	NR		
19.	Strontium		Sr	NR		
20.	Total Hardness (CaCO3)		89200.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L
++				
1038 *Ca < *HCO3 3	Ca (HCO3)2	81.0	3.0	243
/	CaSO4	68.1	2.1	142
744 *Mg> *SO4 2	CaCl2	55.5	1032.8	57312
<	Mg (HCO3)2	73.2		
3102 *Na> *Cl 4879	MgSO4	60.2		
++	MgCl2	47.6	744.5	35441
Saturation Values Dist. Water 20 C	NaHCO3	84.0		
CaCO3 13 mg/L	Na2SO4	71.0	100	
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	3101.6	181255
BaSO4 2.4 mg/L				

REMARKS:

SCALE TENDENCY REPORT

Company : YATES DRILLING CO. Date : 5/20/02
Address : ARTESIA, NM Date Sampled : 5/20/02
Lease : ELLIOTT HALL "B" Analysis No. : 00438
Well : #1 Analyst : A. MILLER

Sample Pt. : WATER TANK

STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO3 Scaling Tendency

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

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

S = 645 at 70 deg. F or 21 deg C
S = 694 at 90 deg. F or 32 deg C
S = 727 at 110 deg. F or 43 deg C
S = 739 at 130 deg. F or 54 deg C
S = 739 at 150 deg. F or 66 deg C