		Drawer DD	ssic
Form 3160-5 (June 1990)	UNITED STAT DEPARTMENT OF TH BUREAU OF LAND MA	Artosia, NM 88210 ES E INTERIOR	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No. NM-66695
	SUNDRY NOTICES AND RE. form for proposals to drill or to dee Use "APPLICATION FOR PERM	pen or reentry to a different reservoir.	6. If Indian, Allottee or Tribe Name
	SUBMIT IN T	RIPLICATE	7. If Unit or CA, Agreement Designation
	Gas Vell 🗌 Other		8. Well Name and No.
2. Name of Operator YATES PE	TROLEUM CORPORATION	J	Blackwater Unit #5 9. API Well No.
3. Address and Tele 105 S. 4th	^{phone No.} h Street, Artesia, NM 88210) (505) 748-1471	3000563028 TO: Field and Pool, or Exploratory Area Wildcat Group 1 R
4. Location of Well Section 4-	(Footage, Sec., T., R., M., or Survey Descrip T9S-R22E 1980' FSL &	& 660' FWL Unit L NWSW	11. County or Parish, State Chaves, N.M.
12. CHE	ECK APPROPRIATE BOX(s) T	O INDICATE NATURE OF NOT	CE, REPORT, OR OTHER DATA
TYI	PE OF SUBMISSION	TYPE OF A	CTION
	Notice of Intent	Abandonment Recompletion	Change of Plans
X	Subsequent Report	Plugging Back	Non-Routine Fracturing
	Final Abandonment Notice	Casing Repair	Water Shut-Off
		Altering Casing Other	Conversion to Injection Conversion to Injection Conversion to Injection Note: Report results of multiple completion on Well
13. Describe Proposed	or Completed Operatons (Clearly state all pe	rtinent details, and give pertinent dates, including	Completion or Recompletion Report and Log form.) estimated date of starting any proposed work. If well is directionally
Order #7 and r Wildcat Group	equests your approval. The will formation. The water is stor Pathfinder AFT #13 SWD per	pplication for produced water fror ell produces approximately 3 bbls red in a 210 barrel fiberglass tank rmit # 415 Sec.21-10S-27E.	of water per day from the
14. Thereby certify the	at the foregoing is true and correct		Otto Line Line. Distante
Signed Show	non Coupland	Title Production Clerk	<u>Date</u> 9/22/95
(This space for I Approved by	Federal or State office use)		ETER W. CHESTER
	pproval, if any:	i BURFAT	
Title 18 U.S.C. Sectio statements or represen	n 1001, makes it a crime for any person know nations as to any matter within its jurisdiction	vingly and willfully to make to any department of a $ROSW$	gency of the United States any false, fiftitious or fraudulent $ELL_{RESOUNCE AREA}$ e Side $URCE_{AREA}$
		*See Instruction on Revers	e Side ORCE AREA



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Petrolite Corporation 510 West Texas Artesia, NM 88210-2041

> (505) 746-3588 Fax (505) 746-3580

> > Reply to:

TRETOLITE DMSION

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		ANALYSIS			Rep P.O. B Artesia 88211-	a, NM
Compan	y : YATES PETROLEUM		Date	: 4-12-9	95	
Addres	s : ARTESIA N.M.		Date Sampled	: 4-12-9	95	
Lease			Analysis No.	: 0083		
	: 5					
Sample	Pt. : WELLHEAD					
	ANALYSIS		mg/L		* meq/L	
	*					
	рН 5.7					
	H2S 0					
	Specific Gravity 1.11	5				
4.			153496.6			
5.	F		NR			
	Dissolved Oxygen		NR			
	Dissolved CO2		NR			
	Oil In Water		NR			
9.	Phenolphthalein Alkalinity					
10.	Methyl Orange Alkalinity (,				
	Bicarbonate	HCO3	48.0	HCO3	0.8	
	Chloride	Cl	96276.0	Cl	2715.8	
	Sulfate	SO4		SO4	0.5	
	Calcium	Ca	16800.0	Ca	838.3	
	Magnesium	Mg	3192.9	Mg	262.7	
	Sodium (calculated)		37154.7	Na	1616.1	
- · ·	Iron	Fe	NR			
	Barium	Ba	NR			
	Strontium	Sr	NR			
20.	Total Hardness (CaCO3)		55100.0			

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L					
++ ++									
838 *Ca < *HCO3 1	Ca(HCO3)2	81.0	0.8	64					
/>	CaSO4	68.1	0.5	35					
263 *Mg> *SO4 1	CaCl2	55.5	837.0	46446					
<	Mg(HCO3)2	73.2							
1616 *Na> *Cl 2716	MgSO4	60.2							
++ ++	MgCl2	47.6	262.7	12505					
Saturation Values Dist. Water 20 C	NaHCO3	84.0							
CaCO3 13 mg/L	Na2SO4	71.0							
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	1616.1	94446					
BaSO4 2.4 mg/L									

REMARKS: KCLNR

Petrolite Oilfield Chemicals Group

PETROLITE

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SCALE TENDENCY REPORT

Company	: YATES PETROLEUM	Date	:	4-12-95
Address	: ARTESIA N.M.	Date Sampled	:	4-12-95
Lease	: BLACKWATER	Analysis No.	:	0083
Well	: 5	Analyst	:	S. TIGERT
Sample Pt.	: WELLHEAD			

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

S.I.	=	-0.6	at	60	deg.	F	or	16	deg.	С
s.I.	=	-0.6	at	80	deg.	F	or	27	deg.	С
S.I.	=	-0.5	at	100	deg.	F	or	38	deg.	С
S.I.	=	-0.5	at	120	deg.	\mathbf{F}	or	49	deg.	С
s.I.	=	-0.4	at	140	deg.	F	or	60	deg.	С

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

S	=	924	at	60	deg.	F	or	16	deg	С
S	=	1026	at	80	deg.	F	or	27	deg	С
S	=	1091	at	100	deg.	F	or	38	deg	С
S	=	1123	at	120	deg.	F	or	49	deg	С
S	=	1147	at	140	deg.	F	or	60	deg	С

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Respectfully submitted, S. TIGERT