Form 5160-5 (August 1999) DEPA1	UNJTED STATES DEPARTME OF THE INTERIOR			Cons. Div	FORM APPROVED
				French Di	Expires November 30, 2000
SUNDRY NOTICES AND REPORTS ON WELLS OF HODDS, NM				4	
Do not use this fo	orm for proposals to drill or to	re-enter an	0000 , (6. If Indian	, Allottee or Tribe Name
abandoned well. U	se Form 3160-3 (APD) for su	ch proposals	3		
SUBMIT IN TRIPLIC	ATE - Other Instructions of	n reverse side		2 (a) 2 (b) (b)	r CA/Agreement, Name and/or No. 08492C NM 68289
I. Type of Well	and Contract of the second second Second second	E, NEW MEXIC	:0	CA 8910	08492C INIVI 08289
Oil Well Gas Well	Other SANTA F	1. 我已来,他不知		8. Well Na	me and No.
2. Name of Operator					Ridge Unit #8
CITATION OIL & GAS COR 3a. Address		3b. Phone No. (include area code)		9. API Wel 30-025-20	
P.O. Box 690688, Houston, Tex		(281) 517-7800			ad Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R.,	M., or Survey Description)		<u>-</u> .		Ridge Atoka
Unit H 1980 FNL & 660 FEL	Sec. 28-23S-34E			11. County Lea Cour	or Parish, State 1ty, NM
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	RIATE BOX(ES) TO INDICA			E, REPORT, OI	R OTHER DATA
TYPE OF SUBMISSION		ТҮРЕ О	OF ACTION	• • • • • • • • • • • • • • • • • • • •	
	cidize Deepen			(Start/Resume)	Water Shut-Off
	Iter Casing Fracture		Reclamation		Well Integrity
	•••	d Abandon	Recomplete Temporarily		Other
_	onvert to Injection Plug Ba		Water Dispo		
13. Describe Proposed or Completed Operat					
If the proposal is to deepen directional	y or recomplete horizontally, give sub will be performed or provide the Bo perations. If the operation results in a andonment Notices shall be filed only spection.)	surface locations and nd No. on file with a multiple completion after all requirement	d measured a BLM/BIA. 1 or recomple nts, including	nd true vertical de Required subseque tion in a new inte g reclamation, have	pths of all pertinent markers and zones. Int reports shall be filed within 30 days strul, a Form 3160-4 shall be filed once been completed, and the operator has
				CCT 15	
14. I hereby certify that the foregoing is true Name (Printed/Typed) Sharon Ward	e and correct	Title Regulatory A Date	dministra	tor	Kz
<u>Staron U</u>	land	8/29/01			
in the second second second second	THIS SPACE FOR FEDE		OFFICE U		
Approved by		Title		D	ate
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 18 U.S.C. Section 1001 and Title 43 U. States any false, fictitious or fraudulent statem	S.C. Section 1212, make it a crime for nents or representations as to any matt	or any person knowin er within its jurisdict	ngly and will tion.	fully to make to a	ny department or agency of the United

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WORKOVER PROCEDURE

PROJECT: ARU NO. 8 – Acidize with Coiled Tubir	ng and Run ESP	
DRILLED & COMPLETED: <u>10/80</u> LAST WO:	5/00 – Pull and Replace Tubing	
LOCATION: 1980' FNL & 660' FEL SEC. 28, T-23	3S, R-34E	
FIELD: ANTELOPE RIDGE	_ COUNTY: _Lea	STATE: <u>NM</u>

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TD: <u>13,850'</u> PBTD: <u>13,735'</u> DATUM: <u>3502' DF</u> KB to CHF: <u>28'</u>

CASING AND LINER RECORD

SIZE	WEIGHT	DEPTH	CEMENT	HOLE SIZE	TOC	REMARKS
16"	65#	462'	950	20"	SURF	
10 3/4"	40.5-45.5#	5180'	1170	14 3/4"	3000	DV @ 1012', TOC - SURF
7 5/8"	33.7#	11,700'	1000	9 1/2"	6100'	Calc'd TOC
5"	18#	13,846'	540	6 1/2"	LNR	LINER F/11,298' - 13,846'

PRESENT FORMATION AND COMPLETION: ATOKA (12,386'-12,410') 24 SHOTS

 TUBING:
 5" HES "PLS" PKR @ 12,339' w/ Guiberson On-Off Tool & 1.781" F Profile, 2 3/8" Sub, Baker 1.81" F Nipple, 36 Jts 2 3/8" 4.7# J-55 tbg, 352 Jts 2 7/8" 6.5# N-80 tbg, (3) 2 7/8"

 6.5# N-80 Subs and (1) 2 7/8" 6.5# P-110 Sub w/5 GLV's (12,295', 11,766', 11,026', 10,069', 8,396')

TBG HEAD: CIW - 11" x 10K psi THF

MISC.: 8/95 - Acidized w/2,400 gal 20% MSR. AIR - 3.5 BPM, MXP 1170#, ISIP 230#. 2/97 - Acidized w/2,400 gal 20% MSR. AIR - 5.4 BPM, MXP 694#, ISIP 380#. 3/00 - Acidized w/2,400 gal 20% MSR. AIR - 3.0 BPM, MXP 752#, ISIP 614#.

PROCEDURE

Coiled Tubing Acid Treatment

- > Notify NMOCD 48 hrs prior to workover of intent.
- Start up compressor and charge csg up to +/- 700 psi for GL operations prior to workover.
- Run acid compatibilities on produced fluids.
- > Use 2% KCl for all water pumped into the well.
- 1. MIRU CTU. RU BOP's and CT Packoff.
- RIH w/ 1 1/4" CT and Vortech wash tip to 12,410'. Spot acid across Atoka perfs 12,386' 12,410'. PUH to 12,380'. SI CT annulus. Pump 2400 gal 20% MSR acid at +/- 1 BPM using 200 300 scf/bbl N₂ while working tubing through perforated interval. Flush to btm perf w/ 2% KCl and 200 300 scf/bbl N₂. Record injection rates and ISIP.
- 3. Open CT annulus and flow back load if possible.
- 4. POOH w/ CT. RD CTU.
- 5. Flow well back to battery to recover load and clean up. If well will not unload, open well to frac tank to unload tubing.
- 6. Monitor tests and flowing pressures.

ARU NO. 8 – Acidize with Coiled oing and Run ESP Page 2 of 2

PROCEDURE

Install ESP Equipment

- > Install approx. 5000' of primary power line, 3-75 KVA transformers and VSD at ARU #8.
- Locate Double Stud Adapter and 7 1/16" x 2 7/8" x 4 rd MLE Tubinghead (J & W Wellhead, 915-550-7502).
- > Acidize ARU #1G SWD well prior to installing ESP.
- > Use 2% KCl for all water pumped into the well.
- 1. MIRU PU. ND WH. NU BOP.
- 2. Rlse 5" HES "PLS" PKR @ 12,339'. POOH w/ tbg and pkr.
- 3. RIH w/ 120 HP, 370 stg RA-7 Centrilift ESP pump w/ seal section and BHP sensor and 5KV, #4 flat CPL cable on +/-352 jts 2 7/8 6.5# N-80 tbg. Hydrotest tbg to 6000# AS. Band cable to tbg w/ 3 monel bands per jt, one in the middle of the jt and one approx. 3' from each end. Place two bands immediately above and below the flat cable splice and uphole cable splice.
- 4. Land btm of motor no lower than 11,290'.
- 5. ND BOP. NU Double Stud Adapter and 7 1/16" x 2 7/8" x 4 rd MLE Tubinghead.
- 6. RD MOPU.
- 7. Shoot FL prior to ESP start-up.
- 8. Hook up electrical cable. Place well on test. Monitor BHP, FL and production tests to size permanent production assembly.

WORKOVER PROCEDURE

PROJECT: Antelope Ridge Unit #1G - Acidize SWD	Well	
DRILLED & COMPLETED: 9/66 LAST WO: _	12/97 – Acidize	
LOCATION: <u>1980' FNL & 1980' FEL SEC. 22, T-23</u>	-S, R-34-E, Lea Co., NM	
FIELD: Antelope Ridge (Delaware)	COUNTY: Lea	STATE: <u>NM</u>
TD: <u>14,761'</u> PBTD: <u>6543'</u> DATUM:	3425' KB KB to GL:	14'

CASING AND LINER RECORD

SIZE	WEIGHT	DEPTH	CEMENT	HOLE SIZE	TOC	REMARKS
20"	94#	360'	650 sx	26"	Surf	CMT CIRC
13 3/8"	61-72#	5004'	2250 sx	17 1/2"	2815'	By TS
9 5/8"	53.5#	9318'- 11,792'	1000 sx	12 1/4"	9350'	Csg cut off and pulled from well
7"	32#	11,506- 14,134''	560 sx	8 3/4"	11,506'	Circ'd

PRESENT FORMATION AND COMPLETION: Delaware OH 5004' - 6543'

TUBING: 3 - 6', 8', 10' 2 3/8" 4.7# J-55 eue 8rd DuoLine tbg subs, 159 Jts 2 3/8" 4.7# J-55 eue 8rd DuoLine tbg, 7" Baker ASA and 13 3/8" Baker "KB" Prod Pkr @ 4966'.

PROCEDURE

- > Notify NMOCD 48 hrs prior to workover of intent.
- > Collect fluid samples for compatibility testing
- 1. Shut down ARU SWD Injection Pump.
- 2. RU acid company. Open csg valve to atmosphere and monitor.
- Acidize Delaware OH (5004' 6543') w/ 3000 gal 15% AS acid. Flush w/ 224 bbls clean PW. Pump acid job at 4 5 BPM at +/- 2500 psi. Record rate, ISIP, 5, 10 and 15 min SI pressures. (NOTE: Max Pressure 3000 psi, 39% of new rating.)
- 4. RD acid company. Return well to injection. Monitor rates and pressures.

FLUID VOLUMES

Tbg Volume	19.2 bbls
Pkr to 8 5/8" Csg Shoe	5.7 bbls
OH Volume	224.4 bbls

