Form 3160-5 (August 2007)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an

	M APPROVED
	S. JEST ST. 2019 EIVED
5. Lease Serial No. nm 01119	NOV 2 3 2009
6. If Indian, Allottee or T	ibe Name
1	NIMOOD ADTECIA

abandoned well.	7. If Unit of CA/Agreement, Name and/or No.										
SUBMI											
1. Type of Well Oil Well Gas V	Vell ☑ Other IN.	JECTION WEI	LL		8. Well Name and No. Avalon (Delaware) Unit 503						
2. Name of Operator Exxon Mobil Corporation	-			9. API Well No. 05-103-28594							
3a. Address P.O. Box 4358, CORP-MI-0203 Houston, TX 77210-4358		3b. Phone No. 281-654-192	. (include area c	ode)	10. Field and Pool or Exploratory Area Avalon Delaware 3715						
4. Location of Well (Footage, Sec., T., 43 'FNL 1458' FEL SEC 31 T20S R28E	R.,M., or Survey Description				11. Country or Parish, S Eddy, NM	11. Country or Parish, State Eddy, NM					
12. CHEC	K THE APPROPRIATE BO	X(ES) TO IND	ICATE NATUR	E OF NOT	CE, REPORT OR OTHE	R DATA					
TYPE OF SUBMISSION			T	YPE OF AC	LION						
✓ Notice of Intent  Subsequent Report	Acidize Alter Casing Casing Repair	New	cure Treat  Construction	Rec	duction (Start/Resume) lamation omplete	Water Shut-Off Well Integrity Other					
Final Abandonment Notice	Change Plans Convert to Injection	Plug	and Abandon Back		Temporarily Abandon  Water Disposal						
LI	SUBS APP	,	11X F. / / / / / / / / / / / / / / / / / /			ROVED 2 0 2009 S.Kristof VD.MANAGEMENT ELELD-OFFICE					
<ol> <li>I hereby certify that the foregoing is to Name (Printed/Typed)</li> <li>MARK DEL PICO</li> </ol>	rue and correct.		Title STAFF	REG SPE	CIALIST						
Signature Wark W	el Rio		Date 11/12/2	009							
	THIS SPACE	FOR FEDE	RAL OR ST	TATE OF	FICE USE						
Approved by											
Conditions of approval, if any, are attached that the applicant holds legal or equitable tentitle the applicant to conduct operations	ttle to those rights in the subject				Dε	ate					
Title 18 U.S.C. Section 1001 and Title 43	U.S C. Section 1212, make it a	crime for any pe	erson 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.

## **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## **SPECIFIC INSTRUCTIONS**

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

#### NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and grantingapproval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

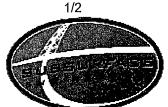
Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240



# EXXONMOBIL US PRODUCTION WELL WORK PROCEDURE ADU 503, 238, 642, 516, 505, 507, 537, 523 Avalon Delaware Unit



**CURRENT STATUS:** 

Well is currently injecting.

Well will be shut in at least 48 hours prior to beginning of step-rate test.

ExxonMobil will contact NM OCD no less than 48 hours prior to beginning of test.

OBJECTIVE:

Perform Step-Rate tests on water injectors to determine latest formation injection

properties.

## Risk Assessment:

Injection well. Producing wells in the area have been known to have + 5000 ppm H2S concentration in their flow stream. Caution should be taken to prevent un-expected H2S exposure.

## RECOMMENDED PROCEDURE:

- 1. Ensure ExxonMobil has notified NM OCD of step rate test (48 hours in advance) and shut in the well for a minimum of 48 hours prior to testing. Execute energy Isolation procedures on all equipment, machinery and valves associated within work scope.
- 2. Check status of rig anchor test. Move in and rig up wireline unit and pump truck.
- 3. Kill well by bull heading field salt water down tubing until assured well is dead.
- 4. Nipple down tree. MIRU BOP and lubricator and test.
- 5. Make wireline run to TD with a tool of analogous O.D. as down-hole pressure gauge to ensure that we have the clearance to run the pressure gauge.
- 6. Set pressure gauge at appropriate depth (see Table 1 below). Consult attached wellbore diagrams for individual well down-hole configurations.
- 7. Start injection at lowest rate (Step 1 of Table 2) and continue to inject at higher rates according to the specifications in Table 2 (below). Each step will last one hour (8 hours total pump time).
- 8. Finish final step rate and stop pumping. Ensure well is dead. Keep kill (or pump) truck on location as needed. ND BOP and lubricator; NU WH.
- 9. RDMO wireline unit and pump truck; RWTI. Return well to previous injection state. NM OCD needs to review the test data before an increase in injection rate or pressure can be approved and implemented.

# ADU Step-Rate Tests

_	U. Chei	rry Perfs	U. Brus	hy Perfs	
Well	Тор	Bottom	Top	Bottom	Gauge Depth
	ft	ft	ft	ft	ft
238	2632	2754	3428	3604	2582
503	2628	2704	3486	3666	2578
505	2546	2662	3514	3564	2578
507	2498	2610	3426	3600	2448
516	2576	2690	3602	3670	2526
523	2556	2682	3542	3738	2506
537	2544	2688	3586	3642	2494
642	2534	2668	3646	3678	2484

Table 1: Step-Rate Test Information

			St.	ep 1	<b>%</b> ∑St	ep 2	St	ep.3	િં∂લંSt	ep 4	િ_ુ"St	èp 5 🗺	્રે °ેSt	ep 6 👫	St	ер7 👫	[≟ ∜″ŝŧ	ep 8	
S-Welly 8	Inj.Water Rate	Inj Pressure	<i>∷ખ</i> ુ (13	0%:	E BECLE	0%	::::::9		`,\~ <b>%1</b>	20% %:		50%	<b>選問<b></b>對</b>	30%	21	10%:	. r. is 20	40%	Total Bbis for Test
Burney "	bpd 🛂 s	psi 💯	Bbl/d	Bbls/hr	BbVd	Bbls/hr	Bbl/d	Bbls/hr	Bbl/d	Bbls/hr	₿bVd	Bbls/hr	Bbl/d	Bbls/hr	Bbl/d	Bbls/hr	.Bbl∕d ·	`Bbls/hr	bbis "
238	475	480	142 5	6	285	12	427 5	18	570	24	712 5	30	855	36	997 5	42	1140	48	214
503	430'	430	129	5	258	11	387	16	516_	22	645	27	7.74	32	·903›*	38	1032	43	194
505	240	480	72	з	144	- 6	216	9	288	12	360	15	432	18	504	21	576	24	108
507	215	480	64 5	3	129	5	193 5	8	258	11	322 5	13	387	16	451 5	19	516	22	97
516	350	480	105	4	210	9	315	13	420	18	525	22	630	26	735	31	840	35	158
523	175	460	52 5	2	105	4	157 5	7	210	9	262 5	11	315	13	367 5	15	420	18	79
537	240	480	72	3	144	6	216	9	288	12	360	15	432	18	504	21	576	24	108
642	200	480	60	3	120	5	180	- 8	240	10	300	13	360	15	420	18	480	20	90

Table 2: Injection Test Specifications for All 8 Wells