Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO.
30-015-28663

5. Indicate Type of Lease
STATE [X] FEE [ ]

6. State Oil & Gas Lease No.
NM 01119

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Avalon (Delaware) Unit

8. Well Number 642

1. Type of Well: Oil Well [ ] Gas Well [X] Other INJECTOR

RECEIVED
NOV 11 2009
NMOCD ARTESIA

2. Name of Operator EXXON MOBIL CORPORATION

9. OGRID Number 7673

3. Address of Operator
P.O. BOX 4358, CORP-MI-0203, HOUSTON, TX 77210

10. Pool name or Wildcat
Avalon; Delaware 3715

4. Well Location
Unit Letter L : 1333 feet from the SOUTH line and 1107 feet from the WEST line
Section 32 Township 20S Range 28E NMPM EDDY County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3648 GR
3205' GR

Pit or Below-grade Tank Application [ ] or Closure [ ]

Pit type_____ **Depth to Groundwater**_____ **Distance from nearest fresh water well**_____ **Distance from nearest surface water**_____

Pit Liner Thickness: _____ **mil** **Below-Grade Tank: Volume** _____ **bbls; Construction Material** _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	P AND A	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPL	[ ]	CASING/CEMENT JOB	[ ]		
OTHER:	[X] STEP RATE TEST PROCEDURE			OTHER: TEMPORARY ABANDONMENT [ ]			

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Exxon Mobil requests approval to perform the attached "Step-Rate Test" to determine latest formation injection properties.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines [ ], a general permit [ ] or an (attached) alternative OCD-approved plan [ ].**

SIGNATURE Mark Del Pico TITLE STAFF REGULATORY SPECIALIST DATE 11 / 11 / 2009

Type or print name MARK DEL PICO E-mail address: mark_delpico@exxonmobil.com Telephone No. 281-654-1926

For State Use Only

APPROVED BY: RICHARD INGE TITLE COMPLIANCE OFFICER DATE 12/11/09

Conditions of Approval (if any):

U.S. PRODUCTION

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

SUBSURFACE ENGINEERING

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.

	U. Cherry Perfs		U. Brushy Perfs		
Well	**Top**	**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

			Step 1		Step 2		Step 3		Step 4		Step 5		Step 6		Step 7		Step 8		
Well	**Inj Water Rate**	**Inj Pressure**	**30%**		**60%**		**90%**		**120%**		**150%**		**180%**		**210%**		**240%**		**Total Bbls for Test**
	bpd	*psi*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*Bbl/d*	*Bbls/hr*	*bbls*
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**	774	**32**	903	**38**	1032	**43**	**194**
505	240	480	72	**3**	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