DE B'	n'\$100-5 gust 2007) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OCD Artesia			FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010 5. Lease Serial No.	
SUNDRY Do not use th abandoned we	NOTICES AND REPOI is form for proposals to II. Use form 3160-3 (API	RTS ON WELLS drill or to re-enter an D) for such proposals.	6. If Indian. Allottee	or Tribe Name	
SUBMIT IN TRI	PLICATE - Other instruc	tions on reverse side.	7. If Unit or CA/Agr	reement, Name and/or No.	
1. Type of Well  R Oil Well Gas Well Oth	her		8. Well Name and No ANTARES 23 F	o. EDERAL 13H	
2. Name of Operator DEVON ENERGY PRODUCT	Contact: ION CO EfMail: trina.couch	TRINA C COUCH @dvn.com	9. API Well No. 30-015-42076-	-00-X1	
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 7310	2	3b. Phone No. (include area code) Ph: 405-228-7203	10. Field and Pool, c WILLIAMS SIN	or Exploratory NK	
4. Location of Well <i>(Footage, Sec., T</i> Sec 23 T19S R31E SWNW 24 32.646622 N Lat, 103.847921	r., R., M., or Survey Description, 400FNL 0190FWL W Lon	)	11. County or Parish EDDY COUNT	n, and State FY, NM	
12. CHECK APP	ROPRIATE BOX(ES) TO	) INDICATE NATURE OF N	NOTICE, REPORT, OR OTHI	ER DATA	
TYPE OF SUBMISSION		TYPE OF	FACTION		
<ul> <li>Notice of Intent</li> <li>Subsequent Report</li> <li>Final Abandonment Notice</li> </ul>	<ul> <li>Acidize</li> <li>Alter Casing</li> <li>Casing Repair</li> <li>Change Plans</li> <li>Convert to Injection</li> </ul>	<ul> <li>Deepen</li> <li>Fracture Treat</li> <li>New Construction</li> <li>Plug and Abandon</li> <li>Plug Back</li> </ul>	<ul> <li>Production (Start/Resume)</li> <li>Reclamation</li> <li>Recomplete</li> <li>Temporarily Abandon</li> <li>Water Disposal</li> </ul>	<ul> <li>Water Shut-Off</li> <li>Well Integrity</li> <li>Other</li> <li>Change to Original PD</li> </ul>	
13. Describe Proposed or Completed Op	eration (clearly state all pertinen	t details, including estimated starting	g date of any proposed work and appr	oximate duration thereof.	
If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involved testing has been completed. Final A determined that the site is ready for f	rk will be performed or provide. d operations. If the operation res bandonment Notices shall be file final inspection.)	give subsurface locations and measu the Bond No. on file with BLM/BIA sults in a multiple completion or recc ed only after all requirements, includ	A Required subsequent reports shall be mpletion in a new interval, a Form 3 ing reclamation, have been completed	Unent markers and zones. be filed within 30 days 160-4 shall be filed once I, and the operator has	
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### 1. Casing and Cementing Plan Summary

The surface fresh water sands will be protected by setting 20" casing at 650' and circulating cement back to surface. The fresh water sands will be protected by setting 13-3/8" casing at 2,575' and 9-5/8" casing at 4,450' and circulating cement to surface. The Delaware intervals will be isolated by setting 5-1/2" casing to total depth and circulating cement above the base of the 9-5/8" casing. 9 5/8" casing has a Collapse design factor of 1.23 as a worst case. This string will never be completely evacuated nor utilized as a production string. All casing is new and API approved.

### 2. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight	Collar	Grade
26"	0 - 650	.20"	0 - 650	94#	BTC	J/K-55
17-1/2"	0 - 2575	13-3/8"	0 - 2575	68#	BTC	· J/K-55
12-1/4"	2575 - 4450	9-5/8"	0 - 4450	40#	LTC	J-55
8-3/4"	4450 - 8600	5-1/2"	0 - 8600	17#	. LTC	HCP-110
8-3/4"	8600 - 13607	5-1/2"	8600 - 13607	17#	BTC	HCP-110

### Design Factors:

3:

	Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
	20"	1.71	6.94	24.22
•	13-3/8"	1.46	2.58	6.11
	9-5/8"	1.23	1.90	3.54
	5-1/2" LTC	2.13	2.64	1.92
	5-1/2" BTC	1.98	2.45	5.23

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## 4. Cement Program:

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String	Slurry	Amount and Type of Cement			
Surface	Lead	801 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.1% Fresh Water, 13.5 ppg, 1.73 cf/sk			
Surface	Tail	300 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water, 14.8 ppg, 1.35 cf/sk			
1/2 2/00 1 4	Lead	1465 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 83.4% Fresh Water, 12.8 ppg, 1.65 cf/sk			
13-3/8" Intermediate	Tail	450 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water, 13.8 ppg, 1.38 cf/sk			
		1 <sup>st</sup> STAGE			
	Lead	520 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 Ibs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 89.6% Fresh Water, 12.6 ppg, 1.73 cf/sk			
9.5/8" Intermediate	Tail	300 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water, 13.8 ppg, 1.38 cf/sk			
	2 <sup>nd</sup> STAGE (DV tool and ECP at 2,650 ft)				
	Lead	435 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 83.4% Fresh Water, 12.8 ppg; 1.65 cf/sk			
	Tail	150 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water, 13.8 ppg, 1.38 cf/sk			
	Lead	635 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 6% bwoc Bentonite + 0.7% bwoc FL-52A + 102.5% Fresh Water, 12.5 ppg, 2.01 cf/sk			
ļ.	Tail	1700 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.6% bwoc Sodium Metasilicate + 0.4% bwoc FL-52A + 57.3% Fresh Water, 14.2 ppg, 1.28 cf/sk			
Production	2 <sup>nd</sup> STAGE (DV tool and ECP at 4,500 ft)				
· · · . · · · · ·	Lead	135 sacks Class C Cement + 1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157% Fresh Water, 11.40 ppg, 2.88 cf/sk			
· · ·	Tail	150 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.1% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.4% Fresh Water, 13.80 ppg, 1.37 cf/sk			

StringTOC20" SurfaceSurface13-3/8" IntermediateSurface9-5/8" IntermediateSurface5-1/2" Production2,300" (~350" above top of<br/>Capitan Reef)

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The above cement volumes are based on 25% excess. Actual cement volumes could be adjusted based on fluid caliper and caliper log data.

#### 5. Pressure Control Equipment

The BOP system used to drill the 17-1/2" hole will consist of a 20" 2M Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 as a 2M system prior to drilling out the casing shoe.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line); **if an H&P rig drills this well. Otherwise no flex line is needed**. The line will be kept as straight as possible with minimal turns.

Depth Range	Mud Weight	Viscosity	Fluid Loss	Type System
0 - 650'	8.4 - 9.0	28-34	·NC	Fresh Water
650' - 2,575'	9.8 - 10	28-32	NC	Brine
2,575' - 4,450'	8.4 - 9.0	28-32	' NC	Fresh Water
4,450' – 13,607	8.4 - 9.0	28-32	NC-12	Fresh Water

#### Proposed Mud Circulation System:

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The necessary mud products for weight addition and fluid loss control will be on location at all times.

#### 7. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13-3/8" casing shoe until the 5-1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13-3/8" shoe until total depth is reached.

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#### 8. Potential Hazards:

No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP of 3,600 psi and estimated BHT 145°. No H2S is anticipated to be encountered.

#### 9. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. Move in operations and drilling is expected to take 32 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

#### 10. Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

#### 11. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in a closed loop system.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier will pick up salts remaining, including broken sacks, after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be sent to a closed loop system.
- f. Disposal of fluids to be transported by the following companies:
  - i. American Production Service Inc, Odessa TX
  - ii. Gandy Corporation, Lovington NM
  - iii. I & W Inc, Loco Hill NM
  - iv. Jims Water Service of Co Inc, Denver CO

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