If earthen pits are used is association with the drilling of this IV-Dist. 2 well, an OCD pit permit must be | Avenue obtained prior to pit construction. 88210 |

FORM APPROVED Form 3160-3 OMB No. 1004-0137 Expires March 31, 2007 (April 2004) UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NM-97111 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No. **V** DRILL REENTER la. Type of work: 8. Lease Name and Well No. Oil Well Gas Well ✓ Single Zone lb. Type of Well: Multiple Zone Willow Draw 25 Fed Com 2 2_API Well No. Name of Operator **Devon Energy Production Company, LP** 50-015-346 3a. Address 20 North Broadway Phone No. (include area code) 10. Field and Pool, or Exploratory Oklahoma City, Oklahoma City 73102-8260 405-552-7802 West Bubbling Springs; Morrow 4. Location of Well (Report location clearly and in accordance with any State requirements RECEIVE 11. Sec., T. R. M. or Blk. and Survey or Area 660' FNL & 1310' FEL At surface FEB 1 0 2006 Lot A Sec 25, T20S R25E At proposed prod. zone 660' FNL & 1310' FEL HARTTHATUUD 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* Approximately 21 miles south west of Artesia. **Eddy County** NM 15. Distance from proposed* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20. BLM/BIA Bond No. on file 19. Proposed Depth 10,450' Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 45 days 12/30/2005 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the 25. Signature Name (Printed/Typed) Stephanie A. Ysasaga 11/09/2005 Title Engineering Tec lan Name (Printed/Typed) Approved by (Signature FEB 0 8 2006 /s/ Joe G. Lara /s/ Joe G Office CARLSBAD FIELD OFFICE D MANAGER Application approval 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 APPROVAL FOR 1 YEAR conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United

*(Instructions on page 2)

Witness Surface & Jacomediate Casing

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a Morrow well to 10,450' for commercial quantities of oil and gas. If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Devon Energy Production Co., LP plans to drill the well per the attached Drilling and Surface Use Plan.

Directions:

Directions to Location: From the Junction of US Hwy 285 and Co. Rd. 28, go South west on Co. Rd 28 for approximately 0.8 mile to lease road; thence South on lease road for approximately 0.7 mile to proposed lease road.

Access Road:

Approximately 2,919' of access road will be required. Archeological survey's will be requested for the pad and access road.

H2S:

No H2S is anticipated to be encountered.

FRICT I 1625 N. French Dr., Hobbs, NM 88240 State of New Mexico

Form C-102 Revised March 17, 1999

DISTRICT II 811 South First, Artesia, NM 88210 Energy, Minerals and Natural Resources Department Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

2040 South Pacheco, Santa Fe, NM 87505

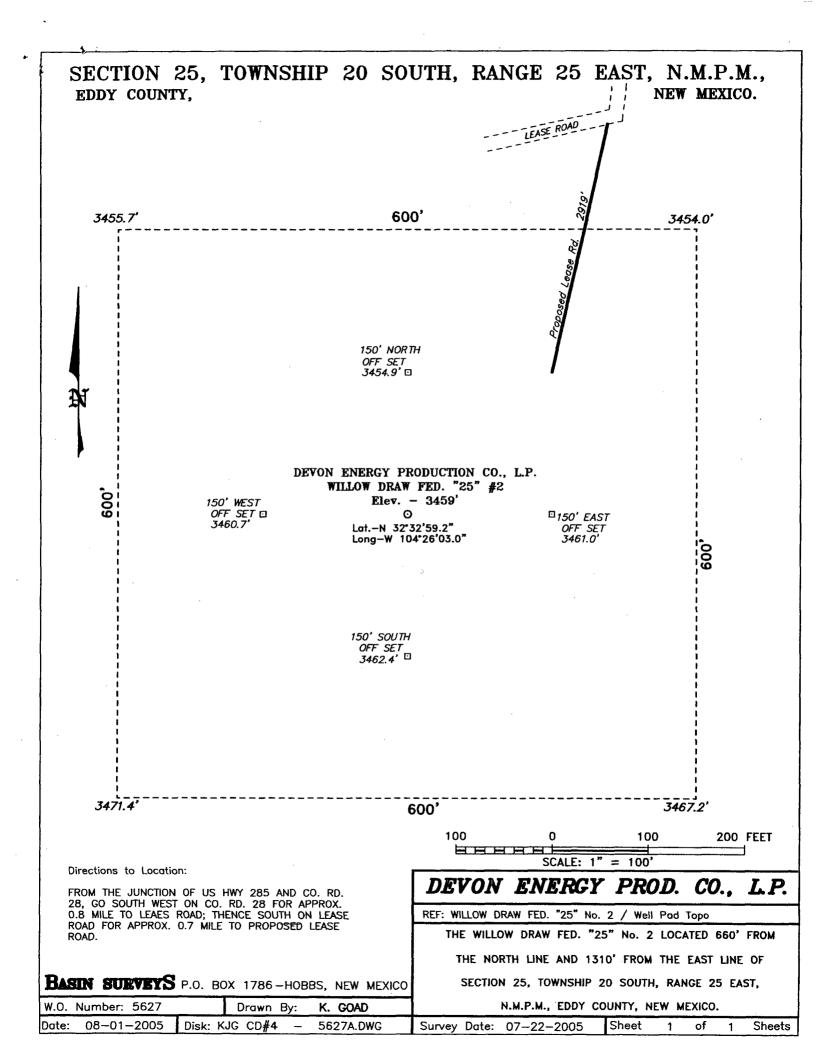
DISTRICT IV

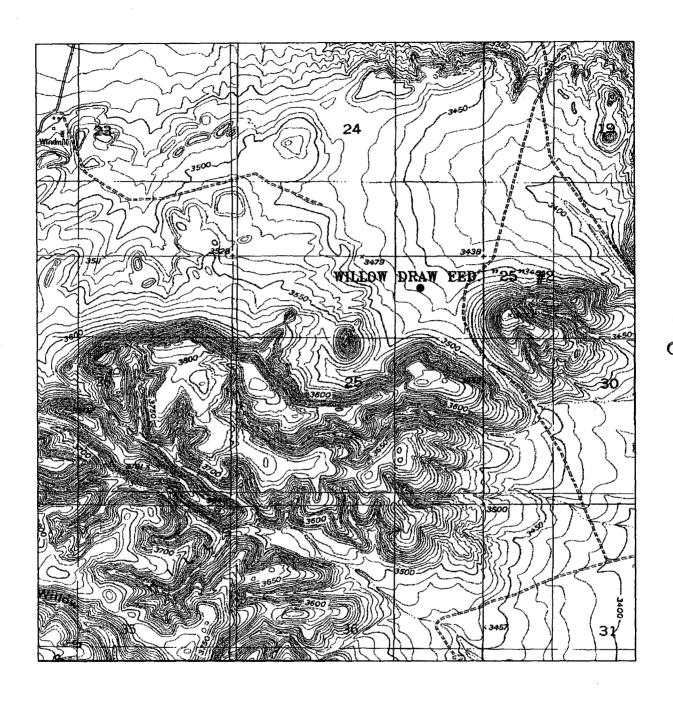
OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

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				3471.4'	3467.2	Printed Name Senior Engage Senior Engage Title 10 Date 10 I hereby certify on this plat we actual surveys supervison are correct to the JUL Date Surveys Signature A.	gineering Techni 0/18/05 OR CERTIFICAT that the well location is plotted from field made by me or at that the same is a best of my belief LY 22, 2005	TON ton shown notes of under my true and





WILLOW DRAW FEDERAL "25" #2 Located at 660' FNL and 1310' FEL Section 25, Township 20 South, Range 25 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786-1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

	W.O.	Number:	5627AA	_	KJG	#1	
	Surv	ey Date:	08-02-	-20	005		******
CHARLES	Scale	e: 1" = 20	000,	este sa	es emante de	acress reverse	
	Date:	07-22-	-2005		All had a series		

DEVON ENERGY PROD. CO., L.P.

DRILLING PROGRAM

Devon Energy Production Company, LP Willow Draw 25 Fed Com 2

Surface Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM Bottom hole Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated tops of geological markers:

a.	Queen	400'
b.	Grayburg	850'
c.	San Andres	1100'
d.	Bone Spring Lime	3650'
e.	3 rd Bone Spring Sand	7050'
f.	Wolfcamp	7500'
g.	Cisco	8175'
ĥ.	Canyon	8600'
i.	Strawn	8900'
j.	Atoka	9525
k.	Morrow	9840'
1.	Morrow Clastics	10000'
m.	Barnett Shale	10350'
n.	Total Depth	10450'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

a.	Surface	150'	Fresh Water
b.	Wolfcamp	7500'	Gas or Oil
c.	Cisco Lime	8175'	Gas or Oil
d.	Atoka	9525'	Gas or Oil
e.	Morrow	9840'	Gas or Oil

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 400' and circulating cement back to surface. Fresh water sands will be protected by setting 8 5/8" casing at 2400' and circulating cement to surface. The Morrow intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 8 5/8" casing.

4. Casing Program:

Hole Size	<u>Interval</u>	OD Csg	Weight	<u>Collar</u>	Grade
17 ½"	0' -400'	13 3/8"	48#	ST&C	H-40
12 1/4"	500'-2400'	8 5/8"	32#	LT&C	J-55
7 7/8"	2400'10450'	5 1/2"	17#	LT&C	HCP110

5. Cement Program:

a.	13 3/8"	Surface	Cement to surface with 170sx Poz C, 2%CaCl +200sx "C", 2% CaCl
b.	8 5/8"	Intermediate	Cement to surface with 575sx 35:65:6 Poz C+250sx 60:40 Poz C(MPA1)surface with 500 sx Class C +2% CaCl2.
c.	5 ½"	Production	Cement with 1 st Stage:741sx Super C Modified ,2ndStage-410sx 35:65:6 PozC + 754sx 60:40 PozC(MPA) TOC- 500' inside of intermediate casing.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 8 5/8" casing shoe.

6. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (5M system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. The drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to 1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing). Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 5000 psi WP rating.

7. Proposed Mud Circulation System

Depth	Mud Wt.	<u>Visc</u>	Fluid Loss	Type System
0' - 400'	8.4-9.2	32-34	NC	Fresh Water
400'-2400'	8.4	28	NC ·	Fresh Water
2400'-9000'	8.4-9.3	28	NC	Fresh/Cut Brine
9000'-10450'	9.3-9.7	30-40	8-10	Cut Brine

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

8. 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.

9. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

10. Potential Hazards:

a. 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 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3900 psi and Estimated BHT 155°. No H2S is anticipated to be encountered.

11. 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 after BLM approval and as soon as a rig will be available. 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 well and construct surface facilities and/or lay flow lines in order to place well on production.

SURFACE USE PLAN

Devon Energy Production Company, LP Willow Draw 25 Fed Com 2

Surface Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM Bottom hole Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on Exhibit 2. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From the Junction of US Hwy 285 and Co. Rd. 28, go South west on Co. Rd 28 for approximately 0.8 mile to lease road; thence South on lease road for approximately 0.7 mile to proposed lease road.

2. Access Road

- a. Exhibit #3 shows the existing lease road. Approximately 2,919' of new access road will be constructed as follows:
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Proposed Facilities

- a. In the event the well is found productive, the Willow Draw 25 Fed Com 2 tank battery would be utilized and the necessary production equipment will be installed at the well site.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
 - i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

4. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in the reserve pits.
- 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, including broken sacks, will pick up salts remaining after completion of well.
- d. Wastewater from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. 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 allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.

5. Well Site Layout

- a. Exhibit D Shows the proposed well site layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

6. Other Information:

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, some mesquite bushes and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area
- b. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
- c. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.
- d. There are no dwellings within 2 miles of location.

Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

Wyatt Abbitt Operations Engineer Advisor

Don Mayberry Superintendent

Devon Energy Production Company, L.P. 20 North Broadway, Suite 1500 Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P. Post Office Box 250 Artesia, NM 88211-0250

(405) 552-8137 (office) (405) 245-3471 (Cellular) (505) 748-3371 (office) (505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed:

Stephanie A. Ysasaga Senior Engineering Technician

November 8th, 2005

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

Willow Draw 25 Fed Com 2

Surface Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM Bottom hole Location: 660' FNL & 1310' FEL, Unit A, Sec 25 T20S R25E, Eddy, NM

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

UNITED STATES DEPARTMENT OF THE INTERIOR

Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

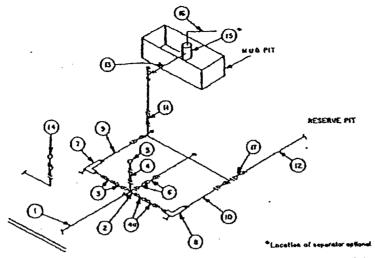
Statement Accepting Responsibility for Operations

Operator Name: Street or Box:	Devon Energy Production Company, LP 20 North Broadway, Suite 1500 Oklohoma City, Oklohoma
City, State: Zip Code:	Oklahoma City, Oklahoma 73102-8260
	licable terms, conditions, stipulations and restrictions concerning operations portion thereof, as described below.
Lease No.:	NM-97111
Legal Description of Land:	320 acres 25-T20S-R25E Lot A Sec 25 660' FNL & 1310' FEL
Formation(s):	Morrow
Bond Coverage:	Nationwide
BLM Bond File No.:	CO-1104
Authorized Signature:	Stephanie A. Ysasaga
Title:	Senior Engineering Technician
Date:	11/08/05

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - a. Characteristics of H2S
 - b. Physical effects and hazards
 - c. Proper use of safety equipment and life support systems.
 - d. Principle and operation of H2S detectors, warning system and briefing areas
 - e. Evacuation procedures, routes and first aid.
 - f. Proper use of 30-minute pressure demand air pack.
- 2. H2S Detection and Alarm System
 - a. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
 - a. Windsock at mud pit area should be high enough to be visible
 - b. Windsock at briefing area should be high enough to be visible
 - c. There should be a windsock at entrance to location
- 4. Condition Flags and Signs
 - a. Warning Sign on access road to location
 - b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well Control Equipment
 - a. See Exhibit "E" & "E-1"
- 6. Communication
 - a. While working under masks chalkboards will be used for communication.
 - b. Hand signals will be used where chalk board is inappropriate
 - c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7. Drill stem Testing
 - a. Exhausts will be watered
 - b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
 - c. If the location is near to a dwelling a closed DST will be performed.
- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.



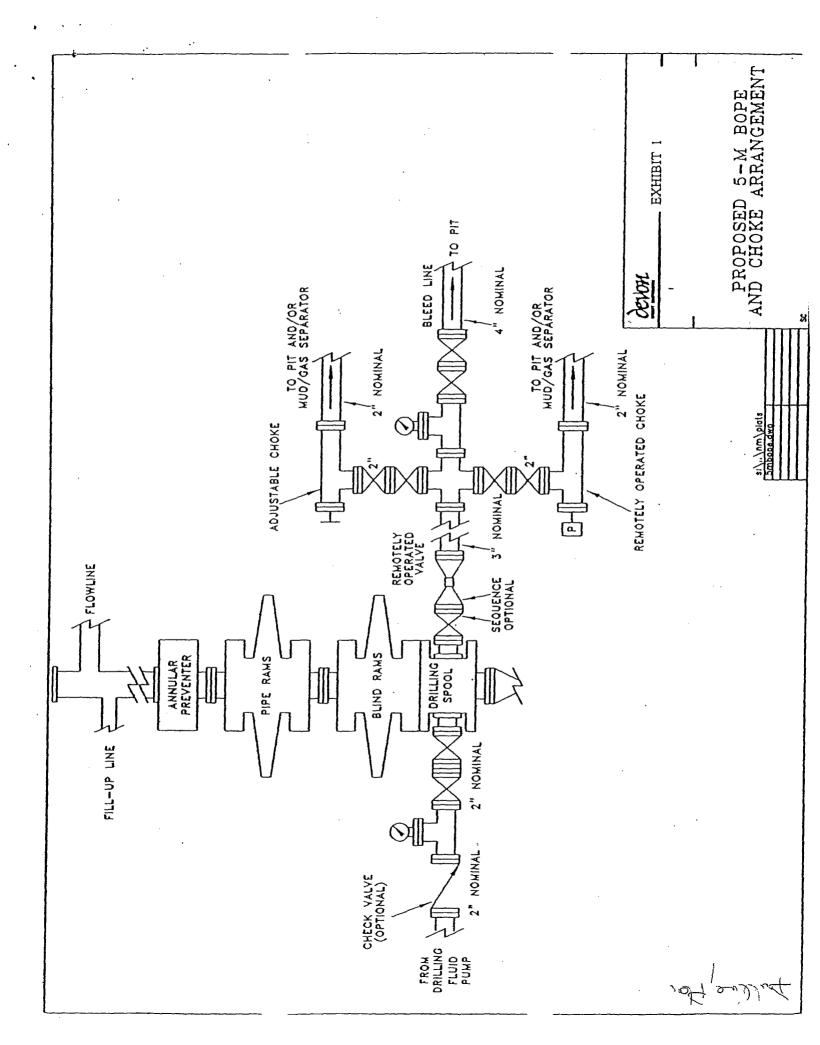
BAUTSURTZBUZ BHOY38

			MINI	MUM REQU	KREMENTS	5				
		3,000 MWP 5,000 MWP					10,000 MWP			
		10	NOMINAL	RATING	I.D.	HOMINAL	RATING	LD.	NOMINAL	PATING
Na	l	 	3.	3,000	1	3.	5,000		3"	10,000
1	Line from drilling spool	 		3,000	 		5,000			
2	Curs 3, KJ, KJ, KJ,	 		3,000	 	1				10,000
	Cust 3_x3_x3_x3_	ļ	ļ		 	 		 		
3	Velves(1) Gate []	3-1/8*		3,000	3-1/8"		\$,000	3-1/8-		10,000
4	Valve Gate D Plug D(2)	1-13/16*		3,000	1-13/16*		5,000	1-17/16"		10,000
48	Values(1)	2-1/16*		3,000	2-1/16"	·	5,000	3-1/8"		10,000
	Pressure Gauge	1		3,000	•		5,000			10,000
6	Valves Ping D(Z)	3-1/8*		3,000	3-1/8"		2,000	3-1/8"		10,000
	Adjustable Choke(3)	2"		3,000	2°		5,000	2-		10,000
7		1-		3.000	1.		5,000	5~		10,000
-5	Adjustable Chake		3-	3.000		3-	\$,000		3-	10,000
9	Line	 	2"	3,000		2"	5.000		3-	10,000
10	Line	 _	2	3,000	<u> </u>				l	
11	Valves Plug ((2)	3-1/6"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3.	1,000		3"	1,000		3.	2,000
13	Lines	1	3-	1,000		3*	1,000		3"	2,000
14	Remote reading compound standpipe pressure pauge			3,000			5.000	•		10,000
15	Gas Separator	1	275"			2:5			5,x2,	
16	Line		4-	1,000		7	1,000		4"	2,000
17	Valves Plug (C2)	J-1/8*		3,000	2-1/8"		5,000	3-1/8*		10,000

- (1) Only one required in Class 3ML
- (2) Gate velves only shall be used for Class 10M.
- [3] Remote operated hydrause choka required on \$,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choke manifold shall be welded, studded, llanged or Cameron clamp of comparable rating.
 All flanges shall be API 68 or 68X and ring gaskets shall be API AX or 8X. Use only 8X for 10 MWP.
- All lines shall be securely anchored.
- An initial based in a second of a control of the second of
- 5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- 6. Line from drilling spoot to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should yent as far as practical from the well.



devon

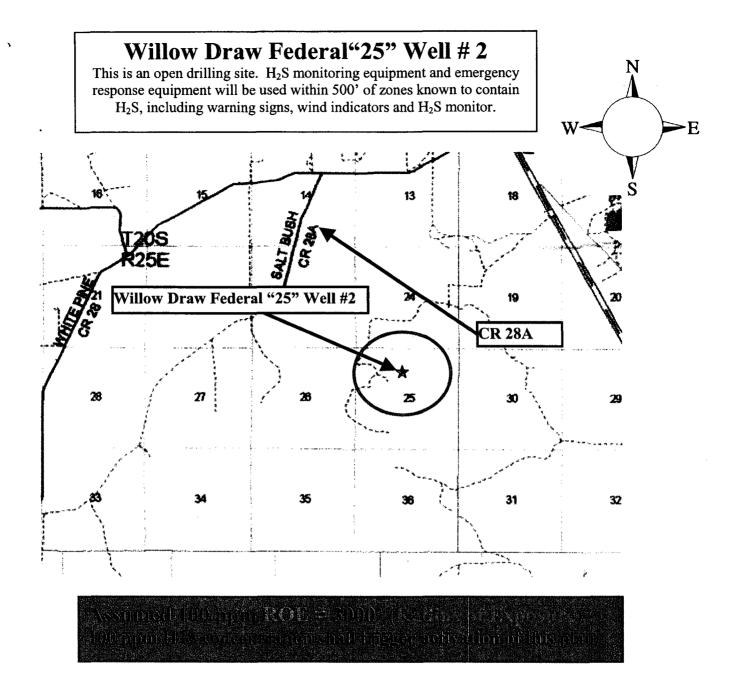
Devon Energy Corporation 20 North Broadway Oklahoma City, Oklahoma 73102-8260

Hydrogen Sulfide (H₂S) Contingency Plan

For

Willow Draw Federal"25" Well #2
660'FNL & 1310' FEL,
Sec-25, T-20S R-25E

Eddy County NM



Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated NorthWest on lease road to Salt Bush – CR 28A. Crews should then block entrance to the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE There are no homes or buildings in or near the ROE.

Emergency Procedures

In the case of a release of gas containing H_2S , the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H₂S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr- ation
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

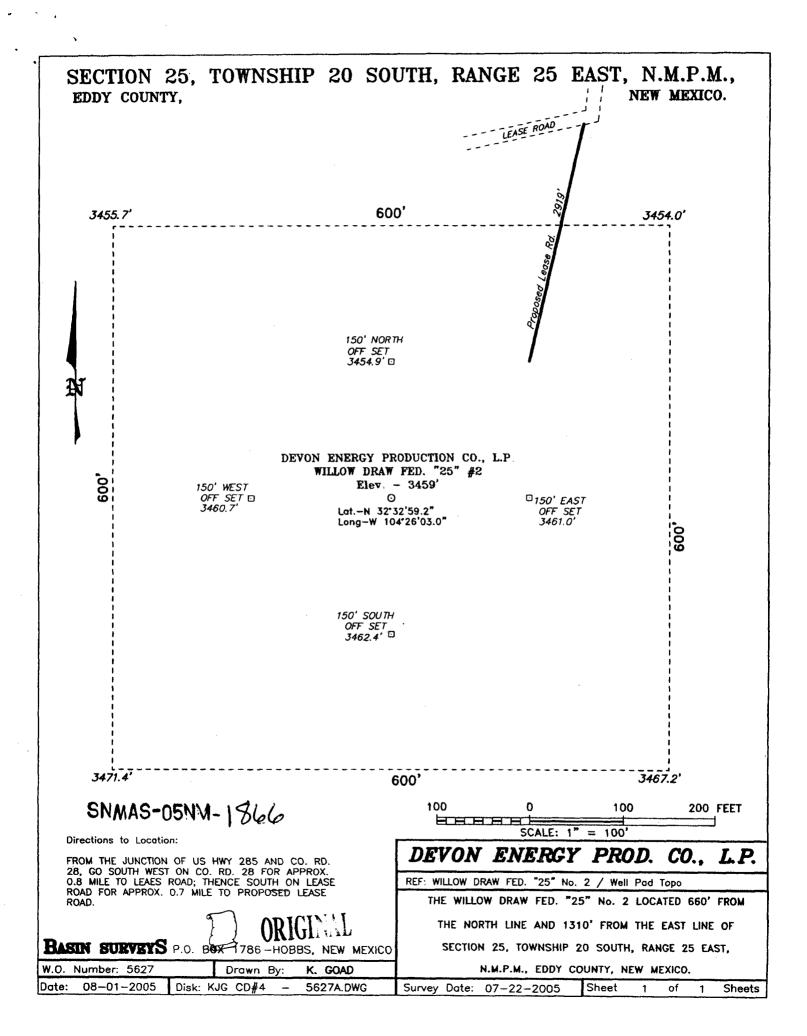
Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Devon Energy Corp. Company Call List

	Artesia	(505)	Cellular	Office	<u>Home</u>	
	Foreman	ı – BJ Cathey	390-5893	.748-0176	. 887-6026	
	Asst. Frr	nn – Bobby Jones	748-7447	. 748-0176	. 746-3194	
		urmond				
		yers				
	Engineer	r – Wyatt Abbitt	(405) 245-3471	. (405) 552-8137	. (405) 340	-3879
Aş	gency C	Call List				
Eddy	z Ar	tesia				
Cour	<u>ity</u>	State Police				746-2703
(505)	1	City Police				746-2703
	_	Sheriff's Office			• • • • • • • • • • • • • • • • • • • •	. 746-9888
		Ambulance				. 911
		Fire Department		***************************************		. 746-2701
			ergency Planning Co			
	Ca	ırlsbad				
		State Police			•••••	. 885-3137
		City Police			•••••	. 885-2111
		Sheriff's Office			•••••	. 887-7551
		Ambulance			•••••	. 911
		Fire Department			•••••	. 885-2111
		LEPC (Local En	nergency Planning	g Committee)		887-3798
		US Bureau of La	and Management.		•••••	887-6544
		New Mexico Em	nergency Respons	e Commission (s	anta Fe)	(505)476-9600
				•	•	` '
			ency Response Ce			(800) 424-8802
		C	• •	inter (Washington	1, 20)	(600) 121 6662
		nergency Services				
	.]	Boots & Coots IWC		1-800)-256-9688	or (281) 931-8884
	(Cudd Pressure Contro	ol	(915)	699-0139	or (915) 563-3356
		Halliburton				
]	B. J. Services		(505)	746-3569	
Give	1	Flight For Life - Lub	bock, TX			(806) 743-9911
GPS		Aerocare - Lubbock,				` '
posit		Med Flight Air Amb				
Posii		Lifeguard Air Med				
	,	Liteguard All Med	Dro. Albuqueiqu	C, 14171	•••••	(303) 212-3113

Prepared in conjunction with Wade Rohloff of;





CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Devon Energy Production Company, L.P.

Well Name & No.

Willow Draw 25 Federal Com #2

Location:

660' FNL, 1310' FEL, Section 25, T. 20 S., R. 25 E., Eddy County, New Mexico

Lease:

NM-97111

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

- A. Well spud
- B. Cementing casing: <u>13-3/8</u> inch <u>8-5/8</u> inch <u>5-1/2</u> inch
- C. BOP tests
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

- 1. The <u>13-3/8</u> inch surface casing shall be set at <u>approximately 400 feet and cement circulated to the <u>surface</u>. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.</u>
- 2. The minimum required fill of cement behind the <u>8-5/8 inch</u> intermediate casing is <u>to be circulated to the surface</u>.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>to reach at least 500 feet</u> above the top of the uppermost hydrocarbon productive interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>13-3/8</u> inch surface casing shoe and shall be tested as follows. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi.
- 3. A variance to test the BOP's to 1200 psi with the rig pumps before drilling out the 13-3/8 inch surface casing shoe is granted.

- 4. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

acs 11/21/05