

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction

-ARTESIA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 13 2006

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-96203	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Devon Energy Production Company, LP		7. If Unit or CA Agreement, Name and No.	
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260		8. Lease Name and Well No. Milagro 34 Federal 1	
3b. Phone No. (include area code) 405-552-7802		9. API Well No. 30-015-34609	
4. Location of Well (Report location clearly on the face of the map with latitude and longitude) At surface NENE 660' FNL & 990' FEL At proposed prod. zone SWSE 660' FSL & 1980' FEL		10. Field and Pool, or Exploratory Carlsbad South; Morrow	
14. Distance in miles and direction from nearest town or post office* Approximately 2 miles southwest of Carlsbad, NM		11. Sec., T. R. M. or Blk. and Survey or Area Lot A Sec 34 T22S R26E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		12. County or Parish Eddy County	
16. No. of acres in lease 320		13. State NM	
17. Spacing Unit dedicated to this well 320		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	
19. Proposed Depth MD 13,100' TVD 12,000'		20. BLM/BIA Bond No. on file CO 1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3235' GL		22. Approximate date work will start* 01/02/2006	
23. Estimated duration 45 days		24. Attachments	

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed/Typed) Stephanie A. Ysasaga	Date 12/14/2005
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Title  
Sr. Staff Engineering Technician

Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date FEB 10 2006
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Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE
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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 conduct operations thereon.  
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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

\*(Instructions on page 2)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

Carlsbad Controlled Water Basin

Witness Surface &  
Intermediate Casing

9.5

**Additional Operator Remarks:**

Devon Energy Production Company, LP proposes to drill a Morrow well to 12,000' 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 To Location:**

From the junction of Hwy 62 / 180 and County Rd. 672, go west on Hildago Road for 3.0 miles to 2-track road; thence south on 2-track road for 0.5 mile to proposed lease road.

**Access Road:**

Approximately 4,390' 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.

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
811 South First, Artesia, NM 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name Carlsbad South; Morrow
Property Code	Property Name MILAGRO "34" FEDERAL	Well Number 1
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION CO., L.P.	Elevation 3235'

Surface Location

UL or lot No. A	Section 34	Township 22 S	Range 26 E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 990	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No. O	Section 34	Township 22S	Range 26E	Lot Idn	Feet from the 660'	North/South line SOUTH	Feet from the 1980'	East/West line EAST	County EDDY
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Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>Lat - N32°21'15.3" Long - W104°16'32.2"</p> <p>SL 3235.3' 3232.8' 990' 3227.0' 3236.5'</p> <p>BHL 660' 1980'</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature Stephanie A. Ysasaga</p> <p>Printed Name Sr. Staff Engineering Tech</p> <p>Title 12/15/05</p> <p>Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>DECEMBER 6, 2005</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor Professional Surveyor W.O. No. 6003 Certificate No. 7977 BASIN SURVEYS</p>
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District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, 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-144  
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: <u>Devon Energy Production Company, L.P.</u> Telephone: <u>(405)-552-7802</u> e-mail address: <u>Stephanie.Ysasaga@dev.com</u>		
Address: <u>P.O. Box 250 Artesia, NM 88211</u>		
Facility or well name: <u>Milagro 34 Federal 1</u> API #: _____ U/L or Qtr/Qtr <u>A</u> Sec <u>34</u> T <u>22S</u> R <u>26E</u>		
County: <u>Eddy</u> Latitude _____ Longitude _____ NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/>		
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>20,000</u> bbls	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____	<b>RECEIVED</b> <b>JAN 18 2006</b> <b>ODU-ARTESIA</b>
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) <u>100 feet or more</u> (0 points)	
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) <u>No</u> (0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) <u>1000 feet or more</u> (0 points)	
Ranking Score (Total Points)		

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results.

(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described 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 ☐.

Date: 12/30/05

Printed Name/Title Stephanie A. Ysasaga / Sr. Staff Engineering Technician Signature \_\_\_\_\_

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title \_\_\_\_\_

Signature \_\_\_\_\_

Date: 1-19-06

**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: **Devon Energy Production Company, LP**  
Street or Box: **20 North Broadway, Suite 1500**  
City, State: **Oklahoma City, Oklahoma**  
Zip Code: **73102-8260**

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

Lease No.: **NMNM-96203**

Legal Description of Land: **320 acres 34-T22S-R26E**  
**Lot A NENE 660' FNL & 990' FWL**

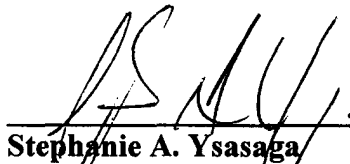
*E per Stephanie  
or 2/10/06  
(52)*

Formation(s): **Happy Valley; Morrow (Gas)**

Bond Coverage: **Nationwide**

BLM Bond File No.: **CO-1104**

Authorized Signature:

  
**Stephanie A. Ysasaga**

Title: **Senior Engineering Technician**

Date: **12/16/05**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0135  
EXPIRES: NOVEMBER 30, 2000Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals

SUBMIT IN TRIPLICATE

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other \_\_\_\_\_

2. Name of Operator

DEVON ENERGY PRODUCTION COMPANY, LP

3. Address and Telephone No.

20 North Broadway, Ste 1500, Oklahoma City, OK 73102 405-552-7802

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

NENE Lot A 660' FNL &amp; 990' FEL

Sec 34 T22S, R26E

5. Lease Serial No.

NMNM-96203

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Well Name and No.

Milagro 34 Federal 1

9. API Well No.

10. Field and Pool, or Exploratory

Carlsbad South; Morrow

12. County or Parish 13. State

Eddy

NM

## CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Access Road
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Devon Energy Production Company, L.P. respectfully requests to move the proposed access road per BLM request. The proposed alternate road is 3400' in length and approximately 15' in width. The proposed alternate access road begins on Eddy County Road 672 (Hidalgo Road) in Section 27 and trends south 3,100 ft (crossing the Sections 27/34 E/W line), thence (in Section 34) east 300 ft, ending on the southwest corner of the Milagro "34" Federal Number 1 proposed well pad. See attached plat that depicts the access road.

See Arch report dated 02/05/06, NMCRIS Number: 97502, Cultural Resource Permit #: 145-2920-04-O, Consultant Report #: SNMAS-05/06NM-2028-A.

Received

FEB 08 2006

Carlsbad Field Office  
Carlsbad, N.M.

14. I hereby certify that the foregoing is true and correct

Signed

Name Stephanie A. YsasagaTitle Sr. Staff Engineering Technician

Date

2/7/2006

(This space for Federal or State Office use)

Approved by

/s/ Joe G. Lara

ACTING

Title FIELD MANAGER

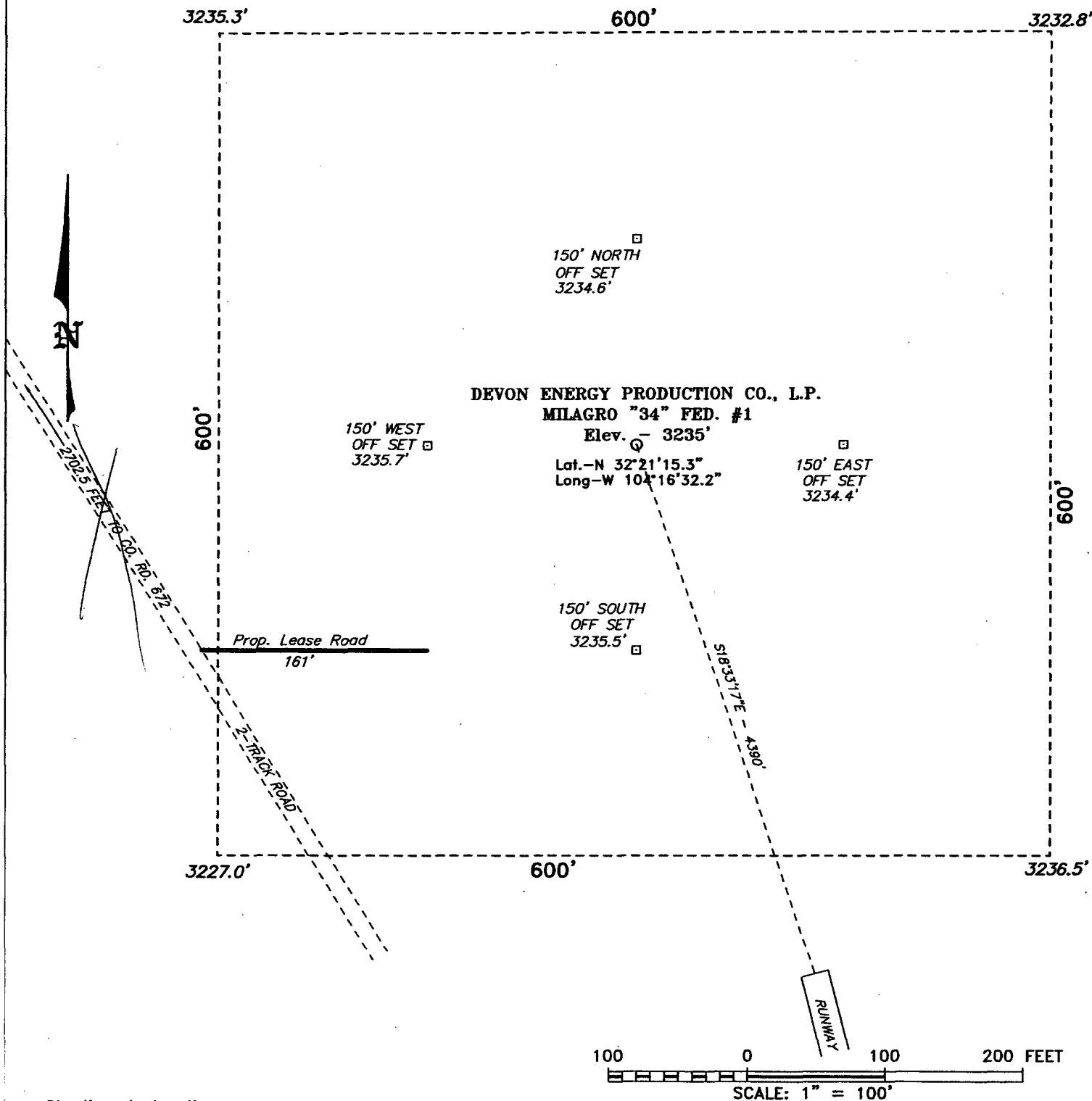
Date

FEB 10 2006

Conditions of approval, if any:



SECTION 34, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF US HWY 62/180 AND CO.  
RD. 672, GO WEST ON HIDALGO ROAD FOR 3.0  
MILES TO 2-TRACK ROAD; THENCE SOUTH ON  
2-TRACK FOR 0.5 MILE TO PROPOSED LEASE ROAD.

**DEVON ENERGY PROD. CO., L.P.**

REF: MILAGRO "34" FED. No. 1 / Well Pad Topo

THE MILAGRO "34" FED. No. 1 LOCATED 660' FROM  
THE NORTH LINE AND 990' FROM THE EAST LINE OF  
SECTION 34, TOWNSHIP 22 SOUTH, RANGE 26 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

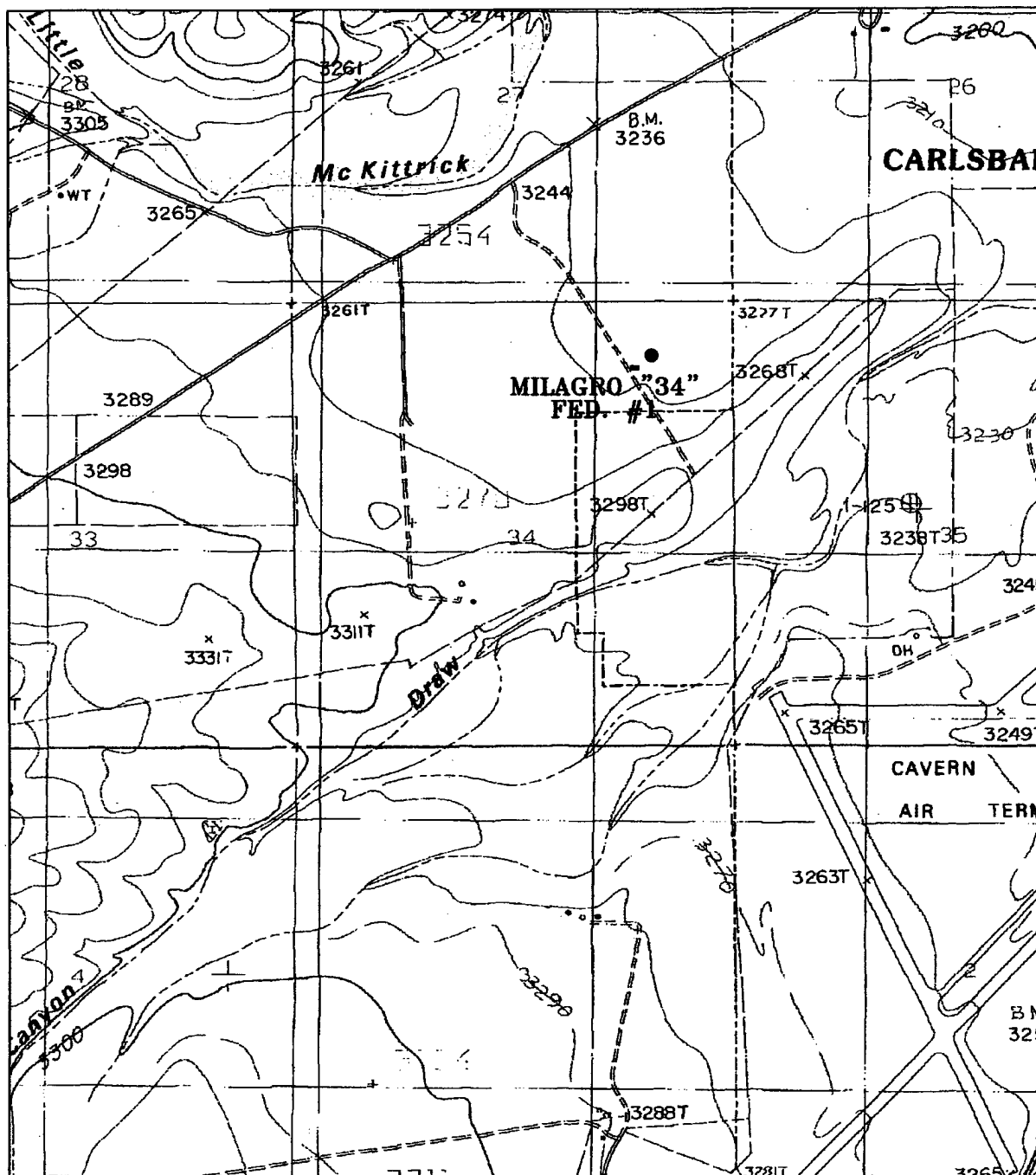
W.O. Number: 6003 Drawn By: K. GOAD

Date: 12-07-2005 Disk: KJG CD#4 - 6003A.DWG

Survey Date: 12-06-2005

Sheet 1 of 1 Sheets





### MILAGRO "34" FEDERAL #1

Located at 660' FNL and 990' FEL  
 Section 34, Township 22 South, Range 26 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

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

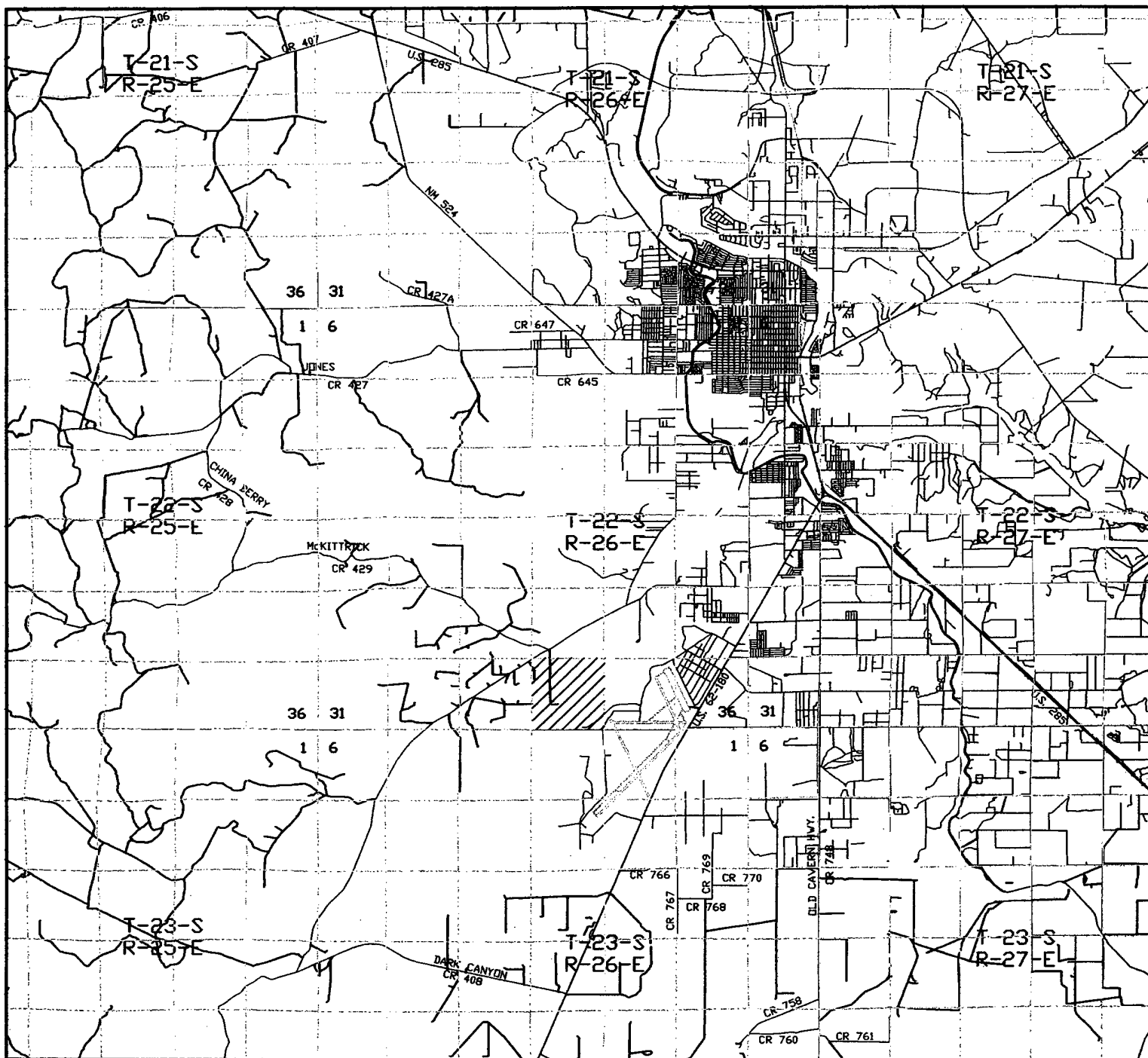
W.O. Number: 6003AA - KJG #1

Survey Date: 12-06-2005

Scale: 1" = 2000'

Date: 12-07-2005

**DEVON ENERGY**  
**PROD. CO., L.P.**



**MILAGRO "34" FEDERAL #1**  
 Located at 660' FNL and 990' FEL  
 Section 34, Township 22 South, Range 26 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

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

W.O. Number: 6003AA - KJG #1

Survey Date: 12-06-2005

Scale: 1" = 2 MILES

Date: 12-07-2005

**DEVON ENERGY**  
**PROD. CO., L.P.**

## **DRILLING PROGRAM**

Devon Energy Production Company, LP

### **Milagro 34 Federal 1**

Surface Location: 660' FNL & 990' FEL, Unit A, Sec 34 T22S R26E, Eddy, NM

Bottom hole Location: 660' FSL & 1980' FEL, Unit O, Sec 34 T22S R26E, Eddy, NM

#### **1. Geologic Name of Surface Formation**

- a. Permian Undifferentiated

#### **2. Estimated tops of geological markers:**

a. Capitan	535'
b. Capitan Perosity	890'
c. Delaware Sd	1825'
d. Bone Spring Lm	5050'
e. First Bone Spring Sn	6000'
f. Second Bone Spring Sn	6550'
g. Third Bone Spring Sn	8200'
h. Wolfcamp	8600'
i. Penn	9890'
j. Strawn	10140'
k. Atoka	10500'
l. Morrow Clastics	11225'
m. Lower Morrow	11600'
n. Barnett	11815'
o. Total Depth	12000'

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

a. Capitan	535'	Water
b. Capitan Perosity	890'	Water
c. Delaware Sn	1825'	Oil
d. Bone Spring Lm	5050'	Oil
e. First Bone Spring Sd	6000'	Oil
f. Second Bone Spring Sd	6550'	Gas
g. Third Bone Spring Sd	8200'	Gas
h. Wolfcamp	8600'	Gas
i. Penn	9890'	Gas
j. Strawn	10140'	Gas
k. Atoka	10500'	Gas
l. Morrow Clastics	11225'	Gas
m. Lower Morrow	11600'	Gas

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 600' and circulating cement back to surface. Freshwater will be protected by setting 9 5/8" casing at 2550' 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:**

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<b>WITNESS</b>
17 ½"	0'-600'	13 3/8"	48#	ST&C	H-40	<b>WITNESS</b>
12 ¼"	600' – 2250'	9 5/8"	36#	ST&C	J-55	<b>WITNESS</b>
8 ¾"	2550'-10500'	7"	26#	LT&C	HCP-110	
6 1/8"	10500'-13100'	4 ½"	13.5#	LT&C	HCP-110	

5. **Cement Program:**

- a. 13 3/8" Surface Cement w/326sx(35:65)Poz(FlyAsh)Class C + 2%CaCl+1/4pps CelloFlake+5ppsLCM-1+6%Bentonite followed by 200sx "C" + 1/4pps Celloflake+2%CaCl. TOC-Surface
- b. 9 5/8" Intermediate Cement w/576sx(35:65)Poz(FlyAsh)Class C + 5%NaCl + 1/4pps Celloflake, 5pps LCM-1,+6%Bentonite followed by 250sx(60:40) Poz(FlyAsh) Class C + 5%NaCl + 1/4pps Celloflake,+ 0.5% sodium metasilicate+4%MPA-1. TOC-Surface
- c. 7" Production Cement Stage1: 826sx(60:40)Poz(FlyAsh)Class H + 1%NaCl+ 0.75%BA-10,+0.75%EC-1+1/4pps Celloflake+3pps KolSeal,+4%MPA-1 + 0.15%Diacel LWL; DV Tool@5500' Stage2: 625sx(60:40)Poz(FlyAsh)Class C + 5%NaCl+1/4pps Celloflake+4%MPA-1+0.2%Sodium Metasilicate. TOC-2050'.
- d. 4 ½" Liner Liner @13,100' - Cement w/257 sx (15:61:11)Poz(FlyAsh)Class C CSE-2,+ 3%NaCl + 0.75%EC-1+ 1/4pps Celloflake + 0.4%CD-32,+3pps LCM-1,+ 0.7%FL-25 + 0.1% R-3, + 0.7%FL-52A. TOC@10,200'.

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 9 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). 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 9 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

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' – 600'	8.4-9.4	29	NC	Fresh Water
600' – 2250'	10	29	NC	Brine
2250'-10500'	8.6 – 9.3	29-34	NC	Cut Brine
10500'-13100'	9.8-10.3	36-40	10-6	Brine/Polymer

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 4 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 1/2" 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 H<sub>2</sub>S in this area. If H<sub>2</sub>S 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 5000 psi and Estimated BHT 150°. No H<sub>2</sub>S 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

### **Milagro 34 Federal 1**

Surface Location: 660' FNL & 990' FEL, Unit A, Sec 34 T22S R26E, Eddy, NM

Bottom hole Location: 660' FSL & 1980' FEL, Unit O, Sec 34 T22S R26E, 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 Hwy 62 / 180 and County Rd. 672, go west on Hildago Road for 3.0 miles to 2-track road; thence south on 2-track road for 0.5 mile to proposed lease road.

#### **2. Access Road**

- a. Exhibit #3 shows the existing lease road. Approximately 4390' 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 Milagro 34 Federal 1 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 dump 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

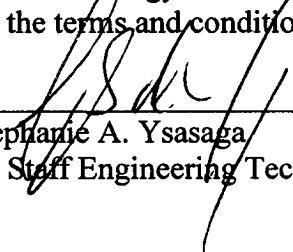


(405) 552-8137 (office)  
(405) 245-3471 (Cellular)

(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:  . Date: December 15<sup>th</sup>, 2005  
Stephanie A. Ysasaga  
Sr. Staff Engineering Technician

Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, LP  
**Milagro 34 Federal 1**

Surface Location: 660' FNL & 990' FEL, Unit A, Sec 34 T22S R26E, Eddy, NM  
Bottom hole Location: 660' FSL & 1980' FEL, Unit O, Sec 34 T22S R26E, 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.

## **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.



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

# **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

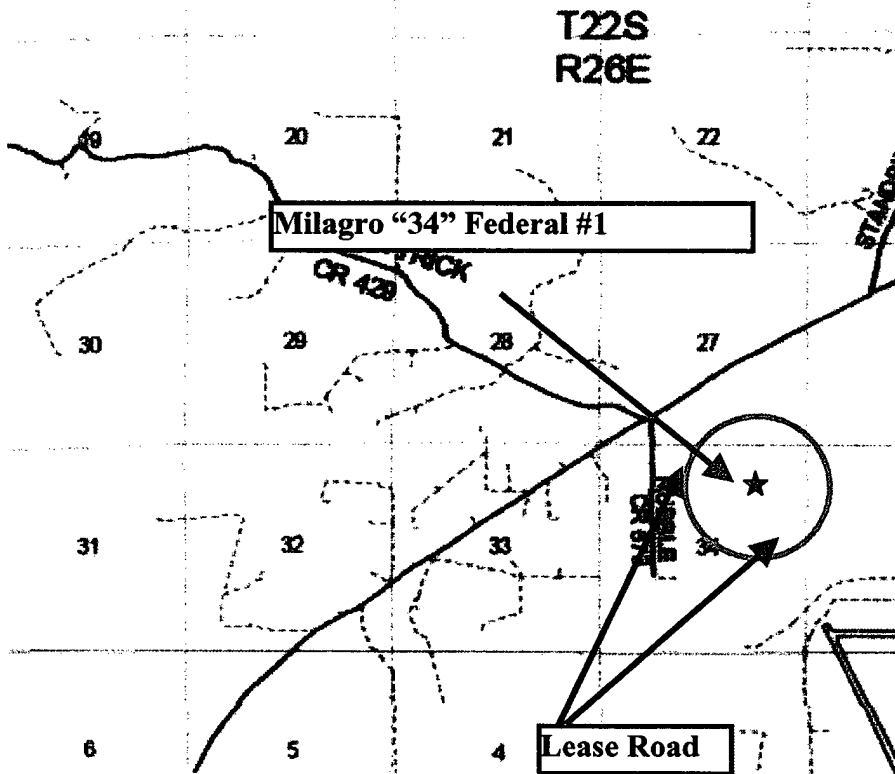
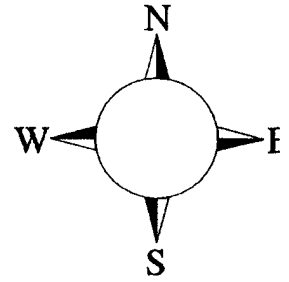
**Milagro “34” Fed # 1**

**660’ FNL & 990’ FEL,  
Sec-34, T-22S R-26E**

**Eddy County NM**

## Milagro "34" Federal # 1

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)  
100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

### 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. Crews should then move to block access 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 the ROE.

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, 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 H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S 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 (SO<sub>2</sub>). 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 H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	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

<u>Artesia (505)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – BJ Cathey.....	390-5893 .....	748-0176 .....	887-6026
Asst. Foreman – Bobby Jones	748-7447 .....	748-0176 .....	746-3194
Don Mayberry.....	748-7180 .....	748-5235 .....	746-4945
Mike Myers .....	(505) 513-0782....	(505) 748-0187 ...	(505) 395-3020
Engineer – Tom Pepper.....	(405) 203-2242....	(405) 552-4513 ...	(405) 728-8641

## Agency Call List

### Eddy      Artesia

<u>County</u>	State Police .....	746-2703
<u>(505)</u>	City Police .....	746-2703
	Sheriff's Office .....	746-9888
	Ambulance .....	911
	Fire Department .....	746-2701
	LEPC (Local Emergency Planning Committee) .....	746-2122
	NMOCD .....	748-1283

### **Carlsbad**

State Police .....	885-3137
City Police .....	885-2111
Sheriff's Office .....	887-7551
Ambulance .....	911
Fire Department .....	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544
New Mexico Emergency Response Commission (Santa Fe) ...	(505)476-9600
24 HR .....	(505) 827-9126
National Emergency Response Center (Washington, DC)	(800) 424-8802

### **Emergency Services**

Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton .....	(505) 746-2757
B. J. Services.....	(505) 746-3569

<i>Give</i>	Flight For Life - Lubbock, TX .....	(806) 743-9911
<i>GPS</i>	Aerocare - Lubbock, TX .....	(806) 747-8923
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM .....	(505) 842-4433
	Lifeguard Air Med Svc. Albuquerque, NM ....	(505) 272-3115

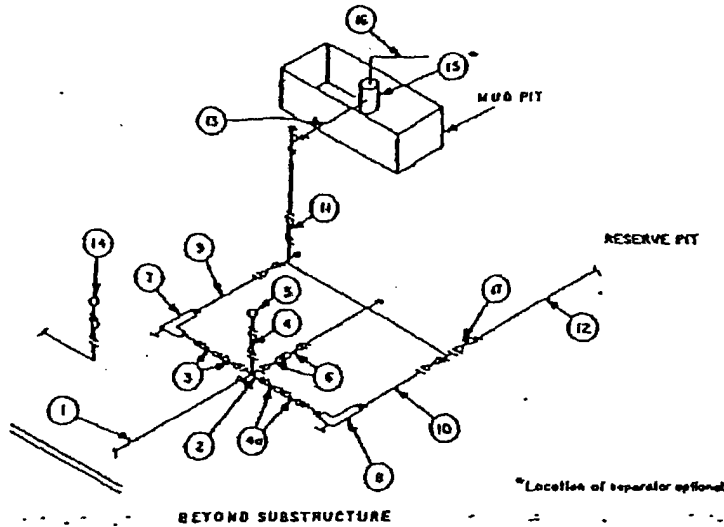
Prepared in conjunction with  
Wade Rohloff of;



**MINIMUM CHOKE MANIFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

Exhibit E



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		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		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

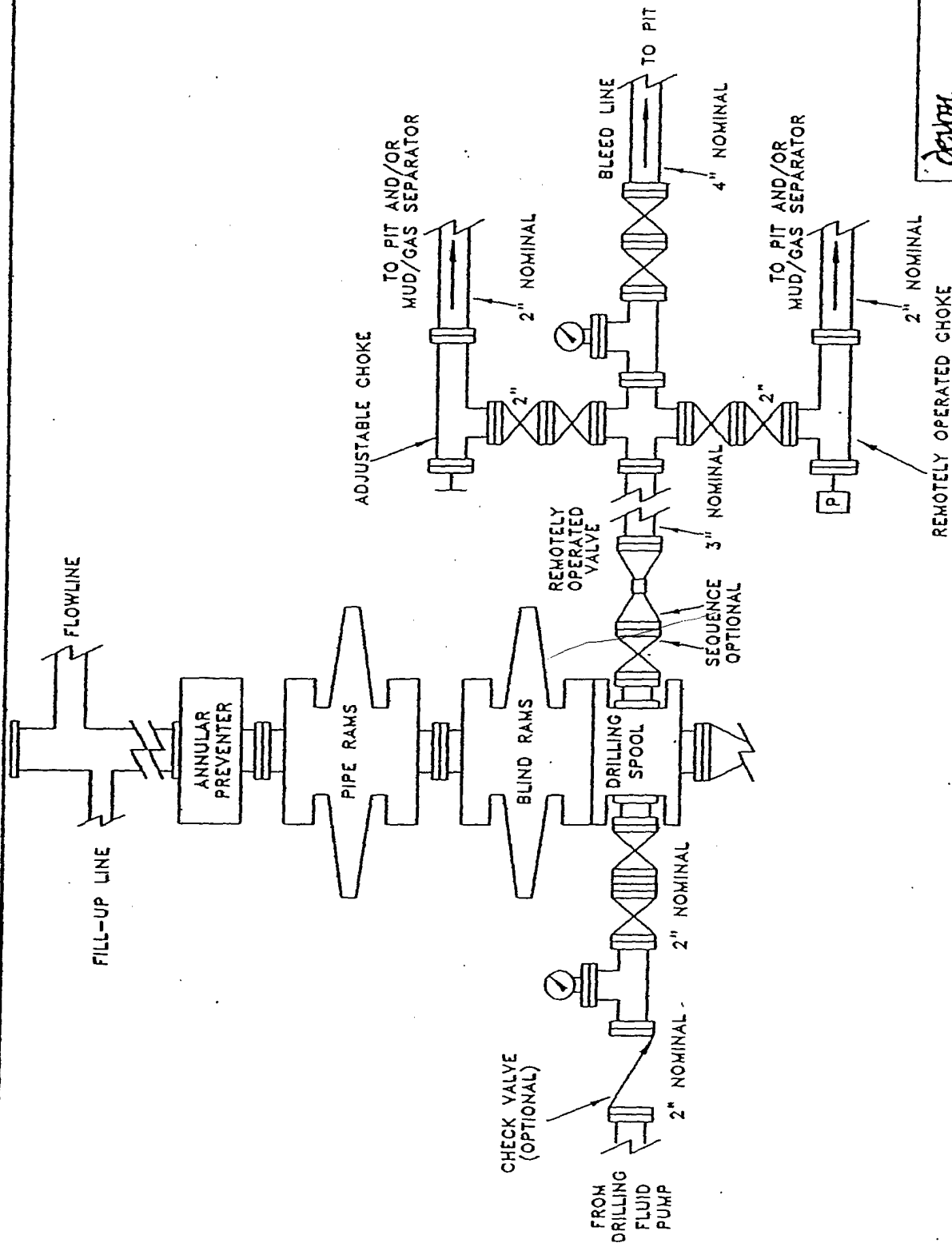
(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
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 spool 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 vent as far as practical from the well.





devon

EXHIBIT 1

PROPOSED 5-M BOPE  
AND CHOKE ARRANGEMENT

sl:\nm\plots  
5mbopa.dwg

SC



**INTEQ**

2105 market Street Midland, TX 79703 Ph. (432)694-9517 Fax. (432)694-5648

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## **Directional/Horizontal Plan Report**

**Devon Energy**

**Milagro 34 Fed#1**

**Eddy County, NM**

**Revised Plan #1**

**Prepared By Oscar Gomez  
Thursday, December 15, 2005**

DEVON ENERGY  
Milagro 34 Fed #1, slot #1  
, Eddy County New Mexico

PROPOSAL LISTING Page 1  
Your ref : Plan 1  
Last revised : 15-Dec-2005

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100ft	Vert Sect
0.00	0.00	194.04	0.00	0.00 N	0.00 E	0.00	0.00
500.00	0.00	194.04	500.00	0.00 S	0.00 W	0.00	0.00
1000.00	0.00	194.04	1000.00	0.00 S	0.00 W	0.00	0.00
1500.00	0.00	194.04	1500.00	0.00 S	0.00 W	0.00	0.00
2000.00	0.00	194.04	2000.00	0.00 S	0.00 W	0.00	0.00
2500.00	0.00	194.04	2500.00	0.00 S	0.00 W	0.00	0.00
3000.00	0.00	194.04	3000.00	0.00 S	0.00 W	0.00	0.00
3500.00	0.00	194.04	3500.00	0.00 S	0.00 W	0.00	0.00
4000.00	0.00	194.04	4000.00	0.00 S	0.00 W	0.00	0.00
4500.00	0.00	194.04	4500.00	0.00 S	0.00 W	0.00	0.00
5000.00	0.00	194.04	5000.00	0.00 S	0.00 W	0.00	0.00
5100.00	0.00	194.04	5100.00	0.00 S	0.00 W	0.00	0.00 KOP
5200.00	3.50	194.04	5199.94	2.96 S	0.74 W	3.50	3.06
5300.00	7.00	194.04	5299.50	11.84 S	2.96 W	3.50	12.20
5400.00	10.50	194.04	5398.32	26.60 S	6.65 W	3.50	27.41
5500.00	14.00	194.04	5496.03	47.18 S	11.80 W	3.50	48.63
5600.00	17.50	194.04	5592.26	73.51 S	18.38 W	3.50	75.77
5700.00	21.00	194.04	5686.65	105.48 S	26.38 W	3.50	108.73
5800.00	24.50	194.04	5778.86	142.99 S	35.76 W	3.50	147.40
5900.00	28.00	194.04	5868.53	185.90 S	46.49 W	3.50	191.62
6000.00	31.50	194.04	5955.34	234.03 S	58.52 W	3.50	241.23
6039.11	32.87	194.04	5988.44	254.24 S	63.58 W	3.50	262.07 ROB
6500.00	32.87	194.04	6375.55	496.90 S	124.26 W	0.00	512.20
7000.00	32.87	194.04	6795.51	760.15 S	190.09 W	0.00	783.56
7500.00	32.87	194.04	7215.46	1023.40 S	255.92 W	0.00	1054.92
8000.00	32.87	194.04	7635.42	1286.66 S	321.75 W	0.00	1326.28
8500.00	32.87	194.04	8055.38	1549.91 S	387.59 W	0.00	1597.64
9000.00	32.87	194.04	8475.34	1813.16 S	453.42 W	0.00	1868.99
9500.00	32.87	194.04	8895.29	2076.41 S	519.25 W	0.00	2140.35
10000.00	32.87	194.04	9315.25	2339.67 S	585.08 W	0.00	2411.71
10500.00	32.87	194.04	9735.21	2602.92 S	650.91 W	0.00	2683.07
11000.00	32.87	194.04	10155.17	2866.17 S	716.74 W	0.00	2954.43
11500.00	32.87	194.04	10575.12	3129.42 S	782.57 W	0.00	3225.79
12000.00	32.87	194.04	10995.08	3392.68 S	848.41 W	0.00	3497.15
12500.00	32.87	194.04	11415.04	3655.93 S	914.24 W	0.00	3768.51
13000.00	32.87	194.04	11835.00	3919.18 S	980.07 W	0.00	4039.87
13077.39	32.87	194.04	11900.00	3959.93 S	990.26 W	0.00	4081.87 TD

All data is in feet unless otherwise stated.  
Coordinates from structure and TVD from rotary table.  
Bottom hole distance is 4081.87 on azimuth 194.04 degrees from wellhead.  
Vertical section is from N 0.00 E 0.00 on azimuth 194.04 degrees.  
Calculation uses the minimum curvature method.  
Presented by Baker Hughes INTEQ

DEVON ENERGY  
Milagro 34 Fed #1, slot #1  
, Eddy County New Mexico

PROPOSAL LISTING Page 2  
Your ref : Plan 1  
Last revised : 15-Dec-2005

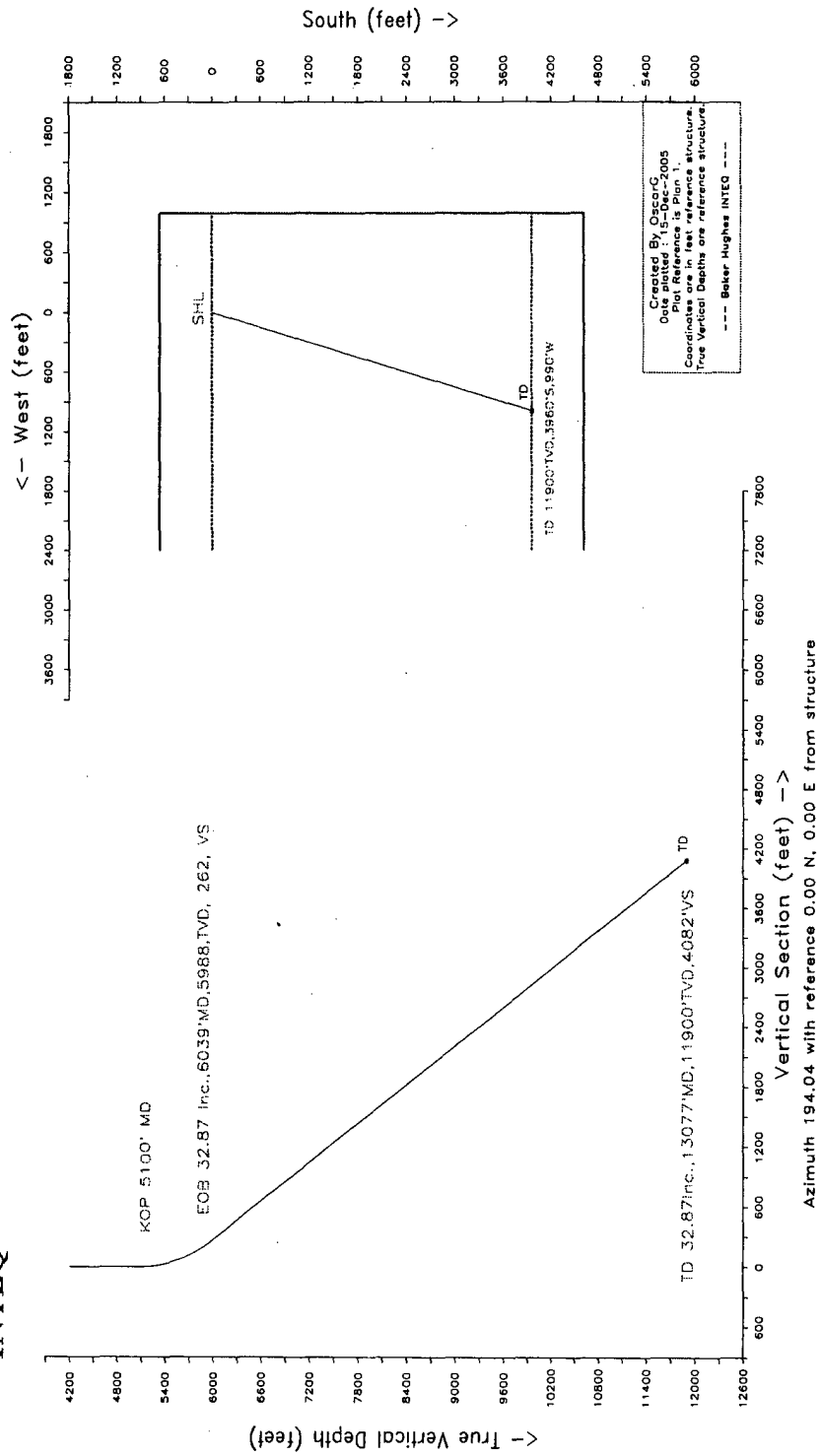
		Comments in wellpath	
		=====	
MD	TVD	Rectangular Coords.	Comment
5100.00	5100.00	0.00 S	0.00 W KOP
6039.11	5988.44	254.24 S	63.58 W BOB
13077.39	11900.00	3959.93 S	990.26 W TD

Targets associated with this wellpath				
=====				
Target name	Geographic Location	T.V.D.	Rectangular Coordinates	Revised
TD		11900.00	3959.93S 990.26W	14-Dec-2005



Structure : Milagro 34 Fed #1 Slot : slot #1

Slot : slot #1  
Location : Eddy County New Mexico



## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Devon Energy Production Company, L.P.  
Well Name & No. Milagro 34 Federal #1  
SH Location: 660' FNL, 990' FEL, Section 34, T. 22 S., R. 26 E., Eddy County, New Mexico  
BH Location: 660' FSL, 1980' FEL, Section 34, T. 22 S., R. 26 E., Eddy County, New Mexico  
Lease: NM-96203

### 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: 13-3/8 inch 9-5/8 inch 7 inch 4-1/2 inch liner

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.

### II. CASING:

1. The 13-3/8 inch surface casing shall be set at approximately 600 feet and cement circulated to the surface. 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.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is to be circulated to the surface.

3. The minimum required fill of cement behind the 7 inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

4. The minimum required fill of cement behind the 4-1/2 inch production liner is to be circulated to the top of the liner.

### 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 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. 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.

Note: Operator plans to test the BOP's and associated equipment to 1200 psi with the rig pump before drilling out the 13-3/8" casing shoe. Prior to drilling out the 9-5/8" casing shoe, the BO's and Hydril will be tested

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according to Drilling Operations Order #2.

3. 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.

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Devon Energy Production Company  
Regulatory Affairs  
20 North Broadway -- Suite 1100  
Oklahoma City, Oklahoma 73102-8260  
Phone: (405)-552-7802  
Fax (405)-552-4553  
[Stephanie.Ysasaga@dvn.com](mailto:Stephanie.Ysasaga@dvn.com)

January 30th, 2006

Bryan Arrant  
Oil Conservation Division  
1301 W. Grand Avenue  
Artesia, New Mexico 88210

**Re: APD – Milagro 34 Federal 1  
BOP Testing**

Dear Mr. Arrant:

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. The functional tests will be documented on the daily drillers' log.

Should we need to provide additional information, please call me at (405)-552-7802.

Very truly yours,

**DEVON ENERGY PRODUCTION COMPANY, L.P.**

A handwritten signature in black ink, appearing to read "Stephanie A. Ysasaga".

Stephanie A. Ysasaga  
Sr. Staff Engineering Technician ☺