JUN 0.2 2008

OMB No 1004-0137 Expires March 31, 2007

Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Lease Serial No. NM-77046

	11112 17010		
á.	If Indian, Allotee	or Tribe Name	

APPLICATION FOR PERMIT TO	DRILL OR REENTER	N. W.	6. If Indian, Allotee	or Tribe N	lame
	UNORTHODA	PA	7 If Unit or CA Agre	ement Na	me and No
la Type of work: ✓ DRILL REENTE	LOCATION	1			
" - " To "			8. Lease Name and		
lb. Type of Well: ✓ O₁l Well Gas Well Other	✓ Single ZoneMultip	ole Zone	North Pure G	old 9 Fed	eral 10H
2 Name of Operator Devon Energy Production Company, L.	P		9. API Well No	5-3	637
3a Address 20 North Broadway	3b. Phone No. (include area code)		10. Field and Pool, or	Exploratory	/
Oklahoma City, Oklahoma City 73102-8260	405-228-8699		Los Medanos	; Delawar	·e
4 Location of Well (Report location clearly and in accordance with an			11. Sec., T R. M. or B		vey or Area
At surface NW/4 SE/4 1450' FSL & 1980' FEL	Carlsbad Controlled	d Water	Rasin		
At proposed prod zone BHL: 330' FNL & 1980' FEL PP	: 1450' FSL & 1980' FEL	u vvator	Dacsec 9 1238	RSIE	
14. Distance in miles and direction from nearest town or post office*			12 County or Parish		13. State
Approximately 18.5 miles east of Loving, NM.	,		Eddy County		NM
15 Distance from proposed* 330' location to nearest	16. No. of acres in lease	17. Spacing	Unit dedicated to this	well	
property or lease line, ft. (Also to nearest drig. unit line, if any)	1,320	120			
18. Distance from proposed location*	19. Proposed Depth	20. BLM/B	IA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft	8015' TVD -11,600' MD	CO-11	04		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will star	rt*	Estimated duration	ก	
3363' GL			45 days		
	24. Attachments				
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be a	ttached to this	s form.		
 Well plat certified by a registered surveyor. A Drilling Plan. 	4. Bond to cover the Item 20 above).	he operation	s unless covered by an	existing b	ond on file (see
 A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	6. Such other site	specific infor	rmation and/or plans as	s may be re	quired by the
	authorized offic	er.			, ····
25. Signature	Name (Printed/Typed)			Date	
1 a Daimer	Judy A. Barnett			04/0	8/2008
Title Regulatory Analyst				,	

Approved by (Signature)

/s/ Jesse J. Juen

Name (Printed/Typed)/s/ Jesse J. Juen

MAY 2 8 2008

Office NM STATE OFFICE

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.

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)

New Pit Rule NMAC 19-15-17 SEE ATTACHED FO CONDITIONS OF ALL MOTILE

APPROVAL SUBJECT TO **GENERAL REQUIREMENTS** AND SPECIAL STIPULATIONS **ATTACHED**

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesis, NM 88210

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

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

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
/	190291	LOS MEDANOS: DELAWARE I	BRUSHY CANYON
Property Code	Pro	perty Name	Well Number
30674	NORTH PURE	GOLD "9" FEDERAL	10H
OGRID No.	Ope	rator Name	Elevation
6137	DEVON ENERGY PR	ODUCTION COMPANY LP	3363'

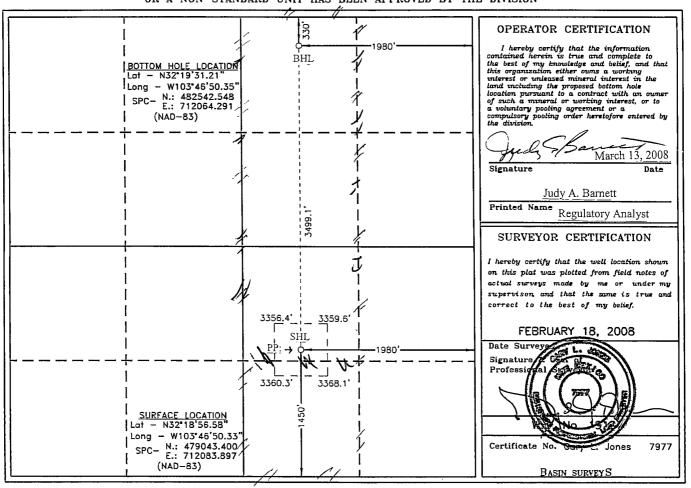
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	9	23 S	31 E		1450	SOUTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	9	23 S	31 E	,	330	NORTH	1980	EAST	EDDY
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Or	der No.				
120									_

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





Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton **Deputy Cabinet Secretary**

Mark Fesmire Division Director Oil Conservation Division



May 20, 2008

Devon Energy Production Company, L.P. Attn: Mr. Ken Gray 20 North Broadway Oklahoma City, OK 73102-8260

Administrative Order NSL-5826

Re:

North Pure Gold 9 Well No. 10H

API No. 30-015-

Unit J. Section 9-23S-31E

Eddy County

Dear Mr. Gray:

Reference is made to the following:

- (a) your application (administrative application reference No. pKVR08-09860401) submitted to the New Mexico Oil Conservation Division (the Division) in Santa Fe, New Mexico on April 7, 2008, and
 - (b) the Division's records pertinent to this request.

Devon Energy Production Company, L.P. (Devon) has requested to drill the abovereferenced well as a horizontal well in the Delaware formation, at a location that will be unorthodox under Division Rule 111. The proposed surface location, point of penetration and terminus of the well are as follows:

Surface Location:

1450 feet from the South line and 1980 feet from the East line

(Unit J) of Section 9, Township 23 S, Range 31 E, NMPM,

Eddy County, New Mexico

Point of Penetration: 1450 feet from the South line and 1980 feet from the East line

(Unit J) of said Section 9.

Terminus

330 feet from the North line and 1980 feet from the East line

(Unit B) of said Section 9.

RECEIVED

MAY 23 2008 WESTERN LAND

Oil Conservation Division * 1220 South St. Francis Drive * Santa Fe, New Mexico 87505

* Phone: (505) 476-3440 * Fax (505) 476-3462* http://www.emnrd.state.nm.us

May 20, 2008 Page 2

The W/2 NE/4 and the NW/4 SE/4 of Section 9 will be dedicated to the proposed well to form a project area comprising three standard 40-acre oil spacing units in the undesignated Los Medanos-Delaware Pool (40297). This pool is governed by statewide Rule 104.B(1), which provides for 40-acre units, with wells located at least 330 feet from a unit outer boundary. This location is unorthodox because a portion of the producing interval will be less than 330 feet from the southern boundary of the project area, and therefore outside the producing area.

Your application has been duly filed under the provisions of Division Rules 104.F and 1210.A(2).

It is our understanding that you are seeking this location to prevent waste by accessing the maximum amount of the target formation in the horizontal portion of the wellbore.

It is also understood no notice of this application to offsetting operators or owners is required because of common ownership.

Pursuant to the authority conferred by Division Rule 104.F(2), the above-described unorthodox location is hereby approved.

This approval is subject to your being in compliance with all other applicable Division rules, including, but not limited to Division Rule 40.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

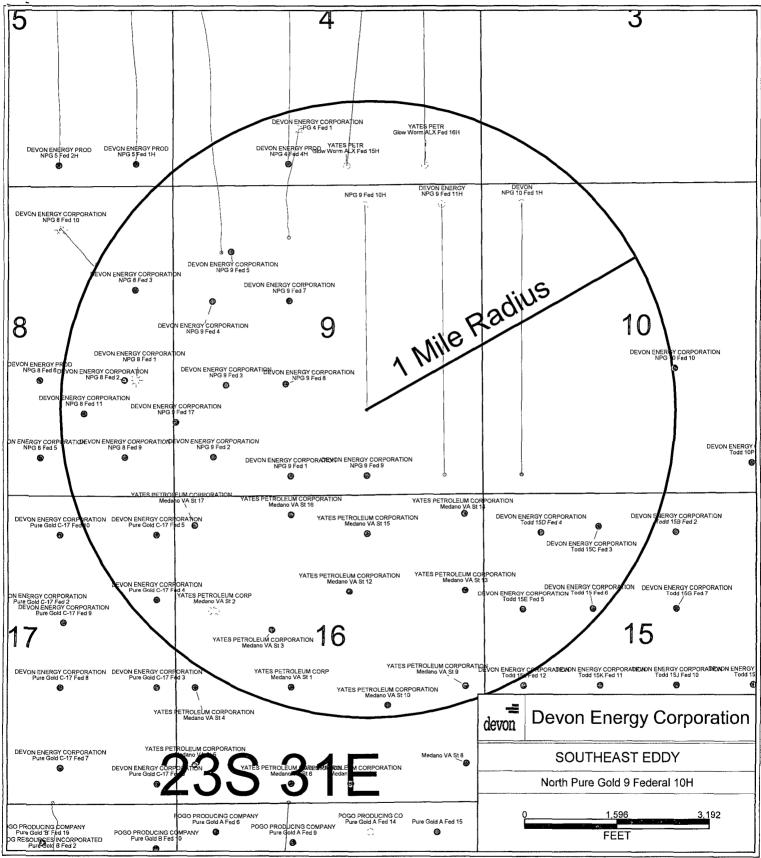
Sincerely,

Mark E. Fesmire, P.E.

Director

MEF/db

cc: New Mexico Oil Conservation Division - Artesia
United States Bureau of Land Management - Carlsbad



ENERGY CORPORATION

DEVON ENERGY CORPORATION

Field: Eddy Co, NM Site: NPG 9 Fed 10H Well: NPG 9 Fed 10H

Wellpath: 10H Plan: Plan #2



NPG 9 Fed 11H (11H)

PBHI.

4000

3000

2000

1000

-0

1000

-2000

South(-)/North(+) [1500ft/in]

SITE DETAILS

NPG 9 Fed 10H Section 9, T23S, R31E Eddy Co, NM

Site Centre Northing. 479043.40 Easting 712083.90

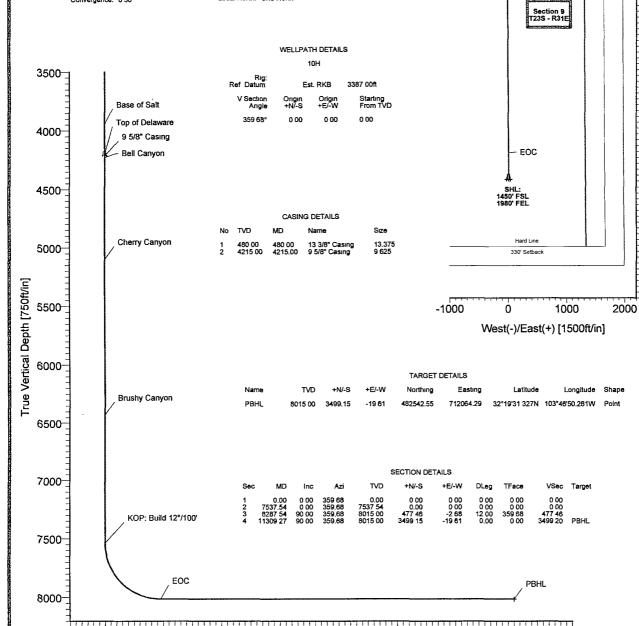
Ground Level 3363.00
Positional Uncertainty: 0 00
Convergence: 0 30

FIELD DETAILS

Eddy Co, NM USA

Geodetic System: US State Plane Coordinate System 1983 Ellipsoid GRS 1980 Zone. New Mexico, Eastern Zone Magnetic Model: 19rf2005

System Datum Mean Sea Level Local North: Grid North



Ryan Energy Technologies 19510 Oil Center Blvd Houston, TX 77073 Ph: 281-443-1414 Fx: 281-443-1676

500

1000

1500



2500

3000

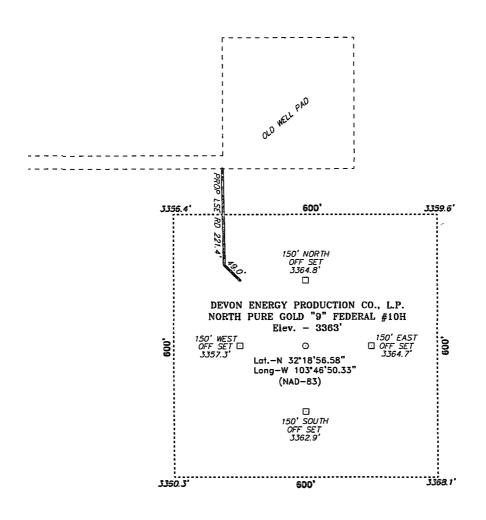
3500

4000

2000

Vertical Section at 359.68° [750ft/in]

SECTION 9, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM MILE MARKER 18 ON STATE HWY. 128, GO WEST 0.3 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTH 0.7 MILES TO #2 LOCATION, FROM #2 LOCATION GO NORTH 0.7 MILES TO #8 LOCATION, THENCE EAST 0.2 ILES TO #7 LOCATION, THENCE SOUTHEAST 0.3 MILES TO OLD PAD AND PROPOSED LEASE ROAD.

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

W.O. Number: 19187 Drawn By: J. M. SMALL

Date: 02-25-2008 Disk: 19187W JMS

200 0 200 400 FEET

SCALE: 1" = 200'

DEVON ENERGY PROD. CO., L.P.

FF: NORTH PURE GOLD "9" FEDERAL #10H / WELL PAD TOPO

THE NORTH PURE GOLD "9" FEDERAL #10H LOCATED 1450'

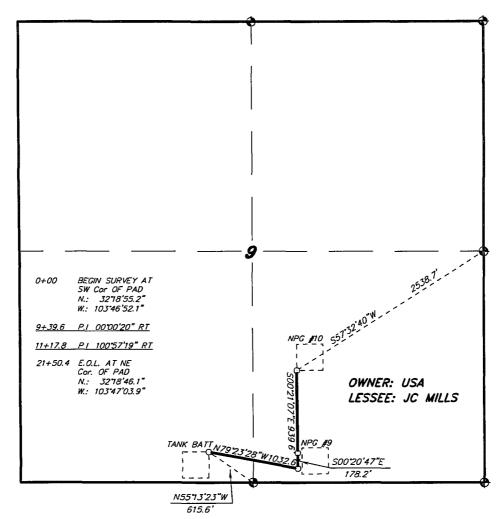
FROM THE SOUTH LINE AND 1980' FROM THE EAST LINE OF

SECTION 9, TOWNSHIP 23 SOUTH, RANGE 31 EAST,

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

Survey Date: 02-18-2008 | Sheet 1 of 1 Sheets

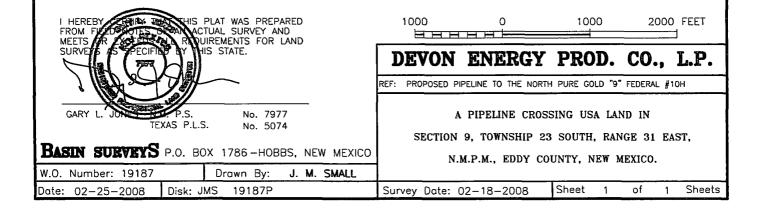
SECTION 9, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

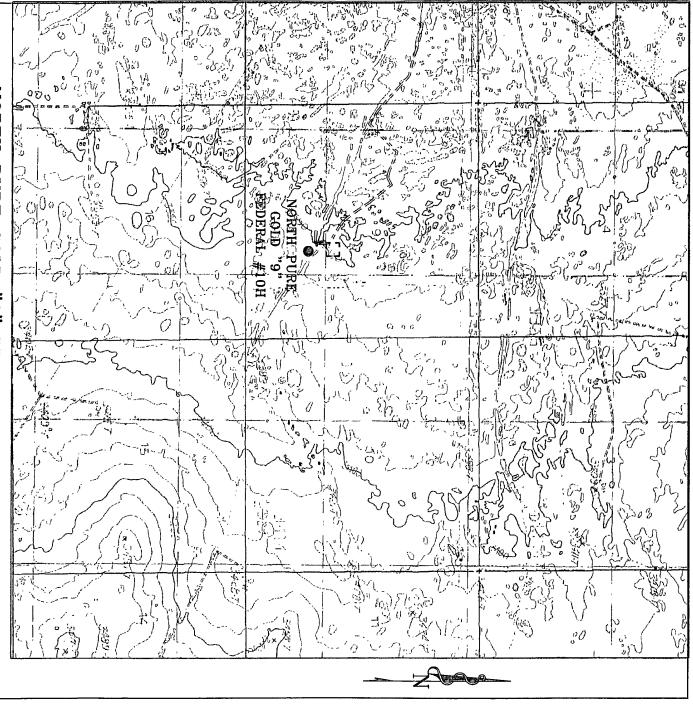


LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 9, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

SECTION 9 = 2150.4 FEET = 0.41 MILES = 130.33 RODS = 1.48 ACRES





Located Section NORTH PURE Eddy 1450' l'ownship County, "Q" AND New FEDERAL South, 1980' Mexico. Range #10H 3 East,



(505) basinsurveys.com (505) 392-3074 393-7316 Office

Scale:

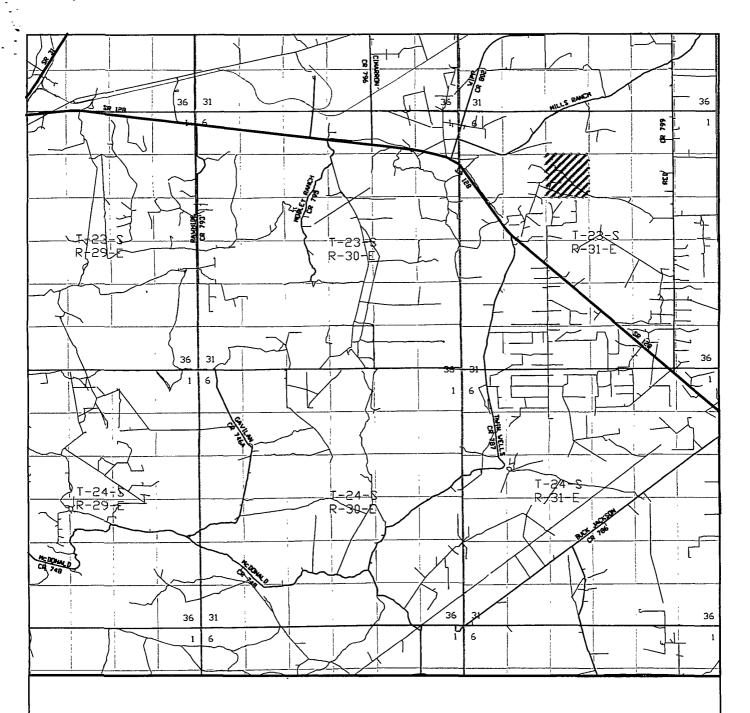
W.O. Number: JMS 19187T

1786

Date: 02-18-2008

Date: 02-25-2008

> PROD. DEVON CO., ENERGY [.p.



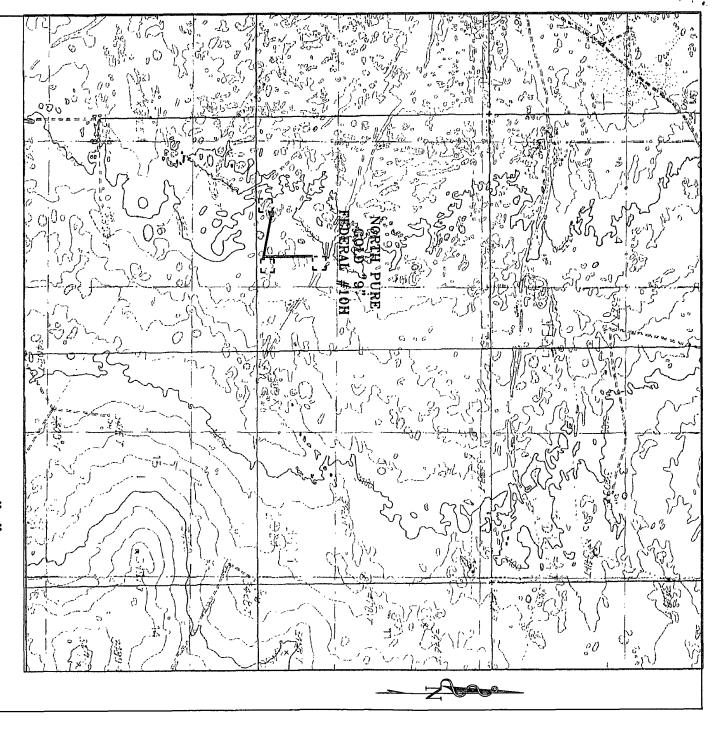
NORTH PURE GOLD "9" FEDERAL #10H Located at 1450' FSL AND 1980' FEL Section 9, Township 23 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



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:	JMS 19187TR	
Survey Date:	02-18-2008	
Scale: 1" = :	2 MILES	
Date: 02-25	5-2008	

DEVON ENERGY PROD. CO., L.P.







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

Date:

02-25-2008

W.O. Number: JMS 19187TT

Survey Date: 02-18-2008

Scale: 1" = 2000'

DEVON ENERGY PROD. CO., L.P.

DRILLING PROGRAM

Devon Energy Production Company, LP North Pure Gold 9 Federal 10H

Surface Location: 1450' FSL & 1980' FEL, Unit J, Sec 9 T23S R31E, Eddy, NM Bottom Hole Location: 330' FNL & 1980 FEL, Unit B, Sec 9 T23S R31E, Eddy, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a.	Rustler	470'	Water
b.	Top of Salt	910'	
c.	Base of Salt	3947'	
đ.	Top of Delaware/Lamar LS	4199'	Oil
e.	Bell Canyon	4229'	Oil
f.	Cherry Canyon	5099'	Oil
g.	Brushy Canyon	6428'	Oil
h.	Total Depth	11,600'	

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 500' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at 4150' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 9 5/8" casing.

3. Casing Program:

Hole Size	_	<u>Iole</u> erval	OD Csg	<u>Casing</u> <u>Interval</u>	<u>Wei</u>	ght	<u>Collar</u>	<u>Grade</u>
17-1/2"	•	-500'	13-3/8"	0'- 500'	48 ;		ST&C	H-40
12-1/4"	500	' - 4215'	9-5/8"	0'- 4215'	40,361	₩/ft	LT&C	K-55
8-1/2"	4215	·'-7600'	5 1/2"	0'- 7600'	17#	#/ft	LT&C	N-80
7 7/8"	Horizon	tal Section	5-1/2"	7600'- 11,309	, 17 ;	#/ft	BT&C	N-80
Design	Parame	ter Factors:			per	Pon	med	1-30-08 10 m (Donar
Casing	Size	Collapse Des	ign Factor	Burst Design	n Factor	Tension	n Design I	Factor
13	3/8"	3.3		2.37			6.29	
9.5	5/8"	1.3	37	2.55			4.1	
5 1	1/2"	1.5	59	2.4			2.28	
5	1/2"							

4. Cement Program:

13 3/8"SurfaceLead Slurry: 275 sacks (35:65) Poz (Fly Ash): Premium Plus C Cement + 4% bwoc Bentonite + 5% bwow Sodium Chloride + 0.8% bwoc Sodium Metasilicate + 0.125 lbs/sack Cello

Flake + 5% BWOC mpa-5 + 101.1% FW.

Yield: 1.96 cf/sack. TOC @ surface.

Tail Slurry: 250 sacks Premium Plus C Cement + 2% bwoc Calcium Chrloride + 0.125 lbs/sack

Cello Flake + 56.3% FW. Yield: 1.35 cf/sack

9 5/8" Intermediate Lead Slurry: 1210 sacks (35:65) Poz (Fly Ash): Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% FW.

Yield: 2.04 cf/sack, TOC @ surface.

Tail Slurry: 300 sacks (60:40) Poz (Fly Ash): Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 +

64.7% FW

Yield: 1.37 cf/sack,

5 1/2" 2 Stage with DV tool @ 7500"

STAGE 1

Spacer: 10.0 bbls Fresh Water @ 8.34 ppg; 1,500 gals Mud Clean II @ 8.45 ppg; 10 bbls Fresh

Water @ 8.34 ppg

Cement Slurry: 710 sacks Class H Cement + 0.35% bwoc R-3 + 0.4% bwoc CD-32 + 1.4% bwoc FL-62 + 0.1% bwoc ASA-301 + 0.2% bwoc Sodium Metasilicate + 20 bls/sack ASCA-1 + 52.9%

FW.

Yield: 1.42 cf/sack

STAGE 2

Spacer: 20 bbls Fresh Water @ 8.34 ppg

Lead **Slurry:** 605 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 1% bwow Sodium Chloride + 0.4% bwoc R-3 + 0.125% lbs/sack CelloFlake + 6% bwoc Bentonite + 0.4% bwoc FL-

52A + 103.1% FW. **Yield:** 1.96 cf/sack,

Tail Slurry: 340 sacks (60:40) POZ (Fly Ash) Premium Plus C Cement + 1% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.75% bwoc BA-10A + 4% bwoc MPA-5 + 63.1% FW..

Yield: 1.34 cf/sack. Displace ment: 174.4 bbls displacement fluid.

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 intermediate casing shoe. All casing is new and API approved.

5. 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 $5\frac{1}{2}$ " drill pipe rams on bottom. The BOP 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. Devon Energy Production Company L. P. requests a variance if Nabors PACE #M-41 is used to drill this well, co-flex hose may be used between the BOP and the choke manifold. The hose will be kept as straight as possible with minimal turns.

CO-Flex Hose: Manufacturer: Phoenix Beattie
Approximately 22' (7.62 meters) of co-flex line
3" coupling w/ 4 1 1/16" flanges on each end – 10,000 psi
Quality Control Inspection & Test Certificate attached
See configuration schematic

There will be no safety clamp requirement and BLM accepts current configuration.

Proposed Mud Circulation System

<u>Depth</u>	Mud Wt.	<u>Visc</u>	Fluid Loss	Type System
0'- 500'	8.4	32 - 34	NC	FW gel
500- 4215'	10	28	NC	Brine
4215'-7600'	9.5	28-30	NC-40cc	FW/Polymer
7600'-11,309'	9.5	34 -40	12-8cc	FW/Polymer

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

6. 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.

7. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- c. 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 4 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

8. 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 2900 psi and Estimated BHT 120°. 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 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.

PHOENIX RUBBER OUALITY DOCUMENT INDUSTRIAL LTD.

aliana kan madalah dalah bahar bahar bah

H-6728 Szeged, Budapesti út 10, Hungary • H-6701 Szeged P.O.Box: 152 • Phone: (3562) 566-737, Fax: (3562) 556-738
The Court of Coongrad County as Registry Court, Registry Court reg.No.. Cg.06-09-002502

QUAI INSPECTION	LITY CON' AND TES		FICATE		CERT. N	l°:	688	-
PURCHASER:	Phoenix Be	attie Co.			₽.O. №:		000573	
PHOENIX ORDER N°:	332060	HOSE TYP	E: 3"	ID	Chi	oke and K	iii Hose	
HOSE SERIAL N°:	46226	NOMINAL	ACTUAL L	ENGTH:		7,62 m		
W.P. 68,96 MPa	10000 P	T.P. 103	,4 MPa	1500	O psi	Duration:	60	min.
		ee attachm	ent. (1 p	age)				
,	711 W	C	OUPLINGS					•
Туре		Serial Nº			Quality		Hea	t N°
3" coupling with	-	774 791		AI	SI 4130		445651	59681
4 1/16" Flange e	nd			Al	SI 4130		59534	5968 1
All metal parts are flawless WE CERTIFY THAT THE AB PRESSURE TESTED AS AB	OVE HOSE HAS	BEEN MANUF,	ACTURED IN	I ACCOR	DANCE W		•	e rate:"B"
Date: 29. March. 2006	Inspector			lity Contr	lase Ir	IX RIB. strial Ltd kpection china Da	l. and	i J

No.: 684,687,688 Page: 1/1

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10	
<u> </u>	

Mill Chick hole



Ryan Energy Technologies Planning Report



Company: DEVON ENERGY CORPORATION

Field: Eddy Co, NM Site: NPG 9 Fed 10H

NPG 9 Fed 10H Well: Wellpath: 10H

Date: 3/18/2008 Time: 13:48:16

Co-ordinate(NE) Reference Site: NPG 9 Fed 10H, Grid North

Vertical (TVD) Reference: Est. RKB 3387.0 Well (0.00N,0.00E,359.68Azi) Section (VS) Reference:

Plan #2

Field:

Eddy Co, NM

USA

Map System US State Plane Coordinate System 1983

Geo Datum: GRS 1980 Sys Datum: Mean Sea Level Map Zone:

New Mexico, Eastern Zone

Coordinate System: Geomagnetic Model: Site Centre igrf2005

Site:

NPG 9 Fed 10H

Section 9, T23S, R31E

Eddy Co, NM

Site Position: Мар From:

Ground Level:

Position Uncertainty:

Northing: Easting:

479043.40 ft 712083.90 ft

Latitude: Longitude:

32 18 56.700 N 50.243 W 103 46

North Reference: **Grid Convergence:**

Grid 0.30 deg

0.00 ft

Mean Sea Level

Well:

NPG 9 Fed 10H

Well Position: +N/-S+E/-W 0.00 ft Northing: 0.00 ft Easting: 0.00 ft

0.00 ft

3363.00 ft

479043.40 ft 712083.90 ft Latitude: Longitude:

Drilled From:

Slot Name:

18 56.700 N 103 46 50.243 W

Surface

Magnetic Data:

Field Strength:

Position Uncertainty: Wellpath: 10H

Current Datum:

Vertical Section: Depth From (TVD)

Est. RKB 3/13/2008

0.00

49024 nT

Height 3387.00 ft

+N/-S

Tie-on Depth: Above System Datum: Declination: Mag Dip Angle:

8.07 deg 60.33 deg Direction

+E/-W ft

deg 359.68

ft 0.00

0.00

3/13/2008

Principal: Yes

Plan #2

Version: Tied-to:

Date Composed:

From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	359.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7537.54	0.00	359.68	7537.54	0.00	0.00	0.00	0.00	0.00	0.00	
8287.54	90.00	359.68	8015.00	477.46	-2.68	12.00	12.00	0.00	359.68	
11309.27	90.00	359.68	8015.00	3499.15	-19.61	0.00	0.00	0.00	- 0.00	PBHL

Survey

Plan:

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100f	Build t deg/100f	Turn deg/100ft	Tool/Comment
7550.00	1.50	359.68	7550.00	0.16	0.00	0.16	12.00	12.00	0.00	***************************************
7575.00	4.50	359.68	7574.96	1.47	-0.01	1.47	12.00	12.00	0.00	
			-							
7600.00	7.50	359.68	7599.82	4.08	-0.02	4.08	12.00	12.00	0.00	
7625.00	10.50	359.68	7624.51	7.99	-0.04	7.99	12.00	12.00	0.00	
7650.00	13.50	359.68	7648.96	13.18	-0.07	13.18	12.00	12.00	0.00	
7675.00	16.50	359.68	7673.11	19.65	-0.11	19.65	12.00	12.00	0.00	
7700.00	19.50	359.68	7696.88	27.37	-0.15	27.37	12.00	12.00	0.00	
7725.00	22.50	359.68	7720.22	36.33	-0.20	36.33	12.00	12.00	0.00	
7750.00	25.50	359.68	7743.06	46.50	-0.26	46.50	12.00	12.00	0.00	
7775.00	28.50	359.68	7765.33	57.8 4	-0.32	57.84	12.00	12.00	0.00	
7800.00	31.50	359.68	7786.98	70.34	-0.39	70.34	12.00	12.00	0.00	
7825.00	34.50	359.68	7807.95	83.95	-0.47	83.95	12.00	12.00	0.00	
7850.00	37.50	359.68	7828.17	98.64	-0.55	98.65	12.00	12.00	0.00	
7875.00	40.50	359.68	7847.60	114.37	-0.64	114.37	12.00	12.00	0.00	
7900.00	43.50	359.68	7866.17	131.10	-0.73	131.10	12.00	12.00	0.00	
7.000.00	40.00	000.00	1000.11	101.10	-0.10	101.10	12.00	12.00	0.00	
7925.00	46.50	359.68	7883.85	148.77	-0.83	148.77	12.00	12.00	0.00	
7950.00	49.50	359.68	7900.58	167.35	-0.94	167.35	12.00	12.00	0.00	



Ryan Energy Technologies **Planning Report**



Page:

Company: DEVON ENERGY CORPORATION
Field: Eddy Co, NM
Site: NPG 9 Fed 10H
Well: NPG 9 Fed 10H Wellpath: 10H

Date: 3/18/2008 Time: 13:48:16
Co-ordinate(NE) Reference:Site: NPG 9 Fed 10H, Grid North
Vertical (TVD) Reference: Est. RKB 3387.0
Section (VS) Reference: Well (0.00N,0.00E,359.68Azi)
Plan: Plan #2

Survey	
MD	Incl
ft	deg

												_
į	MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment	
1		<u>-</u>					400 75					4
	7975.00	52.50	359.68	7916.31	186.77	-1.05	186.77	12.00	12.00	0.00		1
	8000.00	55.50	359.68	7931.01	206.99	-1.16	207.00	12.00	12.00	0.00		1
i	8025.00	58.50	359.68	7944.62	227.96	-1.28	227.96	12.00	12.00	0.00		1
1												1
1	8050.00	61.50	359.68	7957.12	249.60	-1.40	249.61	12.00	12.00	0.00		ı
	8075.00	64.50	359.68	7968.47	271.87	-1.52	271.88	12.00	12.00	0.00		ı
	8100.00	67.50	359.68	7978.64	294.71	-1.65	294.71	12.00	12.00	0.00		1
	8125.00	70.50	359.68	7987.60	318.05	-1.78	318.05	12.00	12.00	0.00		1
-	8150.00	73.50	359.68	7995.33	341.82	-1.92	341.82	12.00	12.00	0.00		1
1												ı
-	8175.00	76.50	359.68	8001.80	365.96	-2.05	365.97	12.00	12.00	0.00		ı
١	8200.00	79.50	359.68	8007.00	390.41	-2.19	390.42	12.00	12.00	0.00		ı
١	8225.00	82.50	359.68	8010.91	415.10	-2.33	415.11	12.00	12.00	0.00		ı
Į	8250.00	85.50	359.68	8013.53	439.96	-2.47	439.97	12.00	12.00	0.00		1
ł	8275.00	88.50	359.68	8014.84	464.92	-2.61	464.93	12.00	12.00	0.00		ı
١	8287.54	90.00	359.68	8015.00	477.46	-2.68	477.46	12.00	12.00	0.00	EOC	
ı	8300.00	90.00	359.68	8015.00	489.92	-2.75	489.93	0.00	0.00	0.00		
ı	8400.00	90.00	359.68	8015.00	589.92	-3.31	589.93	0.00	0.00	0.00		I
ł	8500.00	90.00	359.68	8015.00	689.92	-3.87	689.93	0.00	0.00	0.00		1
ı	8600.00	90.00	359.68	8015.00	789.92	-4.43	789.93	0.00	0.00	0.00		ı
1												١
١	8700.00	90.00	359.68	8015.00	889.92	-4.99	889.93	0.00	0.00	0.00		ı
١	8800.00	90.00	359.68	8015.00	989.91	-5.55	989.93	0.00	0.00	0.00		ı
١	8900.00	90.00	359.68	8015.00	1089.91	-6.11	1089.93	0.00	0.00	0.00		ı
ſ	9000.00	90.00	359.68	8015.00	1189.91	-6.67	1189.93	0.00	0.00	0.00		1
١	9100.00	90.00	359.68	8015.00	1289.91	-7.23	1289.93	0.00	0.00	0.00		
١	0.00.00	00.00	000.00	0010.00	.200.01		.200.00	0.00	0.00	0.00		1
ı	9200.00	90.00	359.68	8015.00	1389.91	-7.79	1389.93	0.00	0.00	0.00		ı
١	9300.00	90.00	359.68	8015.00	1489.91	-8.35	1489.93	0.00	0.00	0.00		1
ı	9400.00	90.00	359.68	8015.00	1589.90	-8.91	1589.93	0.00	0.00	0.00		ı
ı	9500.00	90.00	359.68	8015.00	1689.90	-9.47	1689.93	0.00	0.00	0.00		ı
١	9600.00	90.00	359.68	8015.00	1789.90	-10.03	1789.93	0.00	0.00	0.00		ı
ı	3000.00	50.00	555.00	0013.00	1705.50	-10.03	1705.55	0.00	0.00	0.00		ı
ı	9700.00	90.00	359.68	8015.00	1889.90	-10.59	1889.93	0.00	0.00	0.00		١
1	9800.00	90.00	359.68	8015.00	1989.90	-11.15	1989.93	0.00	0.00	0.00		1
ı	9900.00	90.00	359.68	8015.00	2089.90	-11.71	2089.93	0.00	0.00	0.00		1
١	10000.00	90.00	359.68	8015.00	2189.90	-12.27	2189.93	0.00	0.00	0.00		1
١	10100.00	90.00	359.68	8015.00	2289.89	-12.83	2289.93	0.00	0.00	0.00		ı
١	10100.00	90.00	309.00	0015.00	2209.09	-12.03	2205.53	0.00	0.00	0.00		ı
1	10200.00	90.00	359.68	8015.00	2389.89	-13.39	2389.93	0.00	0.00	0.00		1
J	10200.00	90.00	359.68	8015.00	2369.89 2489.89	-13.39 -13.95	2369.93 2489.93	0.00	0.00	0.00		
	10400.00	90.00	359.68	8015.00	2589.89	-13.93	2589.93	0.00	0.00	0.00		1
١	10500.00	90.00	359.68	8015.00	2689.89	-15.07	2689.93	0.00	0.00	0.00		l
١	10600.00	90.00	359.68	8015.00	2789.89	-15.63	2789.93	0.00	0.00	0.00		l
١	10000.00	30.00	303.00	3013.00	2109.09	-10.03	£105.53	0 00	0.00	0.00		1
I	10700.00	90.00	359.68	8015.00	2889.88	-16.19	2889.93	0.00	0.00	0.00		1
I	10800.00	90.00	359.68	8015.00	2989.88	-16.19 -16.75	2989.93	0.00	0.00	0.00		1
I	10900.00	90.00	359.68	8015.00	3089.88		3089.93		0.00			1
1	11000.00	90.00	359.68	8015.00	3189.88	-17.31 -17.87	3189.93	0.00 0.00	0.00	0.00 0.00		1
1	11100.00	90.00	359.68	8015.00	3289.88	-17.07	3289.93	0.00	0.00	0.00		1
I	11100.00	30.00	333.00	3013.00	3203.00	-10.43	J209. 3 3	0.00	0.00	0.00		1
1	11200.00	90.00	359.68	8015.00	3389.88	-18.99	3389.93	0.00	0.00	0.00		1
1	11309.27	90.00	359.68	8015.00	3499.15	-10.99 -19.61	3499.20	0.00	0.00	0.00	PBHL	1
١	11303.21	30.00	309.00	00.00	J488.13	-18.01	J433.2U	0.00	0.00	0.00	FDFL	
1												ſ

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL.		8015.00	3499.15	-19.61	482542.55	712064.29	32 19 31.327 N	103 46 50.261 W



Ryan Energy Technologies Planning Report



Company: DEVON ENERGY CORPORATION Field: Eddy Co, NM Site: NPG 9 Fed 10H

Field: Eddy Co, NM
Site: NPG 9 Fed 10H
Well: NPG 9 Fed 10H
Wellpath: 10H

Date: 3/18/2008 Time: 13:48:16
Co-ordinate(NE) Reference Site: NPG 9 Fed 10H, Grid North
Vertical (TVD) Reference: Est. RKB 3387.0
Section (VS) Reference: Well (0.00N,0.00E,359.68Azi)
Plan: Plan #2

Casing Points

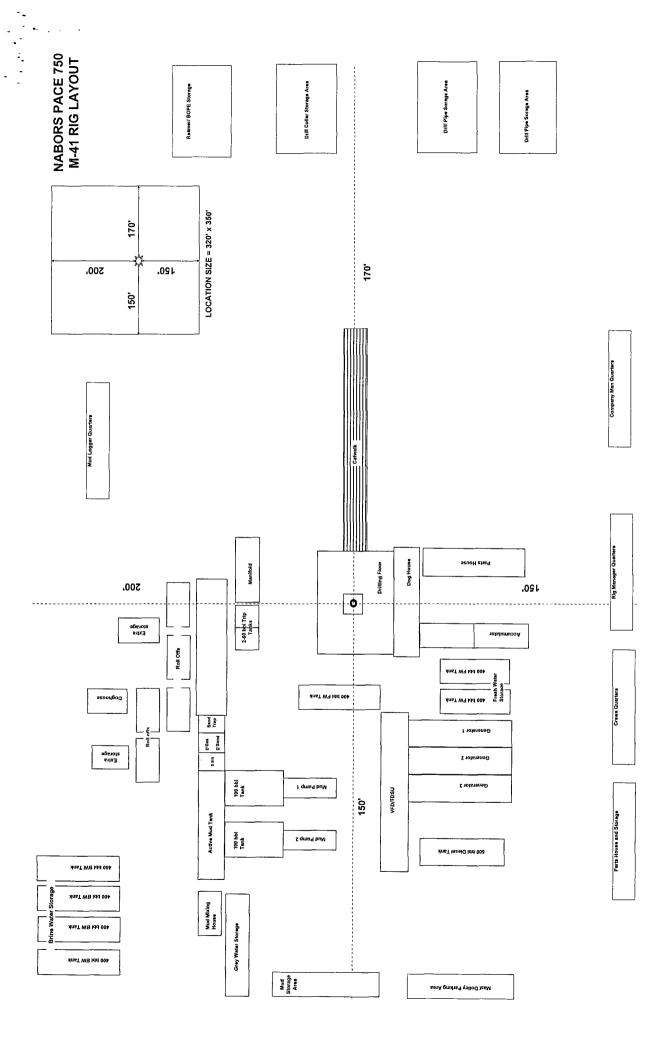
MD ft	TVD ft	Diameter in	Hole Size in	Name	
480.00	480.00	13.375	13.375	13 3/8" Casing	
4215.00	4215.00	9.625	9.625	9 5/8" Casing	

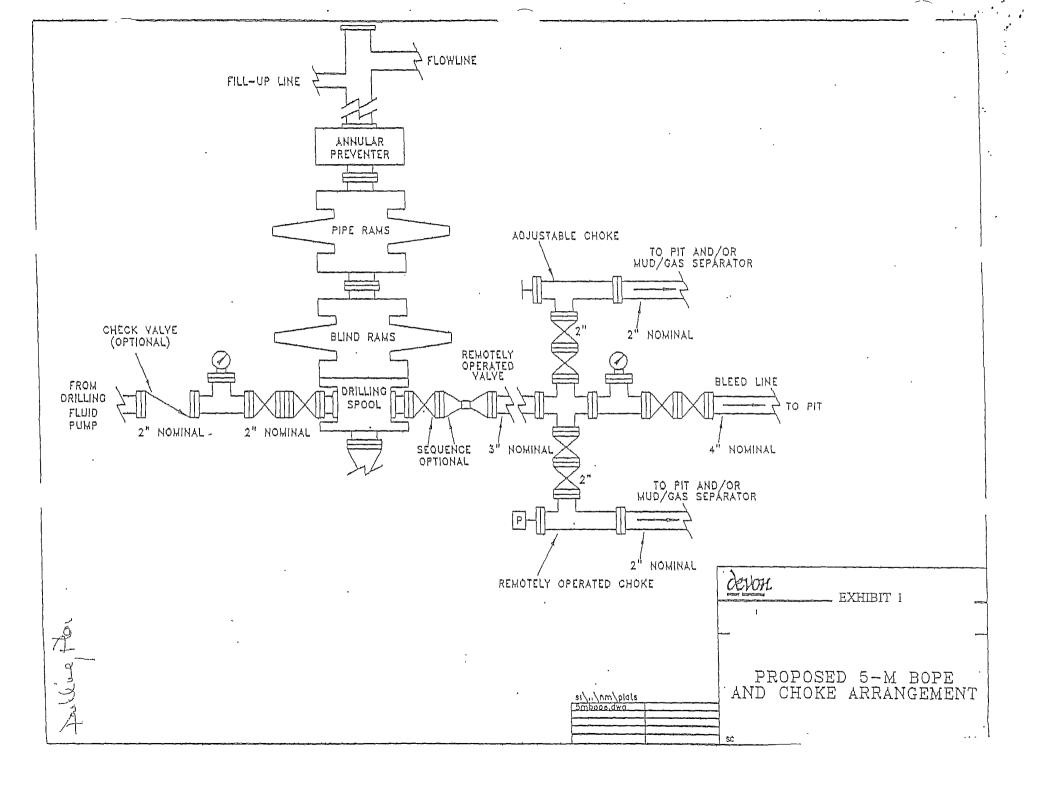
Formations

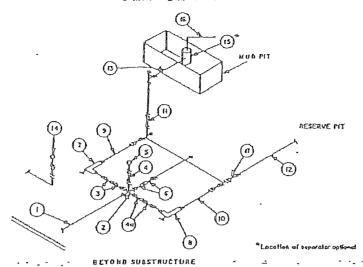
	MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
П	470.00	470.00	Rustler		0.00	0.00
П	910.00	910.00	Top of Salt		0.00	0.00
П	3947.00	3947.00	Base of Salt		0.00	0.00
Н	4199.00	4199.00	Top of Delaware		0.00	0.00
П	4229.00	4229.00	Bell Canyon		0.00	0.00
П	5099.00	5099.00	Cherry Canyon		0.00	0.00
Н	6428.00	6428.00	Brushy Canyon		0.00	0.00

Appotation

1	Annotatio			
	MD ft	TVD ft		
İ	7537.54 8287.54	7537.54 8015.00	KOP: Build 12°/100' ECC	







			MIN	MUM REO	LIREMENT	\$				
							10,000 MW	P		
No.		1.0.	HOMINAL	PLATING	LD.	NOMINAL	RATING	LD.	NOMINAL	PLATING
1	Line from drilling speed		3-	3,000		3,	5,000		3*	10,000
2	Cross3"13"12"			3,000		·	5,000			
_	Cross 2*13"13"13"								1	10.000
3	Valves(1) Gale [] Plup □(2)	3-1/8*		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Votvo Gate []	1-13/16*		3,000	8-13/16"		5,000	1-13/16*		10,000
40	Values(1)	2-1/16		3,000	2-1/16"		5,000	3-1/6"		10,000
S	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate □ Valves Plug □(Z)	3-1/8"		3,000	3-1/8*		000,2	3-1/8-		10,000
7	Adjustable Choke(3)	2"		000,E	2*		5,000	2-	. 1	10,000
Ø	Acquistable Choke	1-		3,000	1.	1	5,000	2-		10,000
23	Line	-	3-	000,E		3-	5,000		3~	10,000
10	Lina		2"	3,000		2-	5,000		3-	10,000
11	Valves Plug ()(2)	3-176*		3,000	3-1/8"		000,2 -	3-1/8"		10,000
12	Linos '		3*	1,000		3⁴	1.000		3"	2,000
13	Lines		3-	1.000		3*	1,000		3-	2,000
34 1	Remote reading compound standpipe pressure gauge			0.00,0	-		5,000	-		10,000
15	Gas Separator		275"			2":5"			2,x2,	
16	Lima		4-	1_000		4-	1,000		4"	2,000
17	Valves Plug D(2)	3-1/61		000,E	2-1/8"		5,000	3-1/8"		10,000

- Valves Plug D(2)

 (1) Only one required in Class 3M.
- (2) Gato valves only shall be used for Class 10M.
- [3] Remote operated hydroulic 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 68 or 68X and ring gaskets shall be API RX or 8X. Use only 8X for 18 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.

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

North Pure Gold 9 Federal 10H

Surface Location: 1450' FSL & 1980' FEL, Unit J, Sec 9 T23S R31E, Eddy, NM Bottom hole Location: 330' FNL & 1980' FEL, Unit B, Sec 9 T23S R31E, 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 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 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.

SURFACE USE PLAN

Devon Energy Production Company, LP

North Pure Gold 9 Federal 10H

Surface Location: 1450' FSL & 1980' FEL, Unit J, Sec 9 T23S R31E, Eddy, NM Bottom hole Location: 330' FNL & 1980' FEL, Unit B, Sec 9 T23S R31E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From mile marker 18 on State Hwy 128 go west 0.3 miles to lease road, on lease road go north 0.7 miles to #2 location, from #2 location go north 0.7 miles to #8 location, thence east 0.2 miles to #7 location, thence southeast 0.3 miles to old pad and proposed lease road.

2. New or Reconstructed Access Roads:

- a. Exhibit 3 shows the existing lease road. Approximately 270.4' 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. Location of Existing Wells:

One Mile Radius Plat shows all existing and proposed wells within a one-mile radius of the proposed location. See attached plat.

4. Location of Existing and/or Proposed Production Facilities:

- a. In the event the well is found productive, the North Pure Gold 9 Federal 1 tank battery would be utilized and the necessary production equipment will be installed at the well site. See Production Facilities Layout diagram.
- 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.

5. 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.

6. Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. 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. 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.
- 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
- **8. Ancillary Facilities:** No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- a. Exhibit D shows the proposed well site layout with dimensions of the pad 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 will be lined.
- 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 to preclude endangering wildlife.

10. Plans for Surface Reclamation:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography. Will close the pits per OCD compliance regulations.
- b. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- c. The location and road will be rehabilitated as recommended by the BLM.
- d. If the well is a producer, the reserve pit fence will be torn down after the pit contents have dried. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.
- e. If the well is deemed commercially productive, the reserve pit will be restored as described in 10(A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

- a. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- b. The proposed road routes and the surface location will be restored as directed by the BLM.

12. 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, sagebush, yucca and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. There is one dwelling within 1 3/4 miles in a northwesterly direction of location.
- d. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

13. Bond Coverage:

Bond Coverage is Nationwide; Bond # is CO-1104

Operators Representative:

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

Jim Cromer

Operations Engineer Advisor

Don Mayberry Superintendent

Devon Energy Production Company, L.P.

20 North Broadway

Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.

Post Office Box 250

Artesia, NM 88211-0250

(405) 228-4464 (office) (405) 694-7718 (Cellular)

(505) 748-0164 (office) (505) 748-5235 (Cellular)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

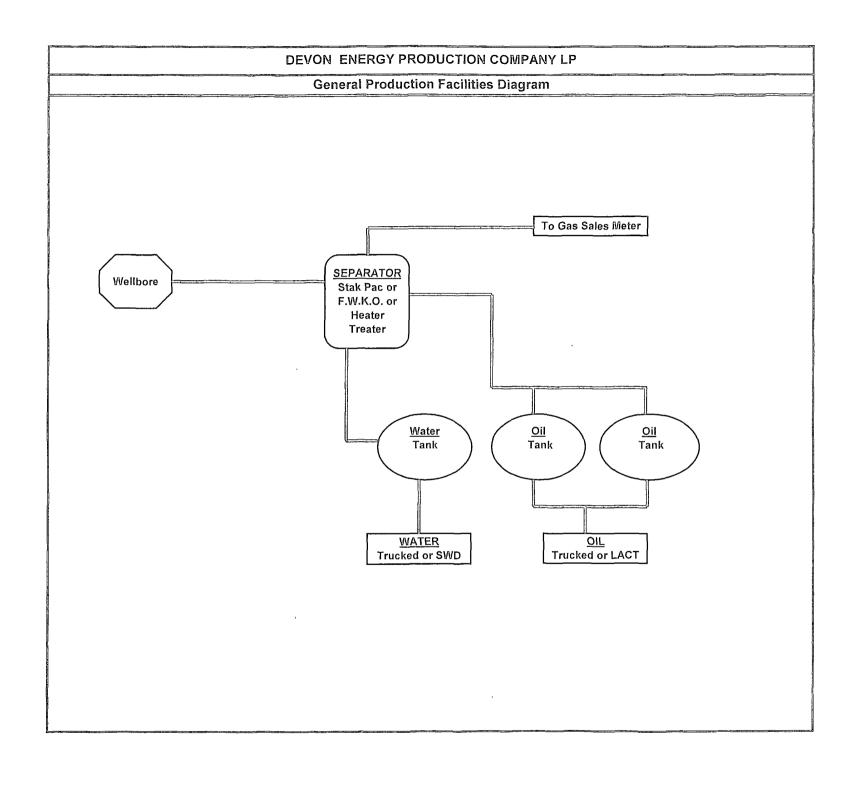
Executed this 8th day of April, 2008.

Printed Name: Judy A. Barnett/

Signed Name: July Buxelon Position Title: Regulatory Analyst

Address: 20 North Broadway, OKC OK 73102

Telephone: (405)-228-8699



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company
LEASE NO.:	NMNM77046
WELL NAME & NO.:	North Pure Gold 9 Federal No 10H
SURFACE HOLE FOOTAGE:	1450' FSL & 1980' FEL
BOTTOM HOLE FOOTAGE	330' FNL & 1980' FEL
LOCATION:	Section 9, T. 23 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

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Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie Chicken
Construction
Notification
Topsoil
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Production (Post Drilling)
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Pipelines
Interim Reclamation
Final Ahandonment/Reclamation

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 15 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 8 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

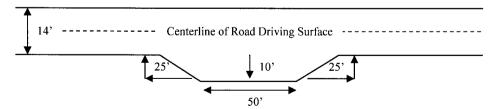
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout - Plan View

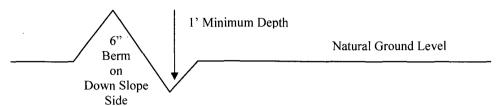


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

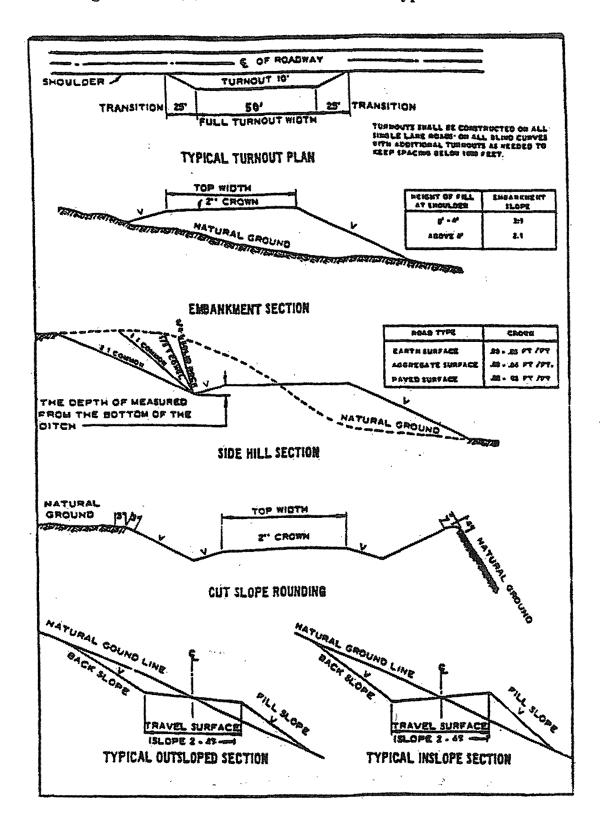
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 - Cross Sections and Plans For Typical Road Sections



A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 4. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufactures of the logging tools recommended speed. (R-111-P area only)

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f. Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

Possible lost circulation in the Delaware and Bone Spring formations. Possible brine and water flows in the Salado, Castile, Delaware, and Bone Spring formations.

1. The 13-3/8 inch surface casing shall be set at approximately 500 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - ⊠ Cement to surface. If cement does not circulate see B.1.a-d above.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing.

- 3. The minimum required fill of cement behind the 5 1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office. Additional cement will be required.

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of 4 11/16" flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. A variance to test the surface casing and BOP/BOPE to the reduced pressure of 1000 psi with the rig pumps is approved. Note this variance is for a test of the entire system as noted above and in the APD.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 042808

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
 - (1) Land clearing.
 - (2) Earth-disturbing and earth-moving work.
 - (3) Blasting.
 - (4) Vandalism and sabotage.
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

by the Authorized Officer.

- 8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.
- 9. The pipeline shall be buried with a minimum of <u>24</u> inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

VIII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass Sand Bluestem Little Bluestem Big Bluestem Plains Coreopsis Sand Dropseed	5lbs/A 5lbs/A 3lbs/A 6lbs/A 2lbs/A
	1100/11

^{**}Four-winged Saltbush

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed (Insert Seed Mixture Here)

⁵lbs/A

^{*} This can be used around well pads and other areas where caliche cannot be removed.

^{*}Pounds of pure live seed:

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.