

OCD-HOBBS

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JAN 26 2009

HOBBSOCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

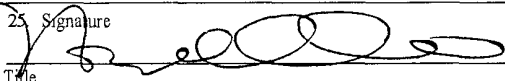
FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-98189
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input 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 73103-8260	3b. Phone No. (include area code) (405) 552-8198	8. Lease Name and Well No. H Davis 30 Fed 1
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2310' - 660 FSL & 660 FEL At proposed prod. zone 360' FSL & 660 FEL		9. API Well No. 30-025-39365
14. Distance in miles and direction from nearest town or post office* Approximately 10 miles south of Maljamar, NM		10. Field and Pool, or Exploratory Lusk; Bone Spring, North
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 660' and 660'		11. Sec, T R M. or Blk and Survey or Area Sec 30 T18S R32E
16. No. of acres in lease 241.110		12. County or Parish Lea
17. Spacing Unit dedicated to this well 40		13. State NM
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft 1048'		20. BLM/BIA Bond No. on file CO-1104
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3697' GL		22. Approximate date work will start* 11/01/2008
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) Norvella Adams	Date 08/25/2008
Title Senior Staff Engineering Technician		

Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed) Don Peterson	Date JAN 21 2009
Title FIELD MANAGER		Office CARLSBAD FIELD 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.

APPROVAL FOR TWO YEARS

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)

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

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

OCD-HOBBS

FORM APPROVED
OMB NO 1004-0135
EXPIRES: NOVEMBER 30, 2000

Do 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, Oklahoma City, OK 73102 405-552-8198

4 Location of Well (Report location clearly and in accordance with Federal requirements)*
**660' FSL 660' FEL, Unit P
Sec 30 T18S R32E**

5. Lease Serial No.

NM-98189

6. If Indian, Allottee or Tribe Name

7 Unit or CA Agreement Name and No.

8 Well Name and No.

H Davis 30 Fed 1

9. API Well No.

30-025-39365

10. Field and Pool, or Exploratory

Lusk; Bone Spring, North

12. County or Parish 13. State

Lea

NM

CHECK APPROPRIATE BOX(s) 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 type="checkbox"/> Other _____
	<input checked="" 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 LP, respectfully requests approval to the following changing in our APD submitted.

* Name change to H Davis 30 Fed Com 1H

* Change from a vertical test to a horizontal test with the following footages:

Surface location: 2310 FSL & 660 FEL Sec 30, T18S R32E, Unit I, Lea County, NM

Bottomhole location: 360' FSL & 660' FEL, Sec 30 T18S R32E, Unit P, Lea County, NM

* Drilling Program changes: The DV tool will be set at 6500'. Please see attached drilling program for other changes.

* A diagram depicting a remotely operated choke is attached.

* Attached is also a new Surface Use Plan that contains the correct footages.

OK C.L. 01/05/2009

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

Signed 

Name **Norvella Adams**
Title **Sr. Staff Engineering Technician**

Date **12/18/2008**

(This space for Federal or State Office use)

Approved by **/s/ Don Peterson**

Title **FIELD MANAGER**

Date **JAN 21 2009**

Conditions of approval, if any.

CARLSBAD FIELD OFFICE

Title to U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations to any matter within its jurisdiction

*See Instruction on Reverse Side

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

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-39365	Pool Code 41450	Pool Name Lusk, Bone Spring, North
Property Code 37639	Property Name H. DAVIS "30" FED:	Well Number 1H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3709'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	30	18 S	32 E		2310	SOUTH	660	EAST	LEA

Bottom Hole Location If Different From Surface

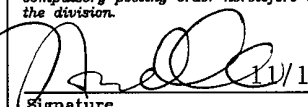
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	30	18 S	32 E		360	SOUTH	660	EAST	LEA
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.						

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>GRID N: 625544.611 GRID E: 700943.236 LATITUDE: 32°43'06.918" LONGITUDE: -103°48'51.736"</p>		<p>GRID N: 625559.429 GRID E: 706259.257 LATITUDE: 32°43'06.803" LONGITUDE: -103°47'49.511"</p>		<p>3711.1' 3710.1'</p>	
		<p>SURFACE LOCATION Lat - N32°43'03.65" Long - W103°47'57.20" SPC- N.: 625225.995 E.: 705601.491 (NAD-83)</p>		<p>3707.1' 3707.1'</p>	
		<p>BOTTOM HOLE LOCATION Lat - N32°42'44.36" Long - W103°47'57.17" SPC- N.: 623276.497 E.: 705613.911 (NAD-83)</p>		<p>1950' 2310'</p>	
<p>GRID N: 622903.031 GRID E: 700958.955 LATITUDE: 32°42'40.779" LONGITUDE: -103°48'51.707"</p>		<p>GRID N: 622910.284 GRID E: 703636.604 LATITUDE: 32°42'40.720" LONGITUDE: -103°48'20.363"</p>		<p>360' 660'</p>	

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

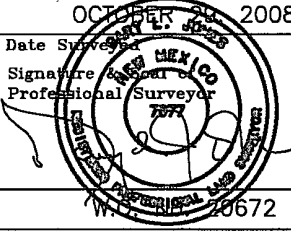
 11/18/08
Signature Date

Norvella Adams
Printed Name

SURVEYOR CERTIFICATION

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.

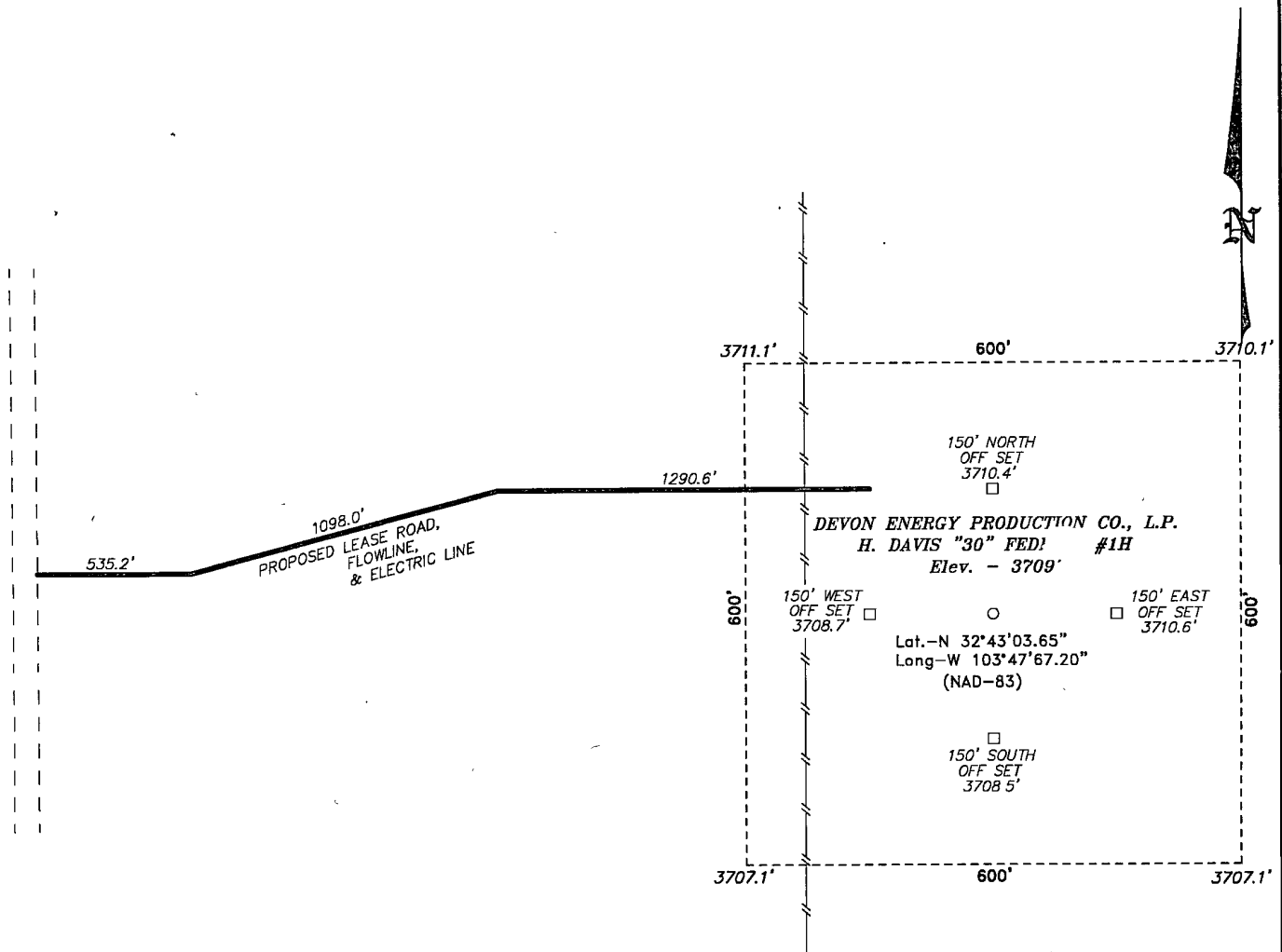
OCTOBER 20 2008
Date Surveyed


Signature of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 30, TOWNSHIP 18 SOUTH, RANGE 32 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



200 0 200 400 FEET
SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF HWY 529 AND MALJAMAR,
GO SOUTHERLY ON MALJAMAR FOR APPROX 5.3
MILES TO LEASE ROAD, ON LEASE ROAD GO
SOUTHWESTERLY 0.6 MILES TO LEASE ROAD, ON
LEASE ROAD GO NORTHERLY 0.4 MILES TO
PROPOSED LEASE ROAD.

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

W.O. Number: 20672

Drawn By: J. M. SMALL

Date: 11-04-2008

Disk: 20672 JMS

DEVON ENERGY PROD. CO., L.P.

REF: H. DAVIS "30" FED. #1H / WELL PAD TOPO

THE H. DAVIS "30" FED. #1H LOCATED 2310' FROM

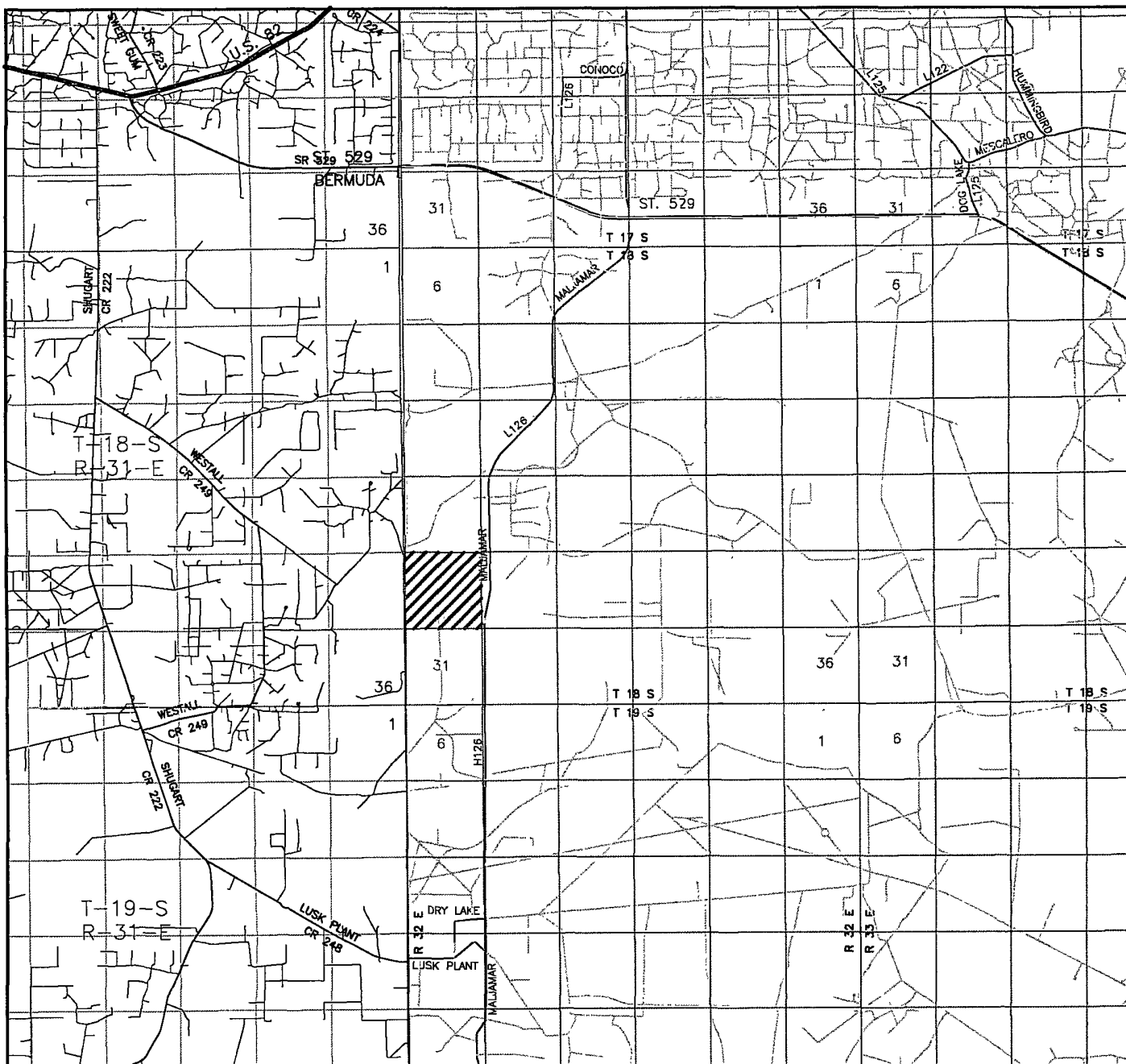
THE SOUTH LINE AND 660' FROM THE EAST LINE OF

SECTION 30, TOWNSHIP 18 SOUTH, RANGE 32 EAST,

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

Survey Date: 10-29-2008

Sheet 1 of 1 Sheets



H. DAVIS "30" FED #1H
 Located at 2310' FSL AND 660' FEL
 Section 30, Township 18 South, Range 32 East,
 N.M.P.M., Lea County, New Mexico.



focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

W.O. Number: JMS 20672

Survey Date: 10-29-2008

Scale: 1" = 2000'

Date: 11-04-2008

DEVON ENERGY
 PROD. CO., L.P.



DRILLING PROGRAM

Devon Energy Production Company, LP

H Davis 30 Fed 1H

Surface Location: 2310' FSL & 660' FEL, Unit I, Sec 30 T18S R32E, Lea, NM

Bottom Hole Location: 360' FSL & 660' FEL, Unit P, Sec 30 T18S R32E, Lea, NM

1. Geologic Name of Surface Formation

a. Quaternary

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

a. Quaternary	19'	Fresh Water
b. Rustler Dol.	1020'	Fresh Water
c. Salado Salt	1296'	
d. Tansil Dol.	2490'	
e. Yates Ss	2643'	Oil
f. Seven Rivers	3109'	Oil
g. Queen Ss	3680'	Oil
h. Grayburg	3730'	Oil
i. San Andres	4327'	Oil
j. Cherry Canyon Ss	4484'	Oil
k. Brushy Canyon Ss	5288'	Oil
l. 1 st Bone Spring Ls	6758'	Oil
m. 1 st Bone Spring Ss	8185'	Oil
n. 2 nd Bone Spring Ls	8451'	Oil
o. 2 nd Bone Spring Ss	8993'	Oil
p. 3 rd Bone Spring Ls	9400'	Oil
q. 3 rd Bone Spring Ss	9721'	Oil
r. Total Depth	10,120'	Oil

13 3/8"

1050'

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 ~~9 5/8"~~ casing at ~~2530'~~ and circulating cement back to surface. The Bone Spring intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement back to surface. DV tool will be set at 6500'.

3. Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17 1/2"	60' - 1050'	13 3/8"	0' - 1050'	48#	ST&C	H-40
12 1/4"	1050' - 2530'	9 5/8"	0' - 2530'	40#	LT&C	K-55
8 1/2"	2530' - 10,120'	5 1/2"	0 - 10,120'	17#	LT&C	N-80

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design</u>	<u>Burst Design</u>	<u>Tension Design</u>
	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
13 3/8"	2.9	2.5	7.1
9 5/8"	1.78	2.82	4.39
5 1/2"	1.58	2.38	2.21

4. Cement Program: (Note yields; and dv tool depths if multiple stages)

- a. 13 3/8" Surface Lead with 370 sx (35:65) Poz Premium Plus C + 5% NaCl + ¼ lbs/sx Cello Flake, and 4% Bentonite + 0.8% Sodium Metasilicate + 5% MPA-5; 12.8 ppg, 1.96 cf/sx, 10.55 gps. Tail with 220 sx Premium Plus C + 2% CaCl₂ + ¼ lbs/sx Cello Flake; 14.8 ppg, 1.35 cf/sx, 6.35 gps. TOC = 0.
- b. 9 5/8" Intermediate Lead with 460 sx (35:65) Poz Premium Plus C + 0.8% Sodium Metasilicate + 5% MPA-5 + 5% NaCl + ¼ lbs/sx Cello Flake + 4% Bentonite; 12.8 ppg, 1.96 cf/sx, 10.55 gps. Tail with 320 sx Premium Plus C + ¼ lbs/sx Cello Flake; 14.8 ppg, 1.33 cf/sx, 6.32 gps. TOC = 0.
- c. 5 1/2" Production Stage 1: 480 sx (15:61:11) Poz Premium Plus C + 1% KCl + 0.75% EC-1 + 0.4% CD-32 + 3 #/sx LCM-1 + 0.6% FL-25 + 0.6% FL-52A; 13.30 ppg, 1.56 cf/sx, 7.55 gps.. TOC = 0.
Stage 2: Lead with 830 sx (35:65) Poz Premium Plus C + ¼ lbs/sx Cello Flake + 6% Bentonite; 12.5 ppg, 1.94 cf/sx, 10.65 gps. Tail with 200 sx (60:40) Poz Premium Plus C + 2% NaCl + 0.1% Sodium Metasilicate + 4% MPA-5. 13.8 ppg, 1.35 cf/sx, 6.29 gps. TOC = 0.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach the surface. All casing is new and API approved.

5. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (5 K system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. **The 5K 2 ram BOPE, consisting of 5K annular, blind rams, and pipe rams will be nipped up on the 13 3/8" surface casing and tested to 1000 psi high and 250 low with the rig pumps. Drill to total depth of intermediate casing, run 9 5/8" casing and nipple up the 11" 5K 2 rams BOPE, consisting of 5K annular, blind rams, and pipe rams. BOPE will be tested by an independent tester per Onshore Order #2 prior to drilling production hole.**

See
COA

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 driller's log. A 2" kill line and 4"

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.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
60' – 1050'	9.6	34	NC	Fresh Water
1050' – 2530'	10.2	30	NC	Brine
2530' – 10,120'	8.7	29	NC	Fresh Water

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

7. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 8 5/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 9 5/8" shoe until total depth is reached.

8. 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 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. A H2S contingency plan will be provided. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4500 psi and Estimated BHT 175°.

10. 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 45 days. If production casing is run then an additional 45 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

devon

Project Eddy Co., New Mexico (Nad 83)
 Site H. Davis 30 Fed #1H
 Well H. Davis 30 Fed #1H
 Lateral #1
 Design Design #1



SECTION DETAILS										
Sec	MD	Inc	As	TVD	+N-S	+E-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	7842.04	0.00	0.00	7842.04	0.00	0.00	0.00	0.00	0.00	
3	8742.04	90.00	179.63	8415.00	-572.95	3.65	10.00	179.63	572.96	
4	10118.63	90.00	179.63	8415.00	-1949.50	12.42	0.00	0.00	1949.54	PBHL - TD (HD30#1H) 12-08-08

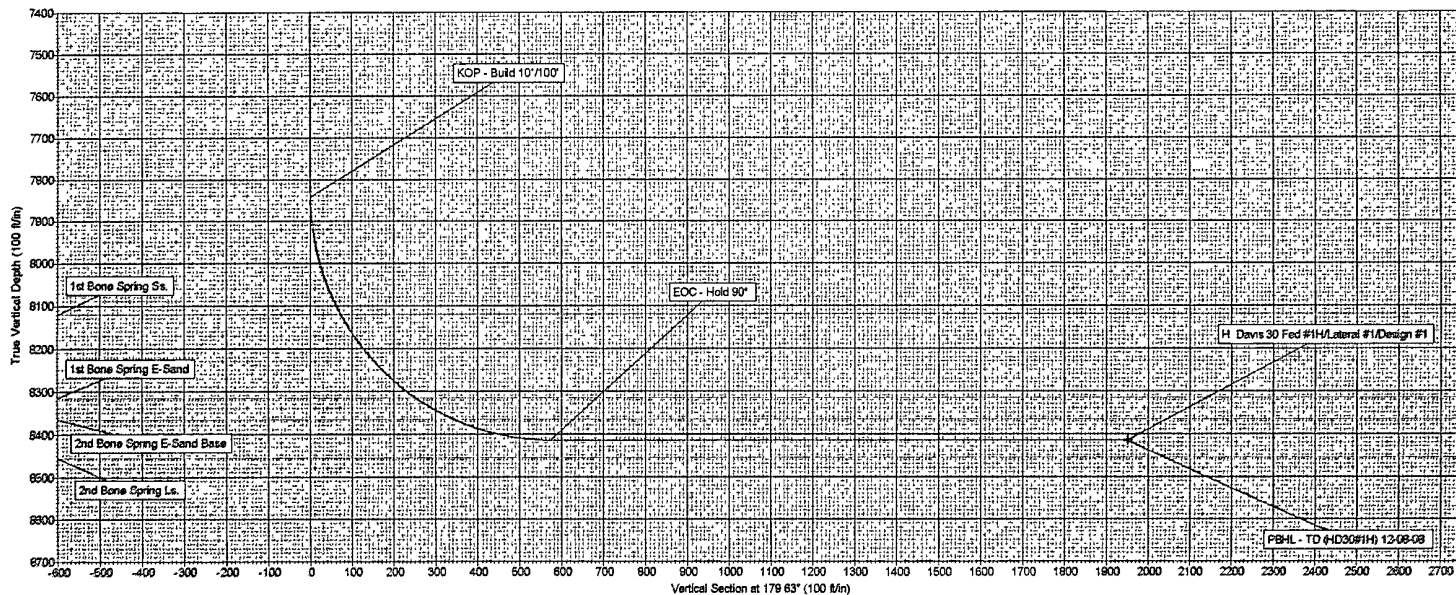
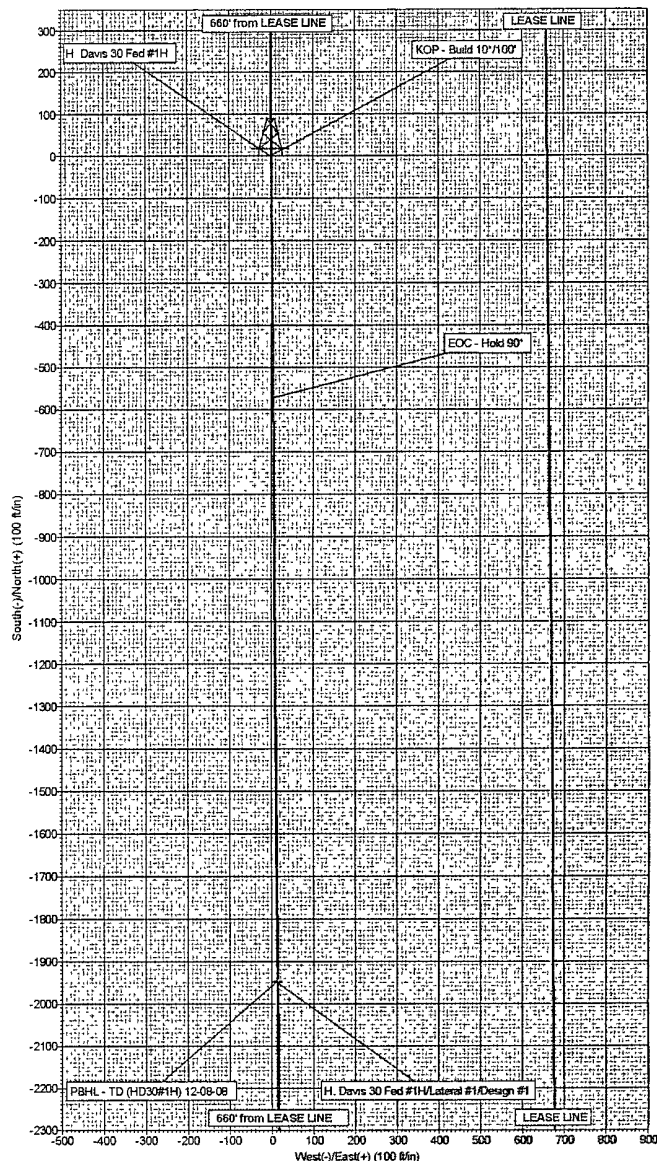
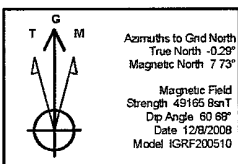
ANNOTATIONS		
TVD	MD	Annotation
7842.04	7842.04	KOP - Build 10°/100'
8415.00	8742.04	EOC - Hold 90°

WELLBORE TARGET DETAILS				
Name	TVD	+N-S	+E-W	Shape Point
PBHL - TD (HD30#1H) 12-08-08	8415.00	-1949.50	12.42	

Plan Design #1 (H. Davis 30 Fed #1H/Lateral #1)	
Created By: Mike Starkey	Date: 16 17, December 08 2008
Checked: _____	Date: _____
Reviewed: _____	Date: _____
Approved: _____	Date: _____

WELL DETAILS H. Davis 30 Fed #1H				
Ground Level				
3709.00				
WELL @ 3721.00ft (Original Well Elev)				
+N-S	+E-W	Northing	Easting	Latitude
0.00	0.00	625225.99	705601.49	32° 43' 3.536 N
Longitude				Slot
103° 47' 57.229 W				

PROJECT DETAILS: Eddy Co., New Mexico (Nad 83)	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level





Devon Energy

Eddy Co., New Mexico (Nad 83)

H. Davis 30 Fed #1H

H. Davis 30 Fed #1H

Lateral #1

Plan: Design #1

Standard Planning Report

08 December, 2008





CUDD Drilling & Measurement Services
Planning Report



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well H. Davis 30 Fed #1H
Company:	Devon Energy	TVD Reference:	WELL @ 3721.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3721.00ft (Original Well Elev)
Site:	H. Davis 30 Fed #1H	North Reference:	Grid
Well:	H. Davis 30 Fed #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

Project	Eddy Co., New Mexico (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	H. Davis 30 Fed #1H, Sec 30, T-18S, R-32E			
Site Position:		Northing:	625,225.99 ft	Latitude: 32° 43' 3.536 N
From:	Map	Easting:	705,601.49 ft	Longitude: 103° 47' 57.229 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence: 0.29 °

Well	H. Davis 30 Fed #1H				
Well Position	+N/-S	0.00 ft	Northing:	625,225.99 ft	Latitude: 32° 43' 3.536 N
	+E/-W	0.00 ft	Easting:	705,601.49 ft	Longitude: 103° 47' 57.229 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,721.00 ft	Ground Level: 3,709.00 ft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/8/2008	8.02	60.68	49,166

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	8,415.00	0.00	0.00	179.63

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,842.04	0.00	0.00	7,842.04	0.00	0.00	0.00	0.00	0.00	0.00	
8,742.04	90.00	179.63	8,415.00	-572.95	3.65	10.00	10.00	0.00	179.63	
10,118.63	90.00	179.63	8,415.00	-1,949.50	12.42	0.00	0.00	0.00	0.00	PBHL - TD (HD30#11-

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well H. Davis 30 Fed #1H
Company:	Devon Energy	TVD Reference:	WELL @ 3721.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3721.00ft (Original Well Elev)
Site:	H. Davis 30 Fed #1H	North Reference:	Grid
Well:	H. Davis 30 Fed #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,006.00	0.00	0.00	1,006.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler Dol.										
1,299.00	0.00	0.00	1,299.00	0.00	0.00	0.00	0.00	0.00	0.00	
Salado Salt										
2,476.00	0.00	0.00	2,476.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tansil Dol.										
2,640.00	0.00	0.00	2,640.00	0.00	0.00	0.00	0.00	0.00	0.00	
Yates										
3,098.00	0.00	0.00	3,098.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seven Rivers										
3,689.00	0.00	0.00	3,689.00	0.00	0.00	0.00	0.00	0.00	0.00	
Queen										
3,733.00	0.00	0.00	3,733.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grayburg										
4,301.00	0.00	0.00	4,301.00	0.00	0.00	0.00	0.00	0.00	0.00	
San Andres										
4,457.00	0.00	0.00	4,457.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cherry Canyon										
5,186.00	0.00	0.00	5,186.00	0.00	0.00	0.00	0.00	0.00	0.00	
Brushy Canyon										
6,728.00	0.00	0.00	6,728.00	0.00	0.00	0.00	0.00	0.00	0.00	
1st Bone Spring Ls.										
7,842.04	0.00	0.00	7,842.04	0.00	0.00	0.00	0.00	0.00	0.00	
KOP - Build 10°/100'										
8,132.25	29.02	179.63	8,120.00	-71.94	0.46	71.94	10.00	10.00	0.00	
1st Bone Spring Ss.										
8,398.40	55.64	179.63	8,315.00	-249.55	1.59	249.55	10.00	10.00	0.00	
1st Bone Spring E-Sand										
8,500.90	65.89	179.63	8,365.00	-338.87	2.16	338.87	10.00	10.00	0.00	
2nd Bone Spring E-Sand Base										
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EOC - Hold 90°										
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PBHL - TD (HD30#1H) 12-08-08										



CUDD Drilling & Measurement Services
Planning Report



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well H. Davis 30 Fed #1H
Company:	Devon Energy	TVD Reference:	WELL @ 3721.00ft (Original Well Elev)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	WELL @ 3721.00ft (Original Well Elev)
Site:	H. Davis 30 Fed #1H	North Reference:	Grid
Well:	H. Davis 30 Fed #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Design #1		

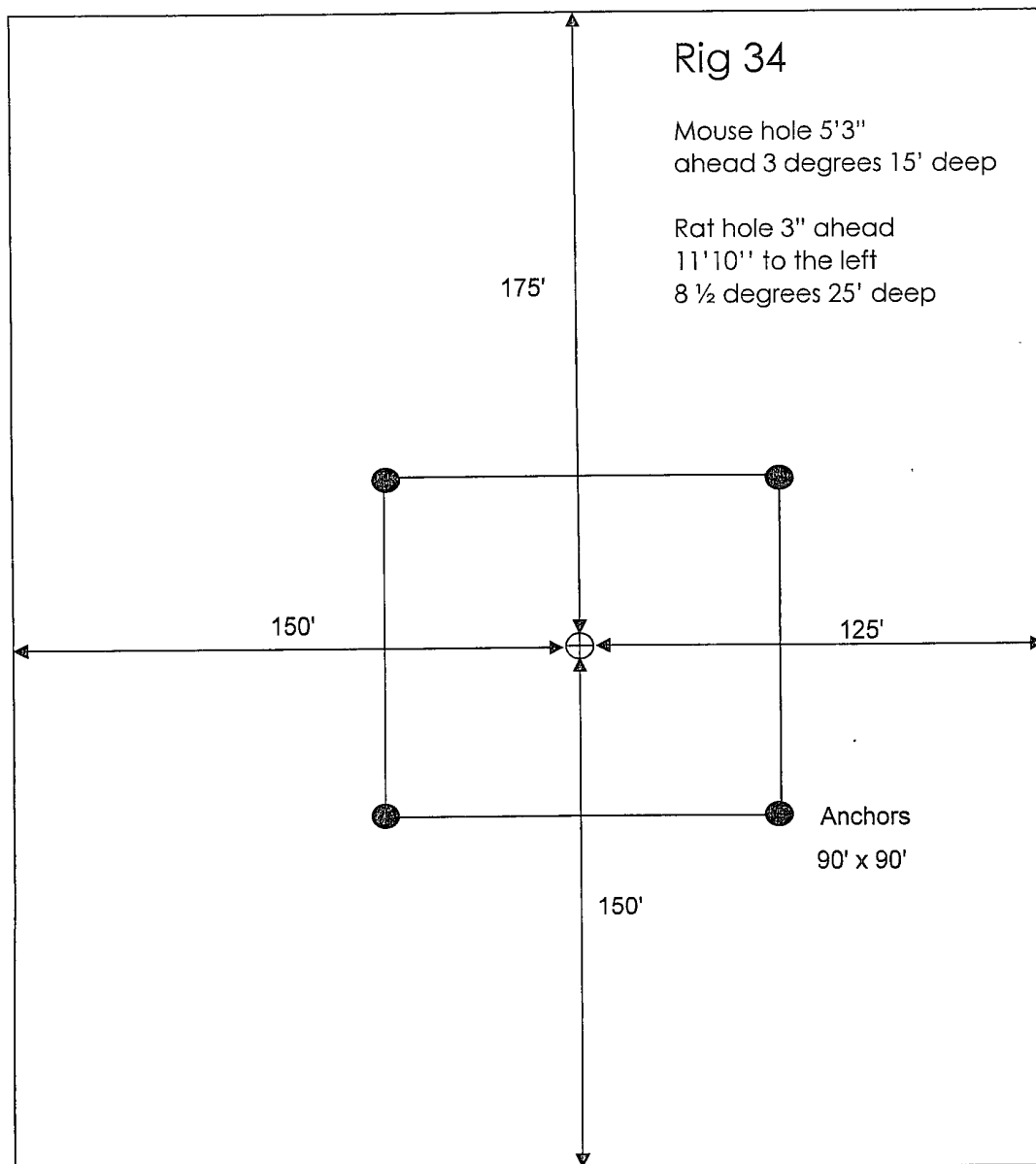
Formations

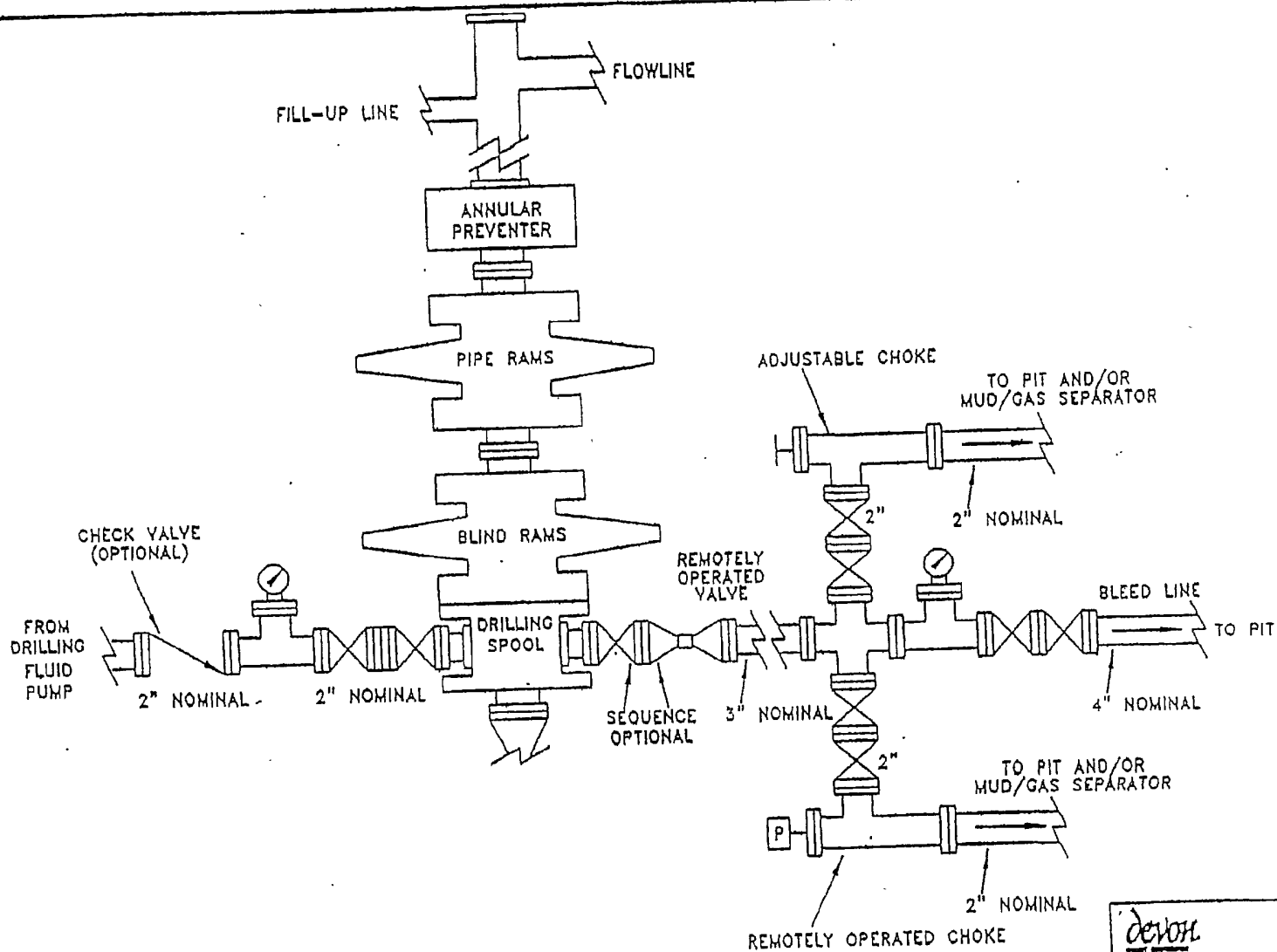
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
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1,299.00	1,299.00	Salado Salt		0.00	
2,476.00	2,476.00	Tansil Dol.		0.00	
2,640.00	2,640.00	Yates		0.00	
3,098.00	3,098.00	Seven Rivers		0.00	
3,689.00	3,689.00	Queen		0.00	
3,733.00	3,733.00	Grayburg		0.00	
4,301.00	4,301.00	San Andres		0.00	
4,457.00	4,457.00	Cherry Canyon		0.00	
5,186.00	5,186.00	Brushy Canyon		0.00	
6,728.00	6,728.00	1st Bone Spring Ls.		0.00	
8,132.25	8,120.00	1st Bone Spring Ss.		0.00	
8,398.40	8,315.00	1st Bone Spring E-Sand		0.00	
8,500.90	8,365.00	2nd Bone Spring E-Sand Base		0.00	
	8,456.00	2nd Bone Spring Ls.		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,842.04	7,842.04	0.00	0.00	KOP - Build 10°/100'
8,742.04	8,415.00	-572.94	3.65	EOC - Hold 90°

BASIC ENERGY SERVICES - RIGS 31, 32 & 34





devon

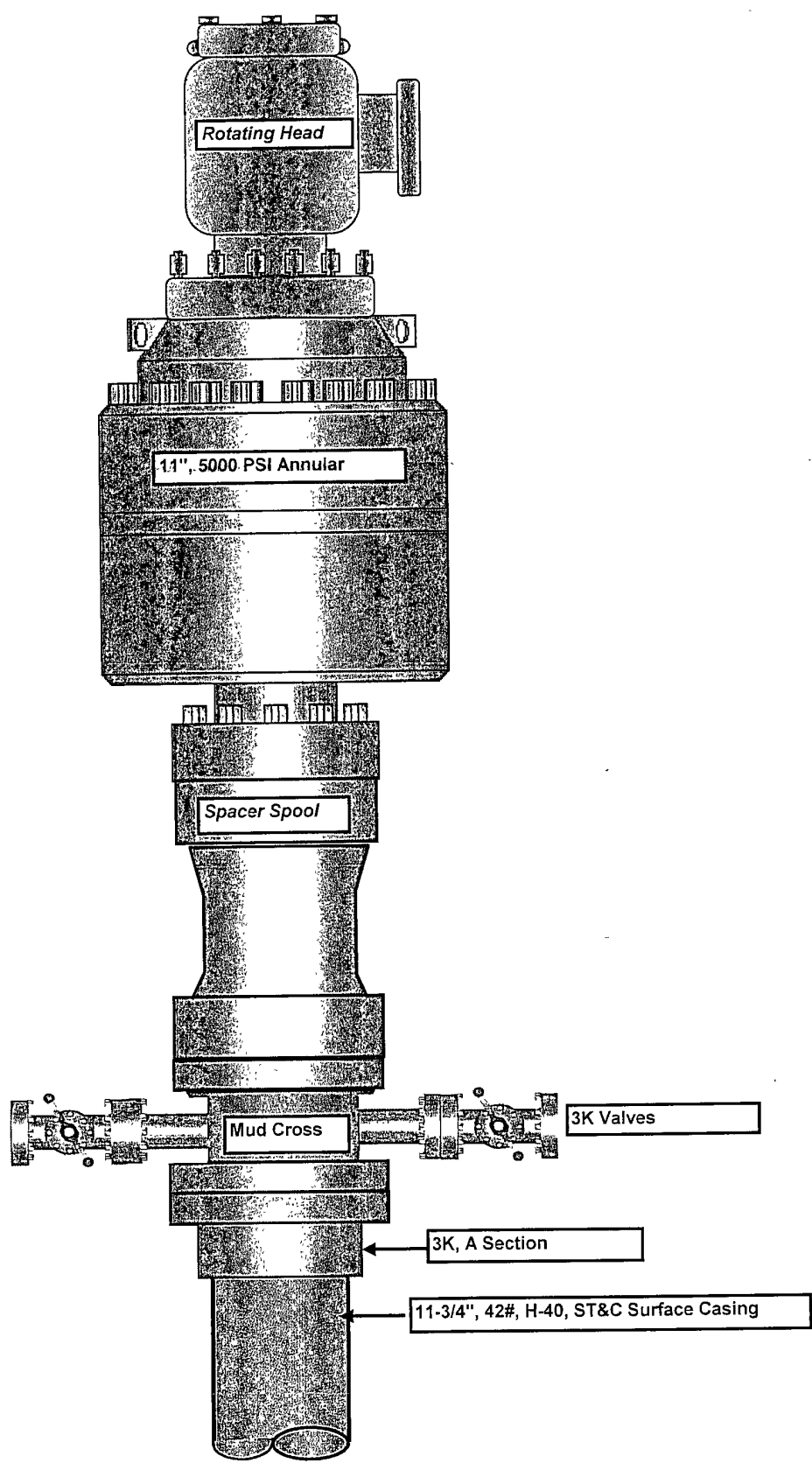
EXHIBIT 1

PROPOSED 5-M BOPE
AND CHOKE ARRANGEMENT

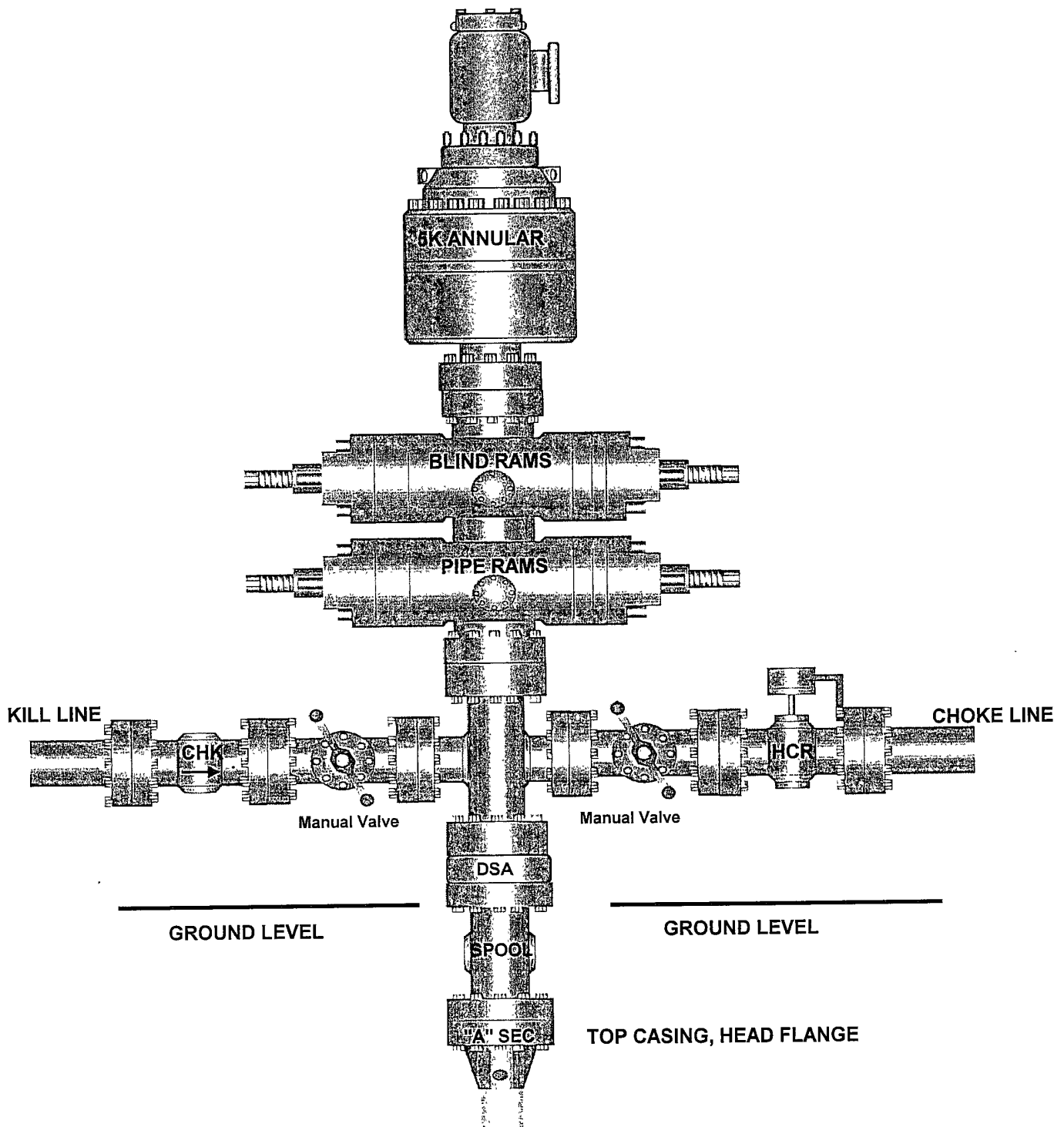
si\..nm\plots
mbana.dwg

sc

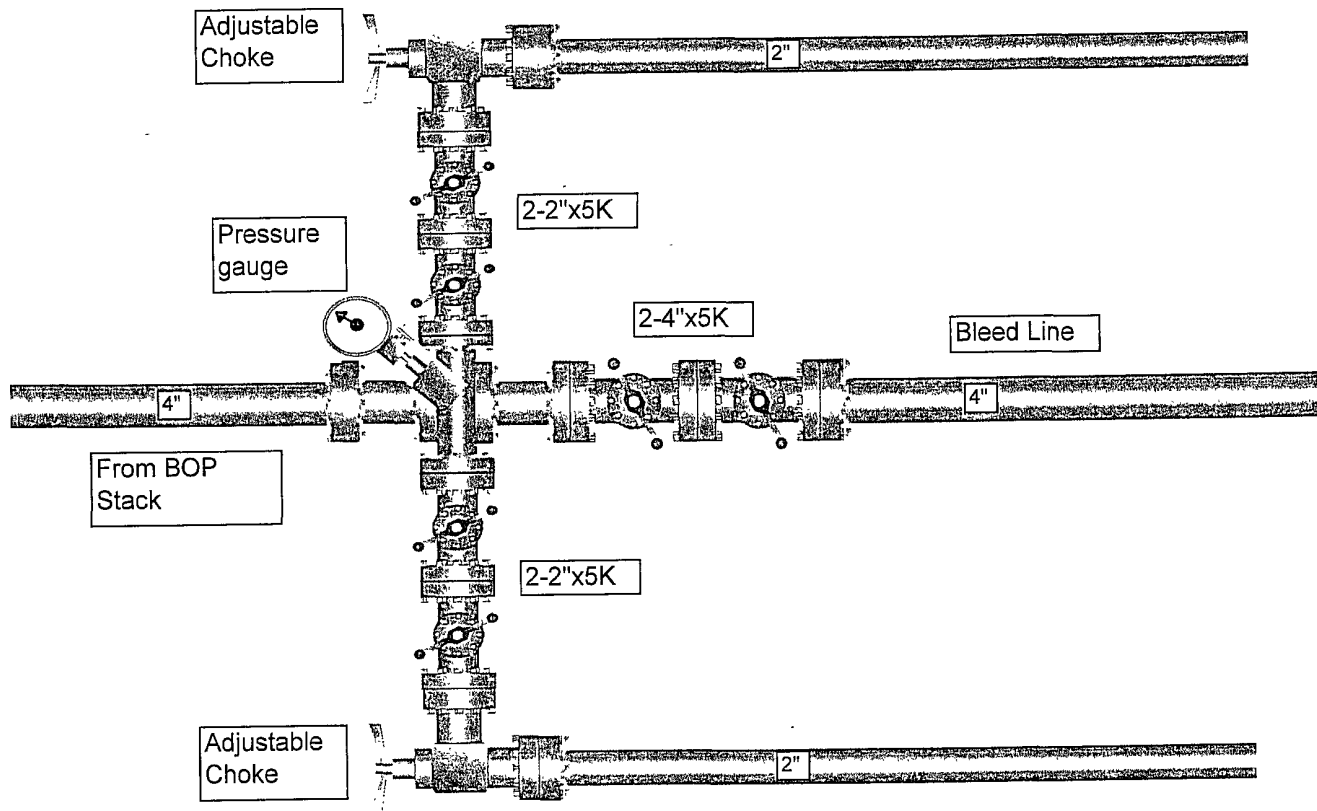
11" x 5K Annular



11" x 5,000 psi BOP Stack



5,000 PSI CHOKE MANIFOLD





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

Hydrogen Sulfide (H₂S) Contingency Plan

For

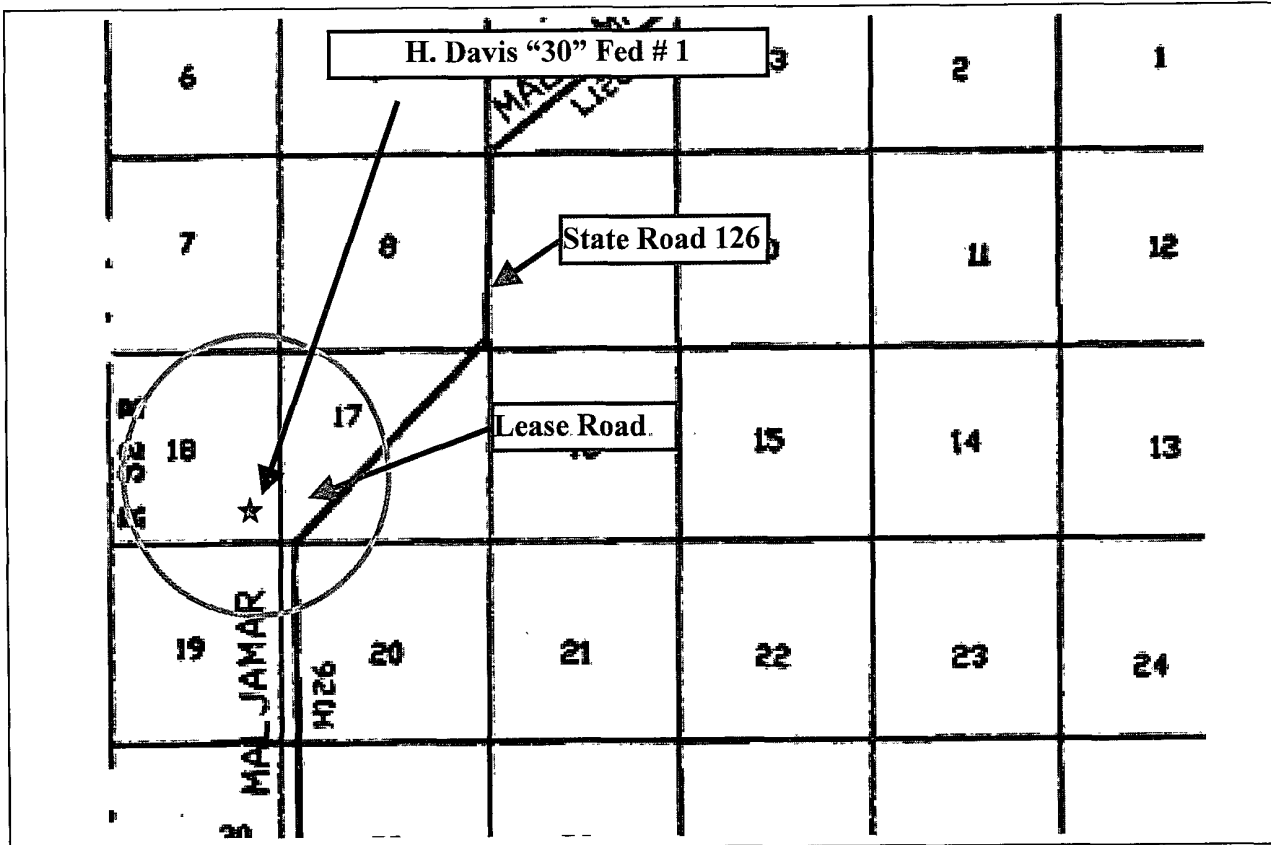
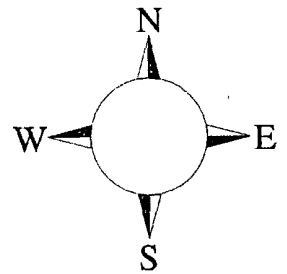
H. Davis "30" Fed # 1

**660'FSL & 660' FEL,
Sec-30, T-18S R-32E**

Lea County NM

H. Davis "30" Fed # 1

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)
100 ppm H₂S 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 East on lease road to State Road 126. Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE There are no homes or buildings in or near the ROE.

Emergency Procedures

In the case of a release of gas containing H₂S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

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

Ignition of Gas Source

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

Characteristics of H₂S and SO₂

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

Contacting Authorities

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

Devon Energy Corp. Company Call List

<u>Artesia (505)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Roger Hernandez ..	748-5238	748-0169	396-7169
Asst. Foreman – Ernie Duran.	513-1768	748-0191	746-4589
Don Mayberry	748-5235	748-0164	746-4945
Linda Berryman	513-0534	748-0177	395-3020
Bill Greenlees	(405) 203-7778 ...	(405) 552-8194 ...	(405) 324-9994

Agency Call List

Lea **Hobbs**

<u>County</u>	State Police.....	392-5588
<u>(505)</u>	City Police.....	397-9265
	Sheriff's Office	393-2515
	Ambulance.....	911
	Fire Department	397-9308
	LEPC (Local Emergency Planning Committee)	393-2870
	NMOCD.....	393-6161
	US Bureau of Land Management.....	393-3612

Eddy **Carlsbad**

<u>County</u>	State Police	885-3137
<u>(505)</u>	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;



SURFACE USE PLAN

Devon Energy Production Company, LP

H Davis 30 Fed 1

Surface Location: 2310' FSL & 660' FEL, Unit I, Sec 30 T18S R32E, Lea, NM

Bottom Hole Location: 360' FSL & 660' FEL, Unit P, Sec 30 T18S R32E, Lea, 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 the junction of State Hwy 529 and Maljamar cutoff, go south 5.8 miles on Maljamar cutoff to lease road, on lease road go southwest 0.4 miles to proposed lease road.

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 shows the existing trail road.
- 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, a 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. We intend to lay flowlines from the H Davis 30 Fed 1 well to the tank battery. 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 12 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.
- f. If a pit or closed loop system is utilized, Devon will comply with the NMOCD requirements 19.15.17 and submit a form C-144 CLEZ to the appropriate NMOCD District Office.

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. We 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 reclaimed 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, sagebrush, 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 are no dwellings within 2 miles 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.

Bill Greenlees
Operations Engineering 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) 552-8194 (office)
(405) 203-7778 (Cellular)

(505) 748-3371 (office)
(505) 746-4945 (home)

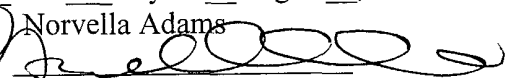
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road 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 25th ___ day of ___August___, 2008.

Printed Name: Norvella Adams

Signed Name: 

Position Title: Sr. Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405) 552-8198

Field Representative (if not above signatory):

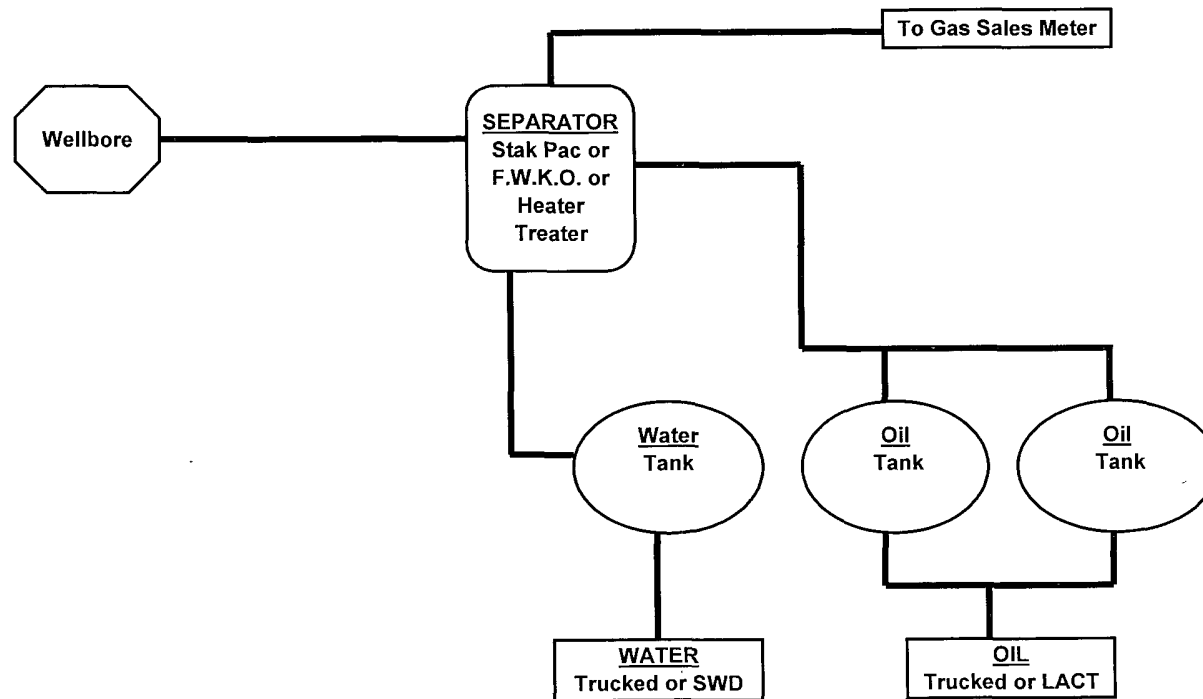
Address (if different from above):

Telephone (if different from above):

E-mail (optional): norvella.adams@dvn.com

DEVON ENERGY PRODUCTION COMPANY LP

General Production Facilities Diagram



PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company, LP
LEASE NO.:	NM-98189
WELL NAME & NO.:	H Davis 30 Fed No 1
SURFACE HOLE FOOTAGE:	2310' FSL & 660' FEL
BOTTOM HOLE FOOTAGE:	360' FSL & 660' FEL
LOCATION:	Section 30, T. 18 S., R 32 E., NMPM
COUNTY:	Lea County, New Mexico

TABLE OF CONTENTS

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.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie Chicken
- ☒ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☒ **Road Section Diagram**
- ☒ **Drilling**
 - Production casing cement
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☒ **Closed Loop System/Interim Reclamation**
- ☐ **Final Abandonment/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 1st through June 15th 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.

***Note:** Due to the location occurring in a Lesser Prairie-Chicken Habitat Evaluation Area (HEA), as described in the 2008 Special Status Species Resource Management Plan Amendment, **non-emergency exceptions to this condition-of-approval will not be granted.**

H Davis 30 Federal # 1: Closed Loop System- V- Door East

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 (575) 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 shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. Closed Loop System

H Davis 30 Federal # 1: Closed Loop System- V- Door East

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 (575) 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

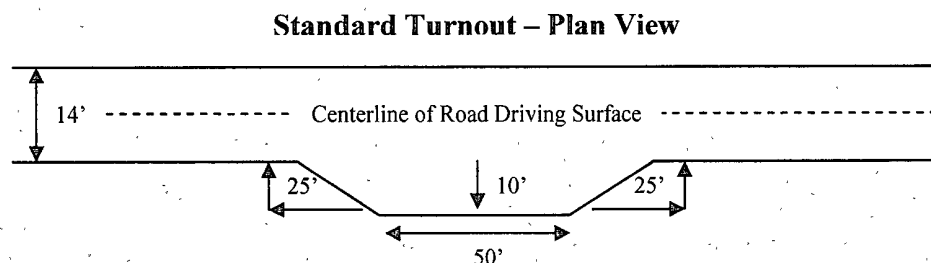
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

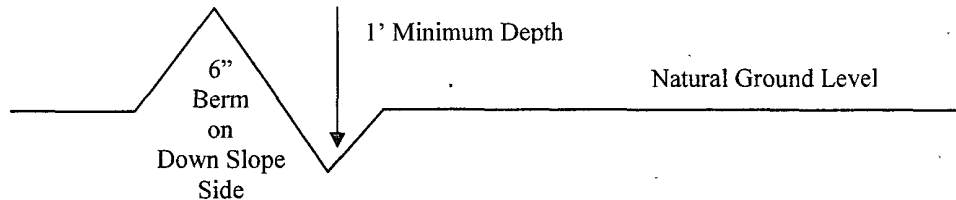


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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:

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

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

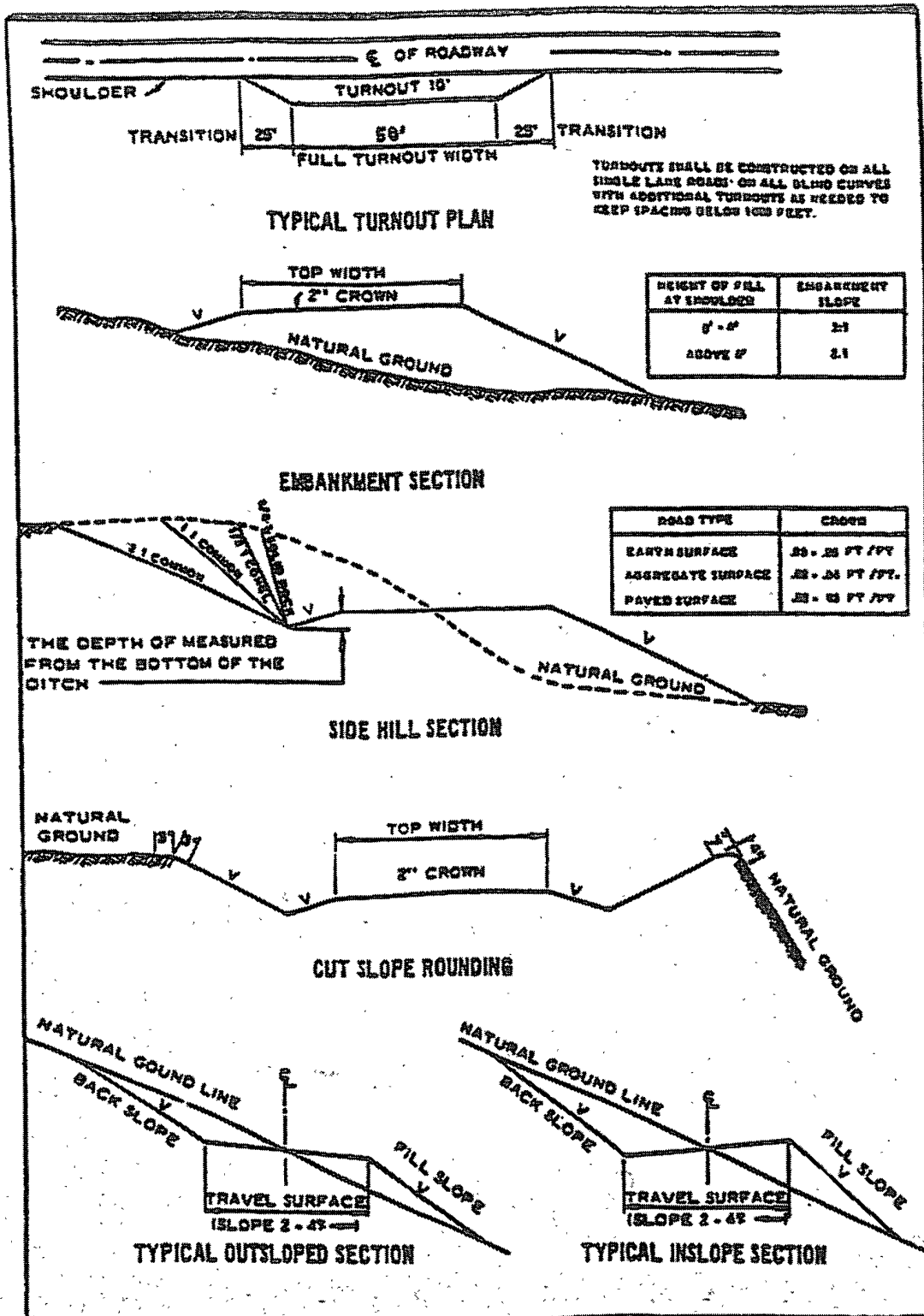
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



VII. DRILLING

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

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Queen** formation. **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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

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 for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible water and brine flows in the Salado and Artesia Groups.

1. The 13-3/8 inch surface casing shall be set **at approximately 1050 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
 - 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 is to include the lead cement slurry.**
 - 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 cementing 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, c-d above. **Casing to be set in the Tansill formation.**

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

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. **Additional cement will be needed as excess cement calculates to a negative 10% based on gauge hole.**

b. Second stage above DV tool, cement shall:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office. **Additional cement may be required as excess cement calculates to 20% based on gauge hole.**

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.

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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8"** intermediate casing shoe shall be **5000 (5M)** psi.
4. 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 (**entire system**) to the reduced pressure of **1000** psi with the rig pumps is approved.

D. DRILL STEM TEST

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

NOTE – area code for Eddy and Lea counties is 575. H2S plan still has 505 numbers.

WWI 011409

VIII. 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

C. ELECTRIC LINES

IX. 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.

BLM Serial #:
Company Reference:
Well Name and Number:

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 no 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	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

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

*Pounds of pure live seed:

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

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.