

OCD-HOBBS
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Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCT 15 2010
HOBBSOCD

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work: ☒ DRILL ☐ REENTER		5 Lease Serial No. NM-114988	
1b Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6 If Indian, Allottee or Tribe Name	
2 Name of Operator Devon Energy Production Company, LP		7 If Unit or CA Agreement, Name and No	
3a Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260		8 Lease Name and Well No Dinwiddie 1 Federal 1H	
3b Phone No. (include area code) 405-228-8699		9 API Well No 30-025-39942	
4 Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 795' FNL & 660' FEL Unit A At proposed prod. zone 660' FNL & 660' FWL Unit D		10 Field and Pool, or Exploratory NE Salado Draw; Bone Spring	
14 Distance in miles and direction from nearest town or post office* Approximately 20 miles northwest of Jal, NM.		11 Sec, T, R, M or Blk. and Survey or Area SEC 1 T26S R33E	
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drng unit line, if any) SL: 660' BHL: 660' BHL 4270'		12 County or Parish Lea County	
16 No of acres in lease 1280		13 State NM	
17 Spacing Unit dedicated to this well 160 Acres			
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft SL: 1420' BHL:		19 Proposed Depth Pilot hole 12,750 TVD 16,500 MD 12,377 TVD 14,190 12,376	
20 BLM/BIA Bond No on file CO-1104			
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3319' GL		22 Approximate date work will start* 09/01/2010	
23 Estimated duration 30 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 <i>Judy A. Barnett</i>	Name (Printed/Typed) Judy A. Barnett	Date 07/06/2010
Title Regulatory Analyst		

Approved by (Signature) <i>Jeanette A. Martinez</i>	Name (Printed/Typed) Jeanette A. Martinez	Date 10/13/2010
Title SOS FIELD MANAGER		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to 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)

Carlsbad Controlled Water Basin

KZ 10/15/10
PETROLEUM ENGINEER

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

RECEIVED

OCT 15 2010

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

HOBBSOCD

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised October 15, 2009

Submit one copy to appropriate

District Office

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-025-39942	² Pool Code 97741	³ Pool Name Wildcat NE Salado Draw; Bone Springs
⁴ Property Code 38351	⁵ Property Name DINWIDDIE 1 FEDERAL	
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	
		⁶ Well Number 1H
		⁹ Elevation 3319.5

¹⁰ Surface Location

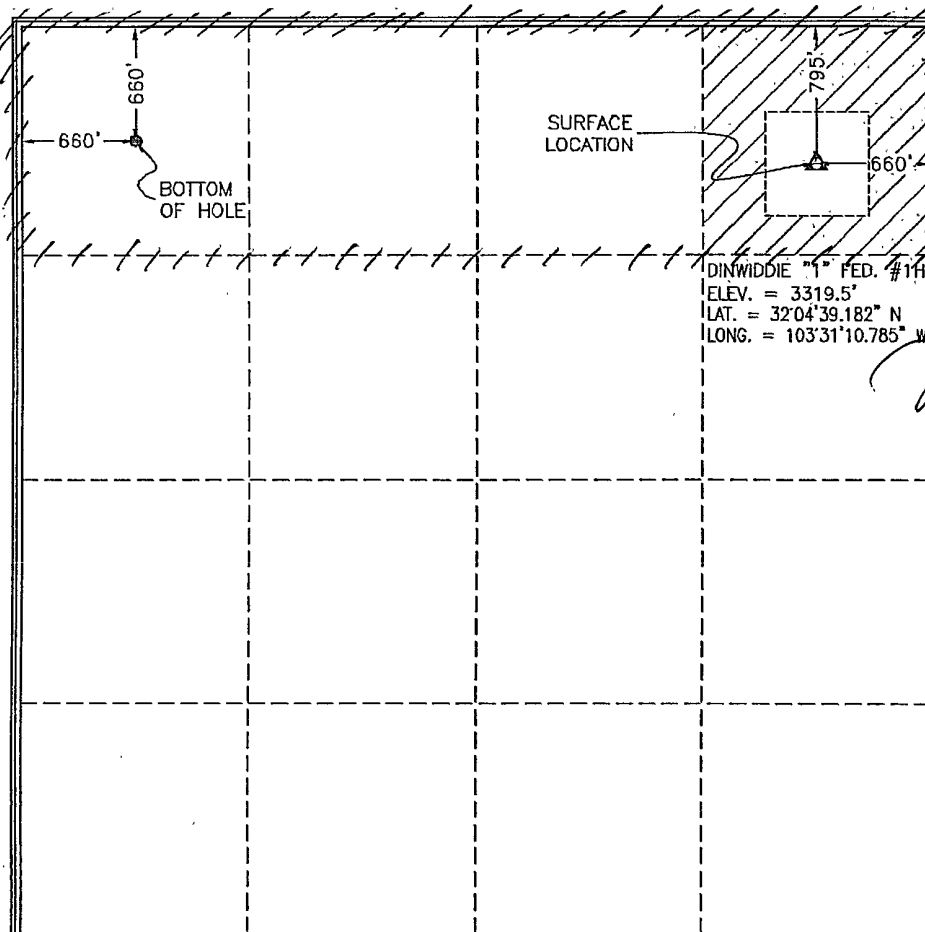
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	26 S	33 E		795	NORTH	660	EAST	LEA

¹¹ 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
D	1	26 S	33 E		660	NORTH	660	WEST	LEA

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

**¹⁷ 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 or has a right to drill this well at this 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.

Signature: *[Signature]* Date: **6/29/2010**

Printed Name

Norvella Adams**¹⁸ 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.

MAY 17, 2010

Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number: **FILMON F. JARAMILLO, PLS 12797**

SURVEY NO. 120

DRILLING PROGRAM

Devon Energy Production Company, LP

Dinwiddie 1 Federal 1H

Surface Location: 795' FNL & 660' FEL, Unit A, Sec 1 T26S R33E, Lea, NM

Bottom Hole Location: 660' FNL & 660' FWL, Unit D, Sec 1 T26S R33E, Lea, NM

1. Geologic Name of Surface Formation

- a. Quaternary Alluvium

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

a. Rustler	900'	Fresh Water
b. Delaware	5220'	
c. Bone Springs	9260'	
d. 1 st Avalon Shale	9400'	Oil
e. 2 nd Avalon Shale	10,250'	Oil
f. 1 st Bone Spring Sd	10,360'	
g. 2 nd Bone Spring Lm	10,650'	
h. 3 rd Bone Spring Sd	12,010'	Oil
i. Total Depth	16,500' 16,150' MD / 12,376' VD Pilot hole 12,750'	

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 950' and circulating cement back to surface. The Bone Spring intervals will be isolated by setting 7" casing to 12,800' and circulating cement to 4,700' and by setting a 4 1/2" liner to total depth and circulating cement to 12,500'.

3. Casing Program:

	<u>Hole</u> <u>Size</u>	<u>Hole</u> <u>Interval</u>	<u>OD</u> <u>Csg</u>	<u>Casing</u> <u>Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
See CoA	17 1/2"	0' - 950' 1030'	13 3/8"	0' - 950'	54.5#	LT&C STC	J-55
	12 1/4"	950' - 5250'	9 5/8"	0' - 5250'	40#	BT&C	HCK-55
	8 3/4"	5250' - 12,750'	Pilot	Hole			
	8 3/4"	5250' - 12,800'	7"	0 - 11,900'	26#	LT&C	HEC-P110 HCP-110
	8 3/4"	5250' - 12,800'	7"	11,900' - 12,800'	26#	BT&C	HEC-P110 per operator 9/28/10
	6 1/8"	12,800' - 16,500'	4 1/2"	12,500' - 16,500'	11.6#	BT&C	HEC-P110

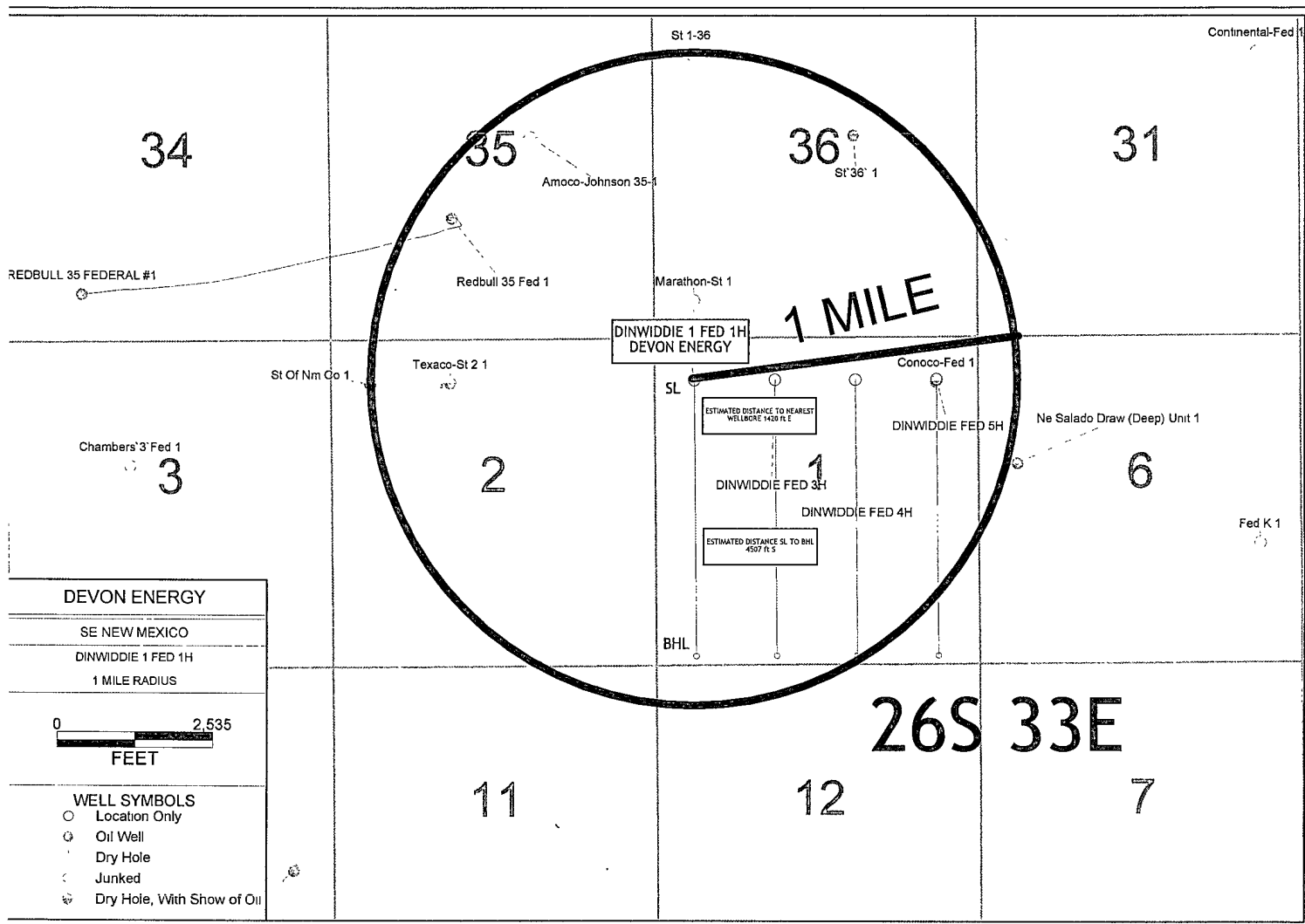
Design Parameter Factors:

<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"	2.5	6.1	9.8
9 5/8"	1.4	1.5	4.1
7"	1.2	1.6	1.6
4 1/2"	1.2	1.5	1.5

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

- a. 13 3/8" Surface Lead with 484 sx (35:65) Poz Class C + 5% NaCl + 1/4 lbs/sx Celloflake + 4% Bentonite + 1% Sodium Metasilicate + 5% MPA-5; 12.8 ppg, 1.97 cf/sx, 10.56 gps. Tail with 300 sx Class C + 2% CaCl₂ + 1/4 lbs/sx Celloflake; 14.8 ppg, 1.35 cf/sx, 6.35 gps. TOC = 0.
- b. 9 5/8" Intermediate Lead with 1178 sx (50:50) Poz Class C + 3% NaCl + 1/4 lbs/sx Cello Flake + 10% Bentonite + 0.05% ASA-301; 12.0 ppg, 2.24 cf/sx, 12.68 gps. Tail with 300 sx Poz Class C + 1/4 lbs/sx Cello Flake + 5% NaCl + 0.3% Sodium Metasilicate + 4% MPA-5; 13.8 ppg, 1.37 cf/sx, 6.36 gps. TOC = 0.
- c. Plug Back *See COA* — With 370 sx Premium Plus H Cement + 0.15% R-3; 15.6 ppg, 1.18 cf/sx, 5.23 gps.
- Plug top 12,000' to 12,750'
- An 8 3/4" Open Hole Whipstock with a packer type anchor will be set at ~ 11,800' after the cement plug has been set.
- d. 7" Intermediate Lead with 422 sx (60:40) Poz Class C + 2.5% R-21 + 15 #/sx CSE-2 + 0.5% FL-52A + 4% MPA-5 + 1/4 lbs/sx Cello Flake + 3 #/sx LCM-1 + 0.8% ASA-301 + 5% A-10 + 4% Sodium Metasilicate + 1% BA-10A + 0.005 gps FP-13L; 10.50 ppg, 4.24 cf/sx, 26.15 gps. Tail with 360 sx (15:61:11) Poz Class H + 0.1% Sodium Metasilicate + 0.5% BA-10A + 0.1% R-3 + 5% NaCl + 1/4 lbs/sx Cello Flake + 0.6% FL-25 + 0.6% FL-52A; 13.3 ppg, 1.60 cf/sx, 7.87 gps. TOC = 4700'.
- e. 4 1/2" Liner Lead with 416 sx (50:50) Poz Class H + 0.2% R-3 + 1% NaCl + 0.5% FL-25 + 0.5% FL-52A + 0.1% Sodium Metasilicate + 2% Bentonite; 14.2 ppg, 1.27 cf/sx, 5.72 gps. TOC = 12,500'.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. All casing is new and API approved.



5. Pressure Control Equipment:

BOP DESIGN: Will consist of a (10M system) triple ram type (10M psi WP) preventor and a bag-type (Hydril) preventor (10M psi WP) and a rotation head. All units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 5" drill pipe rams on bottom. The mentioned 10M preventer will be installed on the 13 3/8" casing. All BOP's will be tested with independent testers before drilling out the associated casing shoes. 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 changed to 3 1/2" after setting the 7" casing string. The 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 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 10000 psi WP rating.

Devon Energy is requesting BOP testing as per BLM Drilling Operations Land Order #2 for the Hole Sections to be as follows:

12 1/4" (950'-5,250') 3000 psi
8 3/4" (5,250'-16,500') 5000 psi

The rig has a 10K psi BOP stack; however a 5000~~X~~ BOP stack will be required.

6. Proposed Mud Circulation System

	<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
	0' - 950' 1230'	8.4 - 8.8	32-34	NC	Fresh Water
See	950' 950' - 5250'	9.7 - 10.0	28-30	NC	Brine
COA	5250' - 12,700'	9.0 - 9.3	28-30	NC-40 cc	Fresh Water
	PH				
	11,700' - 16,500'	9.5-11.0	40-60		80/20 Oil Base - See COA

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 Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 9 5/8" casing shoe until the 4 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.

See
COA —

- 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 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

See
COA —

- 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 5000 psi and Estimated BHT 185°.

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 30 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.



Project: Lea Co., New Mexico (Nad 83)
Site: Dinwiddie 1 Fed
Well: Dinwiddie 1 Fed #1H
Wellbore: Lateral
Design: Design #1



Plan Design #1 (Dinwiddie 1 Fed #1H/Lateral)

Created By: Mike Starkey Date: 15/53, June 15 2010
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

SECTION DETAILS

Sec	MD	Inc	Act	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	11861.96	0.00	0.00	11861.96	0.00	0.00	0.00	0.00	0.00	
3	12771.96	91.00	270.58	12434.83	5.89	-562.93	10.00	270.58	562.96	
4	16149.72	91.00	270.58	12375.88	40.00	-3960.00	0.00	0.00	3960.20	PBHL - TD (D1F#1H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - TD (D1F#1H)	12375.88	40.00	-3960.00	392910.63	789396.76	32° 4' 39.575 N	103° 31' 58.809 W	Point

ANNOTATIONS

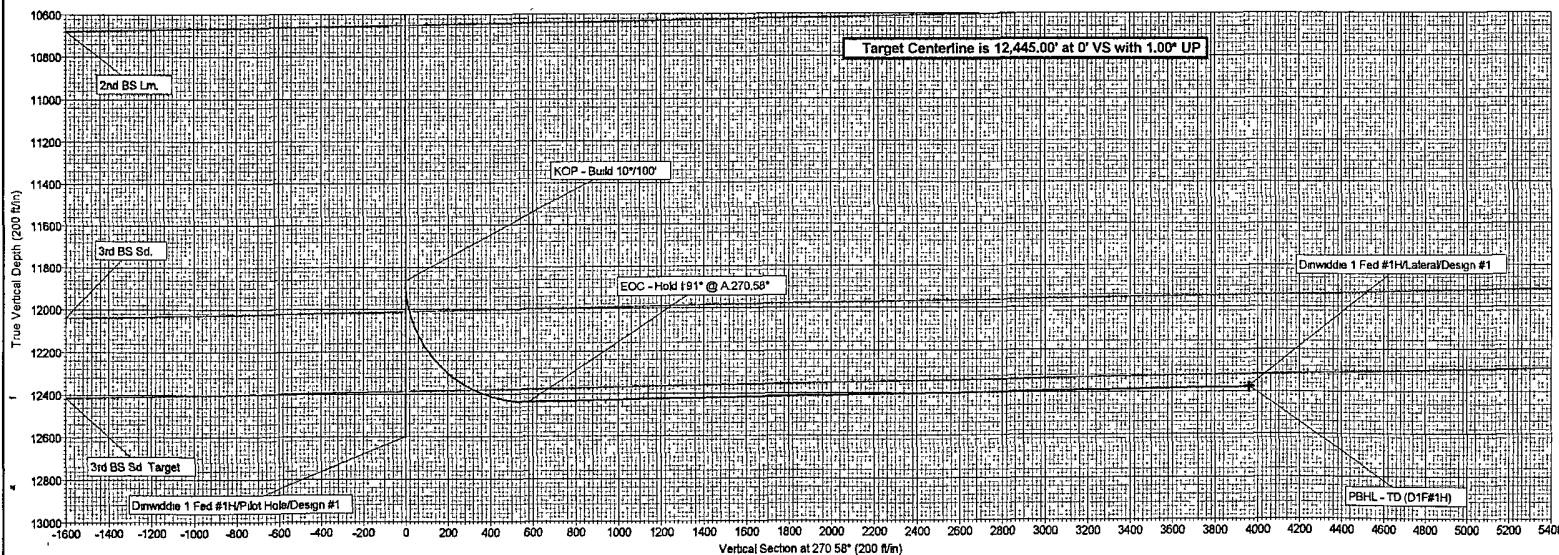
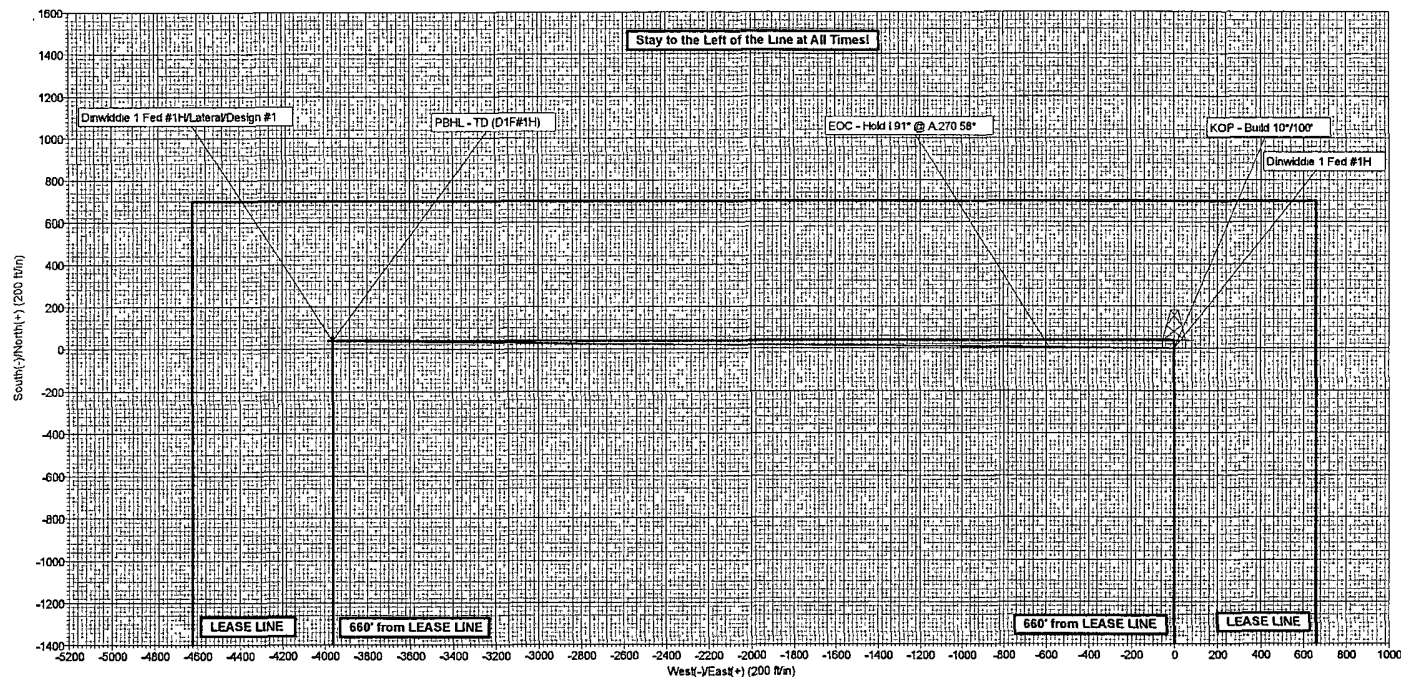
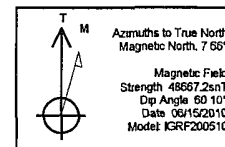
TVD	MD	Annotation
11861.96	11861.96	KOP - Build 10°/100'
12434.83	12771.96	EOC - Hold 191° @ A270.58°

WELL DETAILS Dinwiddie 1 Fed #1H

Ground Level: 3310.00					
WELL @ 3330.00ft (Original Well Elev)					
+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	392900.50	793356.94	32° 4' 39.182 N	103° 31' 10.785 W

PROJECT DETAILS Lea 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

Lea Co., New Mexico (Nad 83)

Dinwiddie 1 Fed

Dinwiddie 1 Fed #1H

Lateral

Plan: Design #1

Standard Survey Report

15 June, 2010





CUDD Drilling & Measurement Services
Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Site Dinwiddie 1 Fed
Project:	Lea Co , New Mexico (Nad 83)	TVD Reference:	WELL @ 3330.00ft (Original Well Elev)
Site:	Dinwiddie 1 Fed	MD Reference:	WELL @ 3330.00ft (Original Well Elev)
Well:	Dinwiddie 1 Fed #1H	North Reference:	True
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 2003.21 Single User Db

Project	Lea 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	Dinwiddie 1 Fed, Sec 1, T-26S, R-33E		
Site Position:	Northing:	392,900.50 ft	Latitude: 32° 4' 39 182 N
From: Lat/Long	Easting:	793,356.94 ft	Longitude: 103° 31' 10.785 W
Position Uncertainty:	Slot Radius:	"	Grid Convergence: 0 43 °

Well	Dinwiddie 1 Fed #1H		
Well Position	+N/-S	0.00 ft	Northing: 392,900.50 ft
	+E/-W	0.00 ft	Easting: 793,356.94 ft
Position Uncertainty	0.00 ft	Wellhead Elevation:	3,330.00 ft
		Ground Level:	3,310.00 ft

Wellbore	Lateral		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF200510	06/15/10	7.66
			Dip Angle (°)
			60.10
			Field Strength (nT)
			48,667

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)
	0.00	0.00	0.00
			Direction (°)
			270.58

Survey Tool Program	Date 06/15/10		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name
0.00	16,149.72	Design #1 (Lateral)	NS-GYRO-MS
			Description
			North sensing gyrocompassing m/s

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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler Dol										
5,220.00	0.00	0.00	5,220.00	0.00	0.00	0.00	0.00	0.00	0.00	
Delaware										
9,260.00	0.00	0.00	9,260.00	0.00	0.00	0.00	0.00	0.00	0.00	
BoneSpring										
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1st Avalon Shale										
10,250.00	0.00	0.00	10,250.00	0.00	0.00	0.00	0.00	0.00	0.00	
2nd Avalon Shale										
10,360.00	0.00	0.00	10,360.00	0.00	0.00	0.00	0.00	0.00	0.00	



CUDD Drilling & Measurement Services
Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Site Dinwiddie 1 Fed
Project:	Lea Co, New Mexico (Nad 83)	TVD Reference:	WELL @ 3330.00ft (Original Well Elev)
Site:	Dinwiddie 1 Fed	MD Reference:	WELL @ 3330.00ft (Original Well Elev)
Well:	Dinwiddie 1 Fed #1H	North Reference:	True
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 2003.21 Single User Db

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)
1st BS Sd.									
10,650.00	0.00	0.00	10,650.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd BS Lm.									
11,861.96	0.00	0.00	11,861.96	0.00	0.00	0.00	0.00	0.00	0.00
KOP - Build 10°/100'									
12,011.70	14.97	270.58	12,010.00	0.20	-19.45	19.46	10.00	10.00	0.00
3rd BS Sd.									
12,521.02	65.91	270.58	12,385.00	3.42	-339.04	339.06	10.00	10.00	0.00
3rd BS Sd. Target									
12,771.96	91.00	270.58	12,434.83	5.89	-582.93	582.96	10.00	10.00	0.00
EOC - Hold 1:91* @ A:270.58*									
16,149.72	91.00	270.58	12,375.88	40.00	-3,960.00	3,960.20	0.00	0.00	0.00
PBHL - TD (D1F#1H)									

Target Name	hit/miss target	Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL - TD (D1F#1H)			0.00	0.00	12,375.88	40.00	-3,960.00	392,910.63	789,396.76	32° 4' 39.575 N	103° 31' 56.809 W
- plan hits target center											
- Point											

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
900.00	900.00	Rustler Dol		0.00	
5,220.00	5,220.00	Delaware		0.00	
9,260.00	9,260.00	BoneSpring		0.00	
9,400.00	9,400.00	1st Avalon Shale		0.00	
10,250.00	10,250.00	2nd Avalon Shale		0.00	
10,360.00	10,360.00	1st BS Sd		0.00	
10,650.00	10,650.00	2nd BS Lm.		0.00	
12,011.70	12,010.00	3rd BS Sd.		0.00	
12,521.02	12,385.00	3rd BS Sd. Target		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,861.96	11,861.96	0.00	0.00	KOP - Build 10°/100'
12,771.96	12,434.83	5.89	-582.93	EOC - Hold 1:91* @ A 270.58°

Checked By: _____ Approved By: _____ Date: _____

Dinwiddie 1 Fed #1H_Plan #1_Report_06-15-10.txt

Devon Energy
Dinwiddie 1 Fed #1H - Design #1

Lea Co., New Mexico (Nad 83)
Dinwiddie 1 Fed

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00
0.00						
11861.96	0.00	0.00	11861.96	0.00 N	0.00 E	0.00
0.00						
11900.00	3.80	270.58	11899.97	0.01 N	1.26 W	1.26
10.00						
12000.00	13.80	270.58	11998.67	0.17 N	16.55 W	16.55
10.00						
12100.00	23.80	270.58	12093.21	0.49 N	48.74 W	48.74
10.00						
12200.00	33.80	270.58	12180.73	0.98 N	96.86 W	96.86
10.00						
12300.00	43.80	270.58	12258.56	1.61 N	159.44 W	159.45
10.00						
12400.00	53.80	270.58	12324.34	2.37 N	234.59 W	234.60
10.00						
12500.00	63.80	270.58	12376.07	3.23 N	320.01 W	320.03
10.00						
12600.00	73.80	270.58	12412.18	4.17 N	413.13 W	413.15
10.00						
12700.00	83.80	270.58	12431.57	5.16 N	511.09 W	511.12
10.00						
12771.96	91.00	270.58	12434.83	5.89 N	582.93 W	582.96
10.00						
12800.00	91.00	270.58	12434.34	6.17 N	610.96 W	610.99
0.00						
12900.00	91.00	270.58	12432.60	7.18 N	710.94 W	710.98
0.00						
13000.00	91.00	270.58	12430.85	8.19 N	810.92 W	810.96
0.00						
13100.00	91.00	270.58	12429.10	9.20 N	910.90 W	910.95
0.00						
13200.00	91.00	270.58	12427.36	10.21 N	1010.88 W	1010.93
0.00						
13300.00	91.00	270.58	12425.61	11.22 N	1110.86 W	1110.92
0.00						
13400.00	91.00	270.58	12423.87	12.23 N	1210.84 W	1210.90
0.00						
13500.00	91.00	270.58	12422.12	13.24 N	1310.82 W	1310.89
0.00						
13600.00	91.00	270.58	12420.38	14.25 N	1410.80 W	1410.87
0.00						
13700.00	91.00	270.58	12418.63	15.26 N	1510.78 W	1510.86
0.00						
13800.00	91.00	270.58	12416.89	16.27 N	1610.76 W	1610.84
0.00						
13900.00	91.00	270.58	12415.14	17.28 N	1710.74 W	1710.83
0.00						
14000.00	91.00	270.58	12413.40	18.29 N	1810.72 W	1810.81
0.00						

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14100.00	91.00	270.58	12411.65	19.30 N	1910.70 W	1910.80
0.00						
14200.00	91.00	270.58	12409.91	20.31 N	2010.68 W	2010.78
0.00						
14300.00	91.00	270.58	12408.16	21.32 N	2110.66 W	2110.77
0.00						
14400.00	91.00	270.58	12406.42	22.33 N	2210.64 W	2210.75
0.00						
14500.00	91.00	270.58	12404.67	23.34 N	2310.62 W	2310.74
0.00						
14600.00	91.00	270.58	12402.93	24.35 N	2410.60 W	2410.72
0.00						
14700.00	91.00	270.58	12401.18	25.36 N	2510.58 W	2510.70
0.00						
14800.00	91.00	270.58	12399.44	26.37 N	2610.56 W	2610.69
0.00						
14900.00	91.00	270.58	12397.69	27.38 N	2710.54 W	2710.67
0.00						
15000.00	91.00	270.58	12395.95	28.39 N	2810.52 W	2810.66
0.00						
15100.00	91.00	270.58	12394.20	29.40 N	2910.50 W	2910.64
0.00						
15200.00	91.00	270.58	12392.45	30.41 N	3010.47 W	3010.63
0.00						
15300.00	91.00	270.58	12390.71	31.42 N	3110.45 W	3110.61
0.00						
15400.00	91.00	270.58	12388.96	32.43 N	3210.43 W	3210.60
0.00						
15500.00	91.00	270.58	12387.22	33.44 N	3310.41 W	3310.58
0.00						
15600.00	91.00	270.58	12385.47	34.45 N	3410.39 W	3410.57
0.00						
15700.00	91.00	270.58	12383.73	35.46 N	3510.37 W	3510.55
0.00						
15800.00	91.00	270.58	12381.98	36.47 N	3610.35 W	3610.54
0.00						
15900.00	91.00	270.58	12380.24	37.48 N	3710.33 W	3710.52
0.00						
16000.00	91.00	270.58	12378.49	38.49 N	3810.31 W	3810.51
0.00						
16100.00	91.00	270.58	12376.75	39.50 N	3910.29 W	3910.49
0.00						
16149.72	91.00	270.58	12375.88	40.00 N	3960.00 W	3960.20
0.00						

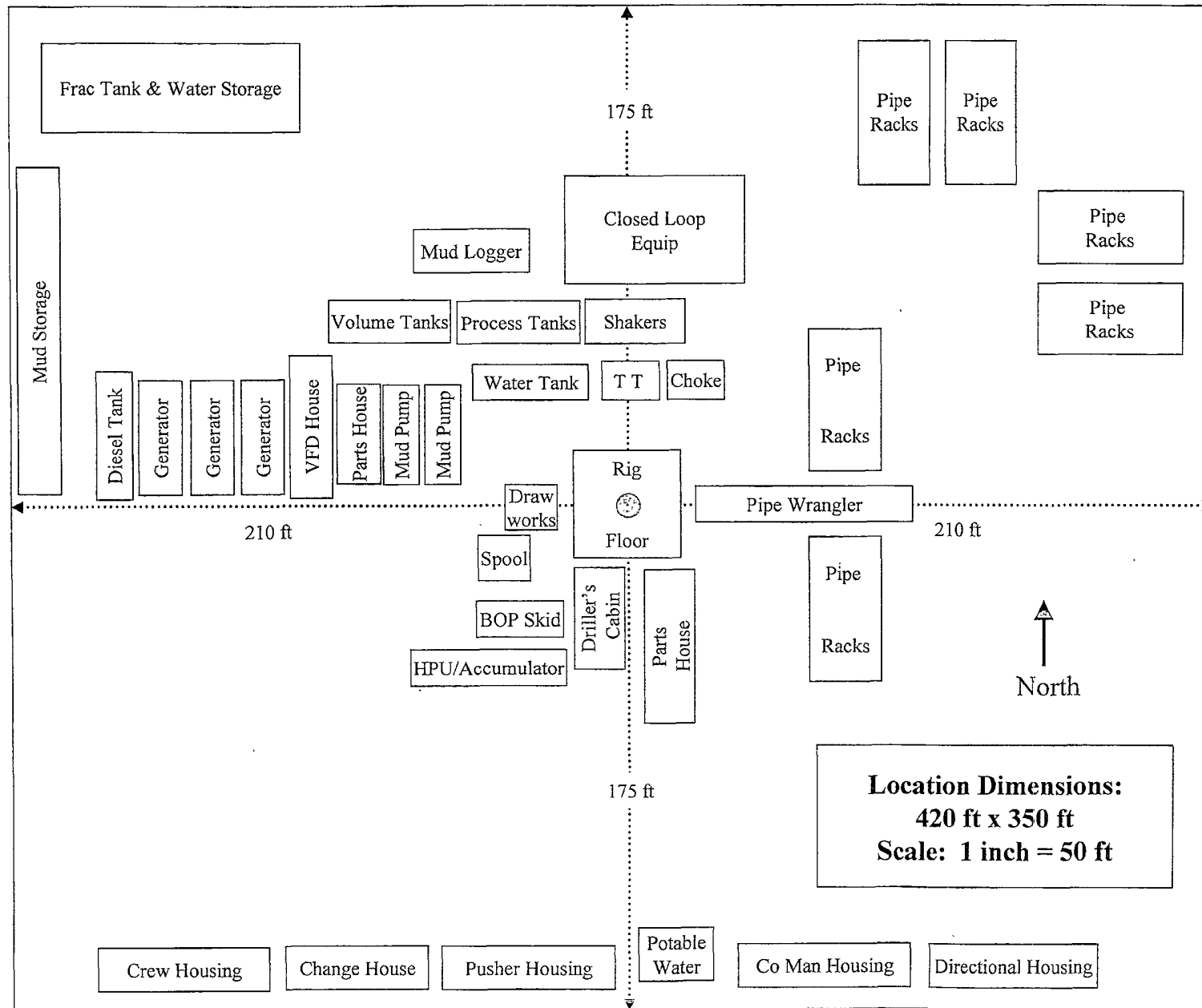
All data are in feet unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Site.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 270.579° (True).

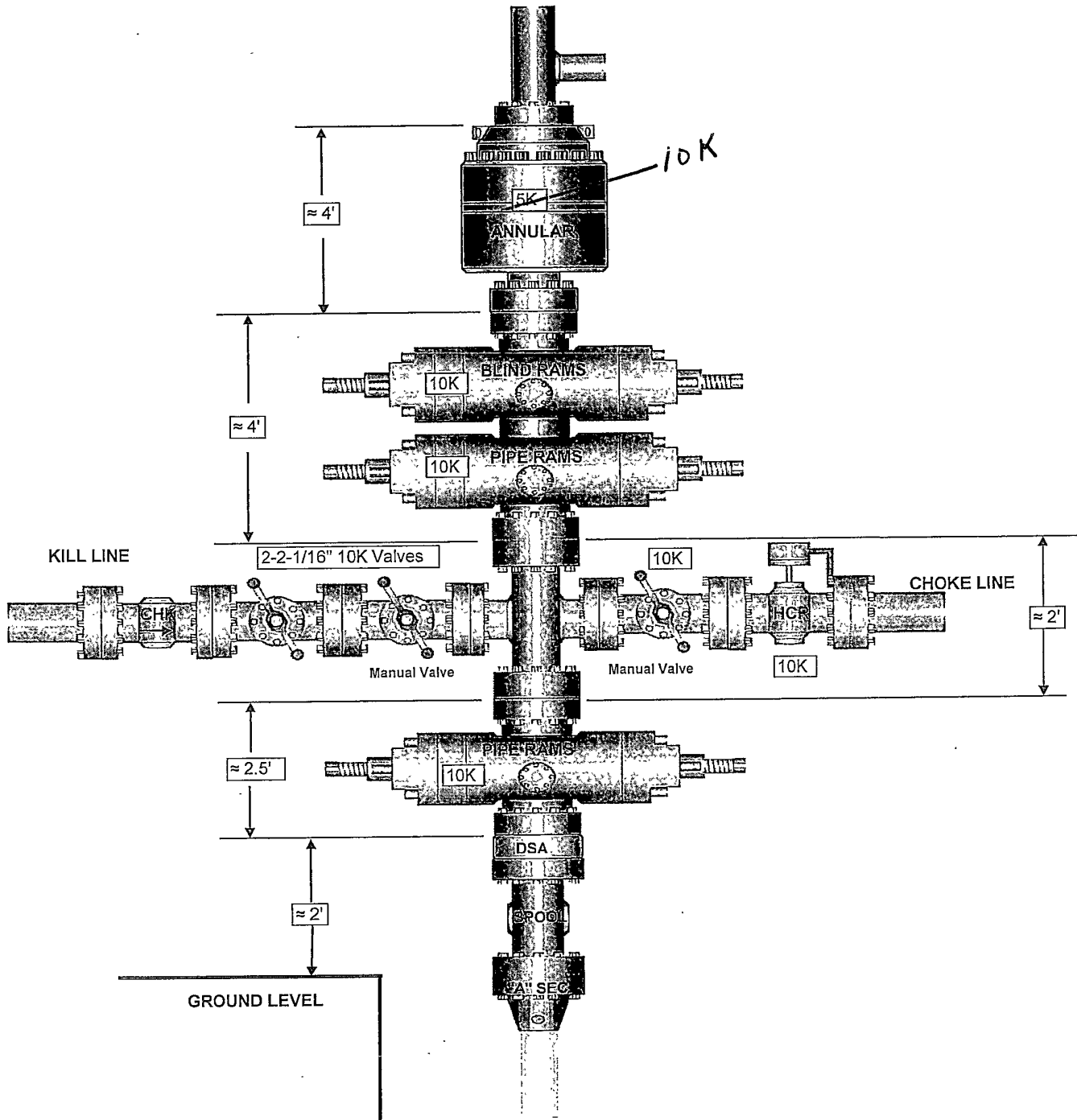
Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.432°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 16149.72ft., the Bottom Hole Displacement is 3960.20ft., in the Direction of 270.579° (True).

H&P Flex Rig Location Layout



BOP STACK SIZE: 10,000#



10,000 PSI CHOKE MANIFOLD

