

OCD-HOBBS

Form 3160-3
(August 2007)

HOBBS OCD

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT SEP 06 2011FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

5. Lease Serial No. 1 EO-0316-0002 (NWSW)
2 NMMLC 0063645 (NESW)
3 NMNM 116168 (NWSW) 4 NMNM 116167 (NESE)

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No. **(38702)**
Scratch Bear 24 Fed Com 1H

9. API Well No.

10. Field and Pool, or Exploratory

Delaware **(21655)**11. Sec., T. R. M. or Blk. and Survey or Area
Section 24 T18S R33E12. County or Parish
Lea13. State
NM1a. Type of work: ☒ DRILL☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator Devon Energy Production Company, LP

3a. Address 20 N. Broadway, OKC, OK 73102

3b. Phone No. (include area code)
405-228-8973

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

At surface 1980' FSL & 330' FWL, Unit L

At proposed prod. zone 1980' FSL & 330' FEL, Unit I

14. Distance in miles and direction from nearest town or post office*

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) 330'16. No. of acres in lease
1. 320.00 Ac 2. 800.00 Ac
3. 274.69 Ac 4. 160.00 Ac17. Spacing Unit dedicated to this well
160 ac18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. 343'19. Proposed Depth
5502' TVD
9877' MD PH 6000'20. BLM/BIA Bond No. on file
CO-110421. Elevations (Show whether DF, KDB, RT, GL, etc.)
3874'22. Approximate date work will start*
10/01/201123. Estimated duration
45 days

24. Attachments

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the
SUPO must be filed with the appropriate Forest Service Office).4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification

6. Such other site specific information and/or plans as may be required by the
BLM.

25. Signature

*Spence Laird*Name (Printed/Typed)
Spence LairdDate
04/25/2011

Title

Regulatory Analyst

Approved by (Signature) **Is/ Don Peterson**

Name (Printed/Typed)

Date **AUG 29 2011**

Title

FIELD MANAGER

Office

CARLSBAD FIELD OFFICEApplication 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 YEARSTitle 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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

*K2 08/06/11*Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

SEP 08 2011

DRILLING PROGRAM**HOBBS OCD**

Devon Energy Production Company, LP

SEP 06 2011**Scratch Bear 24 Federal Com 1H**

Surface Location: 1980' FSL & 330' FWL, Unit L, Sec 24 T18S R33E, Lea, NM

Bottom hole Location: 1980' FSL & 330' FEL, Unit I, Sec 24 T18S R33E, Lea, NM

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

- a. Permian

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

Geologic Formation	Depth (TVD)	O/G/W	Penetration Point
a. Fresh Water	120'	Water	1980' FSL & 330' FWL
b. Rustler	1599'	Barren	1980' FSL & 330' FWL
c. Salado	1869'	Barren	1980' FSL & 330' FWL
d. Base Salt	2993'	Barren	1980' FSL & 330' FWL
e. Yates	3132'	Barren	1980' FSL & 330' FWL
f. Seven Rivers	3691'	Oil	1980' FSL & 330' FWL
g. Queen	4310'	Oil	1980' FSL & 330' FWL
h. Brushy Canyon	4635'	Oil	1980' FSL & 330' FWL
i. Graysburg (assumed KOP)	4972'	Oil	1980' FSL & 330' FWL
j. Horizontal Ldg Depth (TVD)	5544'	Oil	1980' FSL & 900' FWL
k. Delaware	5524'	Oil	1980' FSL & 330' FWL
l. Approx. Total Depth for Lateral	5500'	Oil	1980' FSL & 330' FEL
m. Pilot Hole TD	6000'	Oil	1980' FSL & 330' FWL

Note: This well will have a pilot hole reaching TD at approximately 6000'.

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 17 1/2" casing at 1650' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at 3100' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

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"	0 - 1650'	13 3/8"	0'-1650'	54.5#	STC	J-55
12 1/4"	1650-3100'	9 5/8"	0'-3100'	40#	LTC	J-55
8 3/4"	3100-6000'	Pilot Hole				
8 3/4"	3100-4800'	5 1/2"	0-4800'	17#	LTC	N80
8 3/4"	4800-9900'	5 1/2"	4800-9900'	17#	BTC	N80

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13 3/8" 54.5#	1.31	3.18	5.71
9 5/8" 40#	1.59	2.45	5.08
5 1/2" 17#	2.71	3.92	4.34
5 1/2" 17#	2.35	2.89	2.09

4. Cement Program: (Cement volumes based on at least 25% excess)

13-3/8" Surface	<p>Lead: 980 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 4% bwoc Bentonite + 0.8% bwoc Sodium Metasilicate + 5% bwoc MPA-5 + 98.2% Fresh Water Yield: 1.97 cf/sk TOC @ Surface Tail: 300 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.2% Fresh Water Yield: 1.34 cf/sk</p>
9 5/8" Intermediate	<p>1st stage Lead: 365 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 4% bwoc Bentonite + 0.8% bwoc Sodium Metasilicate + 5% bwoc MPA-5 + 98.2% Fresh Water Yield: 1.97 cf/sk TOC @ 1700' Tail: 300 sacks Class C Cement + 0.125 lbs/sack Cello Flake + 56.1% Fresh Water Yield: 1.33 cf/sk DV Tool @ 1700'</p> <p>2nd Stage Lead: 275 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 4% bwoc Bentonite + 0.8% bwoc Sodium Metasilicate + 5% bwoc MPA-5 + 98.2% Fresh Water Yield: 1.97 cf/sk TOC: surface Tail: 200 sacks Class C Cement + 0.125 lbs/sack Cello Flake + 53.5% Fresh Water Yield: 1.29 cf/sk</p>
5 1/2" Production	<p>1st Stage Lead: 225 sacks (35:65) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.1% bwoc ASA-301 + 6% bwoc Bentonite + 0.2% bwoc FL-52A + 107.8% Fresh Water Yield: 2.04 cf/sk TOC @ 4,000' Tail: 1290 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.6% bwoc Sodium Metasilicate + 0.2% bwoc FL-52A + 57.4% Fresh Water Yield: 1.28 cf/sk DV TOOL at 4,000'</p> <p>2nd Stage</p>

Lead: 135 sacks Class C Cement + 0.75% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157% Fresh Water **Yield:** 2.88 cf/sk **TOC @ 2600'**
Tail: 150 sacks Class C Cement **Yield:** 1.33cf/sk

8 3/4" Pilot Hole

Plug 1: 450 sacks Class H Cement, **yield** 1.18 cf/sk **TOC 4950'**

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 9 5/8" casing shoe. All casing is new and API approved.

Positive standoff centralizers will be utilized for the production string every other joint of casing from 100' MD above KOP or at the legal footage setback, whichever is the deeper MD, up to TOC.

5. **Pressure Control Equipment:**

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 2M Double Ram, and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **2M system** prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 11" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **3M system** prior to drilling out the intermediate casing shoe.

Pipe rams will be operated and checked each 24 hour period and blind rams tested each time the drill pipe is out of the hole. These tests will be logged in the daily log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

6. **Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' – 1650'	8.4-9.0	30-34	NC	FW
1650'–3100'	9.8-10.0	28-32	NC	Brine
3100'–9900'	8.6-9.3	28-32	NC	FW

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 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.

8. Logging, Coring, and Testing Program: *See COA*

- 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 ½" 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. There is no known presence of H2S in this area; therefore, no H2S is anticipated to be encountered. 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 3000 psi and Estimated BHT 135°.

10. Anticipated Starting Date and Duration of Operations:

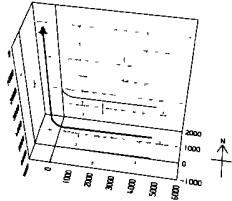
- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

~~Depending on rig availability, Devon may set the surface casing using an Ashton Oilfield Services rig. The rig plat is attached. This rig will be used only to set the surface casing and will leave the location once the surface casing has been run and cemented. Another rig will drill the remainder of the wellbore. The reasons for using the smaller rig to set surface are: rig availability and economics.~~

~~The BLM will be contacted 24 hours prior to commencing drilling operations. The surface casing will be run and cemented back to surface as per the approved APD. The well will be secured with a cap welded onto the surface casing. Another rig will be on location to drill the remainder of the wellbore within 60 days after the Ashton rig has left the location.~~

devon

Company: Devon Energy
Project: Lea County (NAD83)
Site: Sec 24-T18S-R33E
Well: Scratch Bear 24 Fed Com #1H
Wellbore: Wellbore #1
Design: Plan #1
Lat: 32° 43' 52.972 N
Long: 103° 37' 26.837 W
GL: 0.0



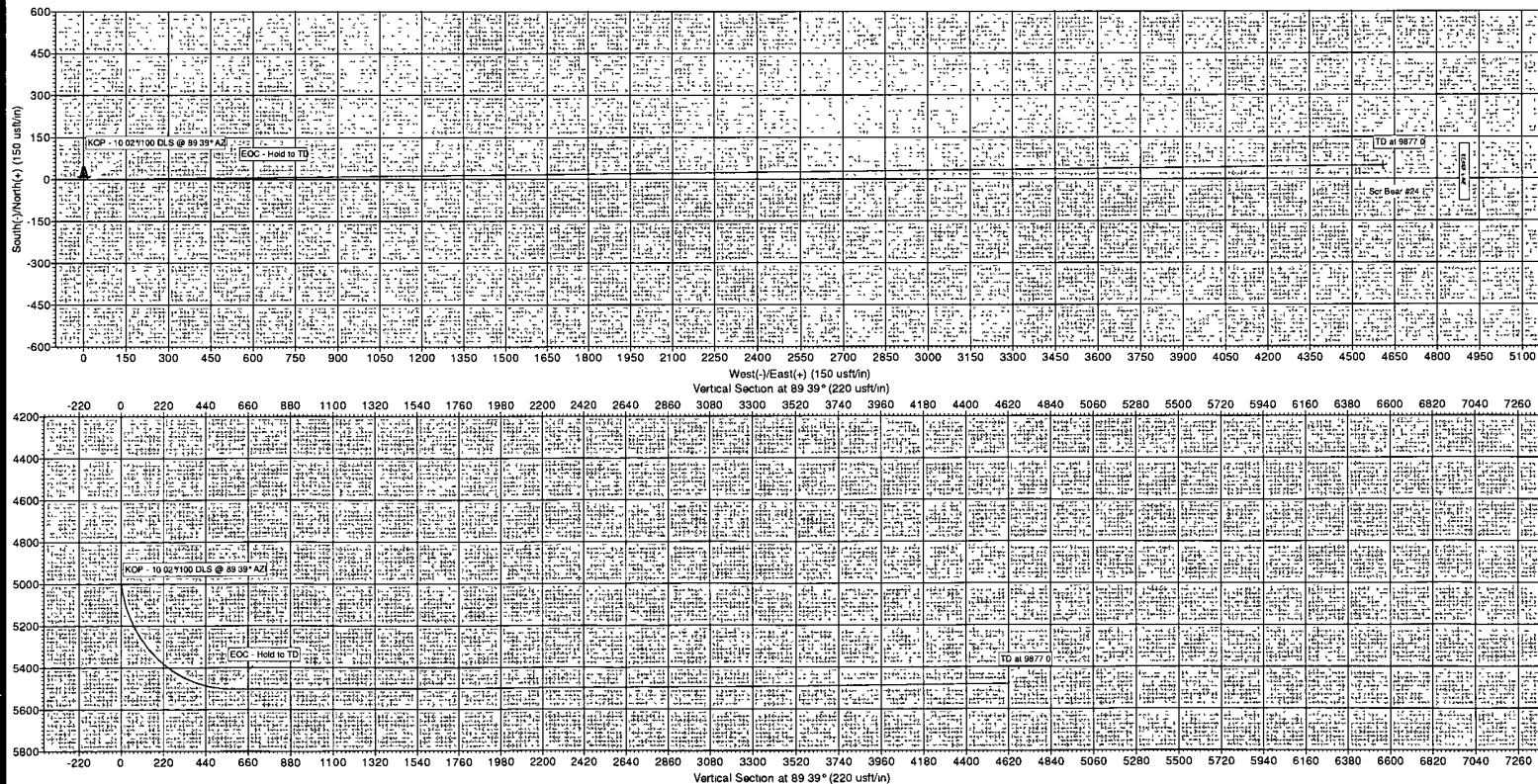
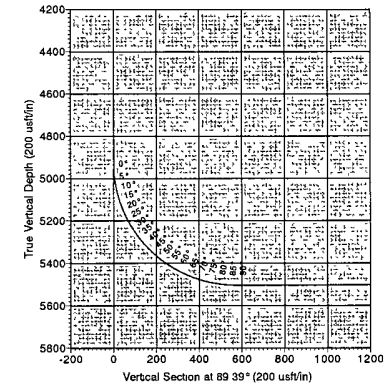
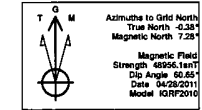
WELL DETAILS Scratch Bear 24 Fed Com #1H						
+N S	+E W	Northing	Ground Level	0 0	Latitude	Longitude
0 0	0 0	630537.88	759424.04	32° 43' 52.972 N	103° 37' 26.837 W	Slot

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N-S	+E-W	Latitude	Longitude	Shape Point
Scr Bear #24	5480 0	49 0	4609.3 32° 43' 53.149 N	103° 36' 32.875 W		

SECTION DETAILS							
MD	Inc	Azi	TVL	+N-S	+E-W	Diag T/Face	V Sect
0 0	0.00	0.00	0 0	0 0	0 0	0.00	0.00
4390 0	0.00	0.00	4390 0	0 0	0 0	0.00	0.00
5628 5	90.00	89.39	5628 0	6 1	572 0	10.02	89.39
9877 0	90.62	89.39	5480 0	49.2	4629 2	0.02	0.00

PROJECT DETAILS Lea County (NAD83)	
Geodetic System	US State Plane 1983
Datum	North American Datum 1983
Ellipsoid	GRS 1980
Zone	New Mexico Eastern Zone
System Datum	Mean Sea Level

SITE DETAILS Sec 24-T18S-R33E	
Site Centre Latitude	32° 43' 52.972 N
Longitude	103° 37' 26.837 W
Positional Uncertainty	0 0
Convergence	0.38
Local North Grid	



Devon Energy

Lea County (NAD83)

Sec 24-T18S-R33E

Scratch Bear 24 Fed Com #1H

Wellbore #1

HOBBS OCD

Plan: Plan #1

SEP 06 2011

RECEIVED

Standard Planning Report

29 April, 2011

Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Scratch Bear 24 Fed Com #1H
Company:	Devon Energy	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Lea County (NAD83)	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 24-T18S-R33E	North Reference:	Grid
Well:	Scratch Bear 24 Fed Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project:	Lea County (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Sec 24-T18S-R33E		
Site Position:	Map	Northing:	630,537.88 usft
From:		Easting:	759,424.04 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 43' 52.972 N
		Longitude:	103° 37' 26.837 W
		Grid Convergence:	0.38 °

Well:	Scratch Bear 24 Fed Com #1H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 43' 52.972 N
		Longitude:	103° 37' 26.837 W
		Ground Level:	0.0 usft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	04/28/11	7.67
			Dip Angle
			(°)
			60.65
			Field Strength
			(nT)
			48,956

Design:	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			89.39

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0 00	0 00	0.0	0.0	0.0	0.00	0.00	0 00	0.00	
4,930.0	0.00	0 00	4,930.0	0.0	0.0	0.00	0.00	0.00	0.00	
5,828.5	90.00	89.39	5,502.0	6.1	572.0	10.02	10.02	0 00	89.39	
9,877.0	90.62	89.39	5,480.1	49.2	4,620.2	0.02	0.02	0 00	0.00	

Planned Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,930.0	0.00	0.00	4,930.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,828.5	90.00	89.39	5,502.0	6.1	572.0	572.0	10.02	10.02	0.00	
9,877.0	90.62	89.39	5,480.1	49.2	4,620.2	4,620.4	0.02	0.02	0.00	

Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Scratch Bear 24 Fed Com #1H
Company:	Devon Energy	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Lea County (NAD83)	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 24-T18S-R33E	North Reference:	Grid
Well:	Scratch Bear 24 Fed Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Scr Bear #24	0.00	0 00	5,480.0	49.0	4,609.3	630,586 90	764,033.38	32° 43' 53.149 N	103° 36' 32.875 W
- plan misses target center by 0.2usft at 9866.2usft MD (5480.2 TVD, 49.1 N, 4609.3 E)									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
4,930.0	4,930.0	0.0	0.0	KOP - 10.02°/100 DLS @ 89.39° AZI
5,828.5	5,502.0	6.1	572.0	EOC - Hold to TD
9,877.0	5,480.1	49.2	4,620.2	TD at 9877.0

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP

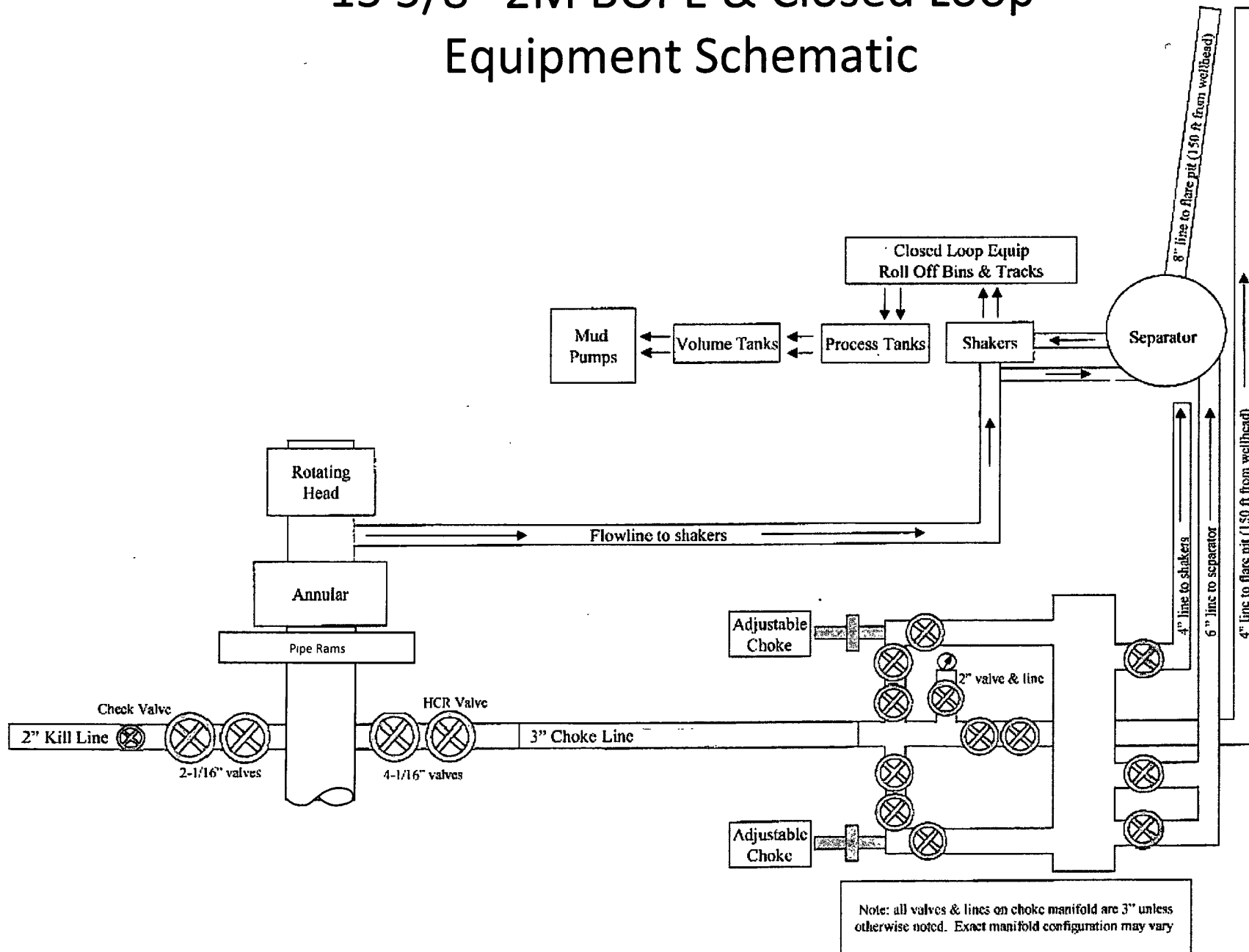
Scratch Bear 24 Federal Com 1H

Surface Location: 1980' FSL & 330' FWL, Unit L, Sec 24 T18S R33E, Lea, NM

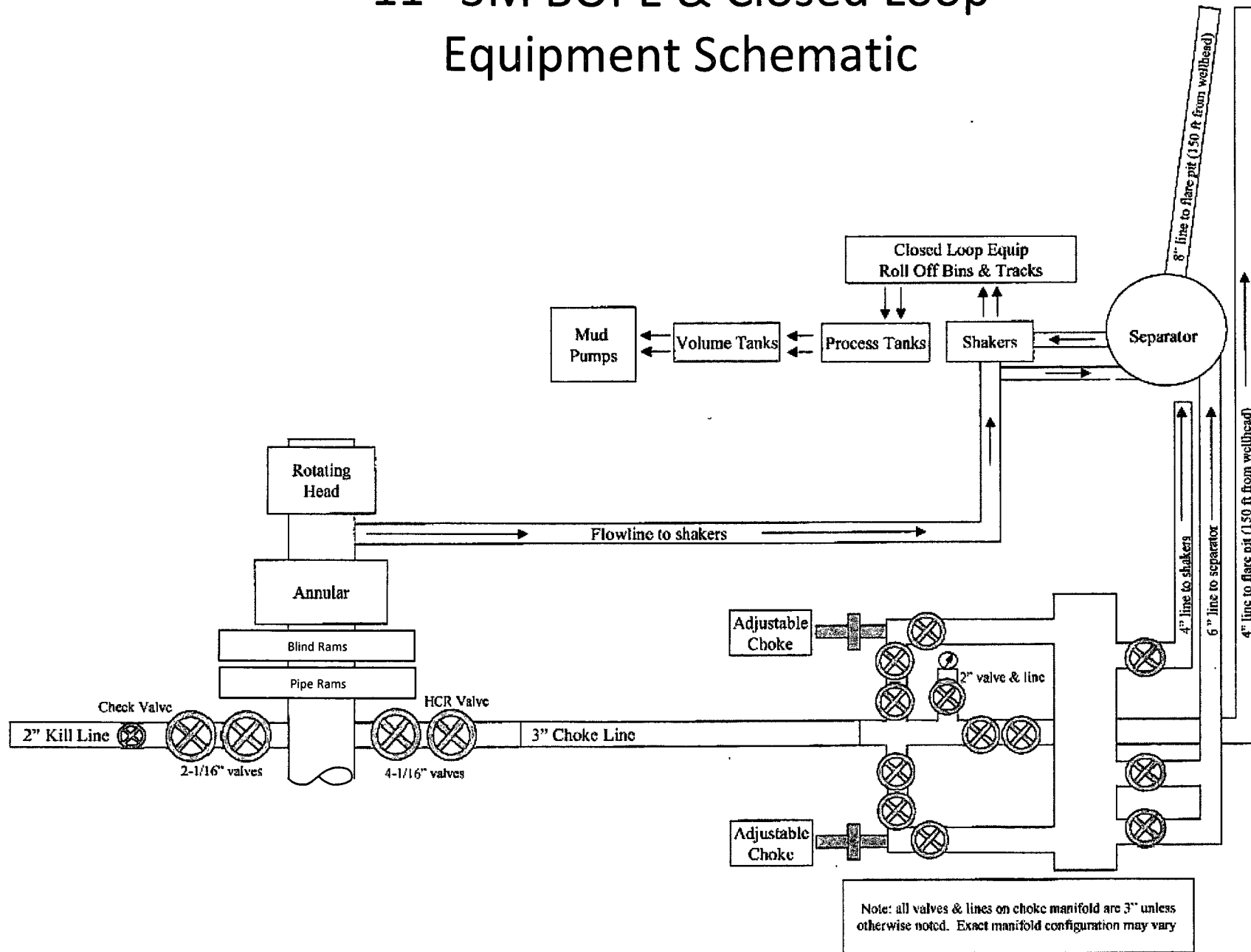
Bottom hole Location: 1980' FSL & 330' FEL, Unit I, Sec 24 T18S R33E, Lea, NM

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.

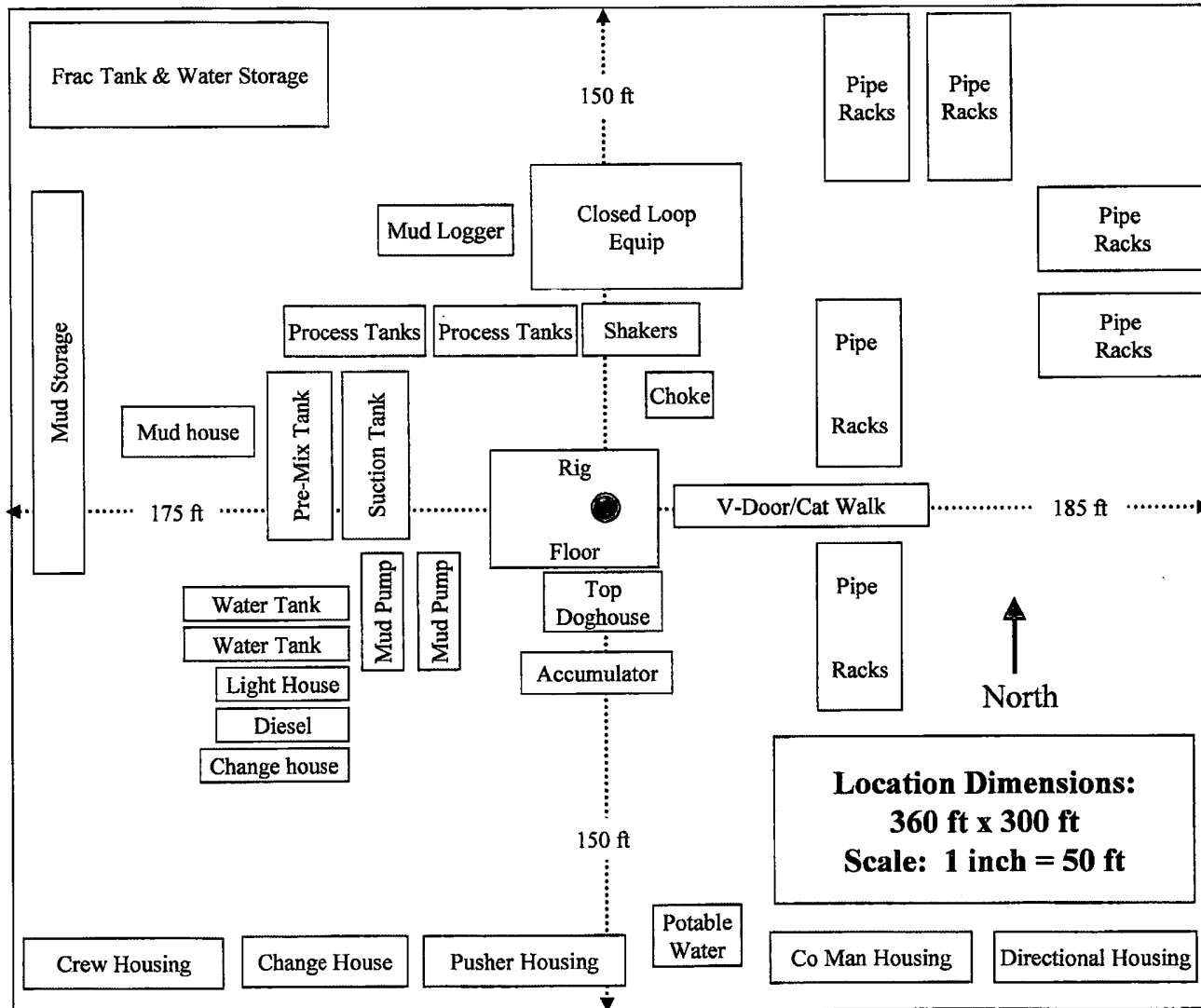
13 5/8" 2M BOPE & Closed Loop Equipment Schematic



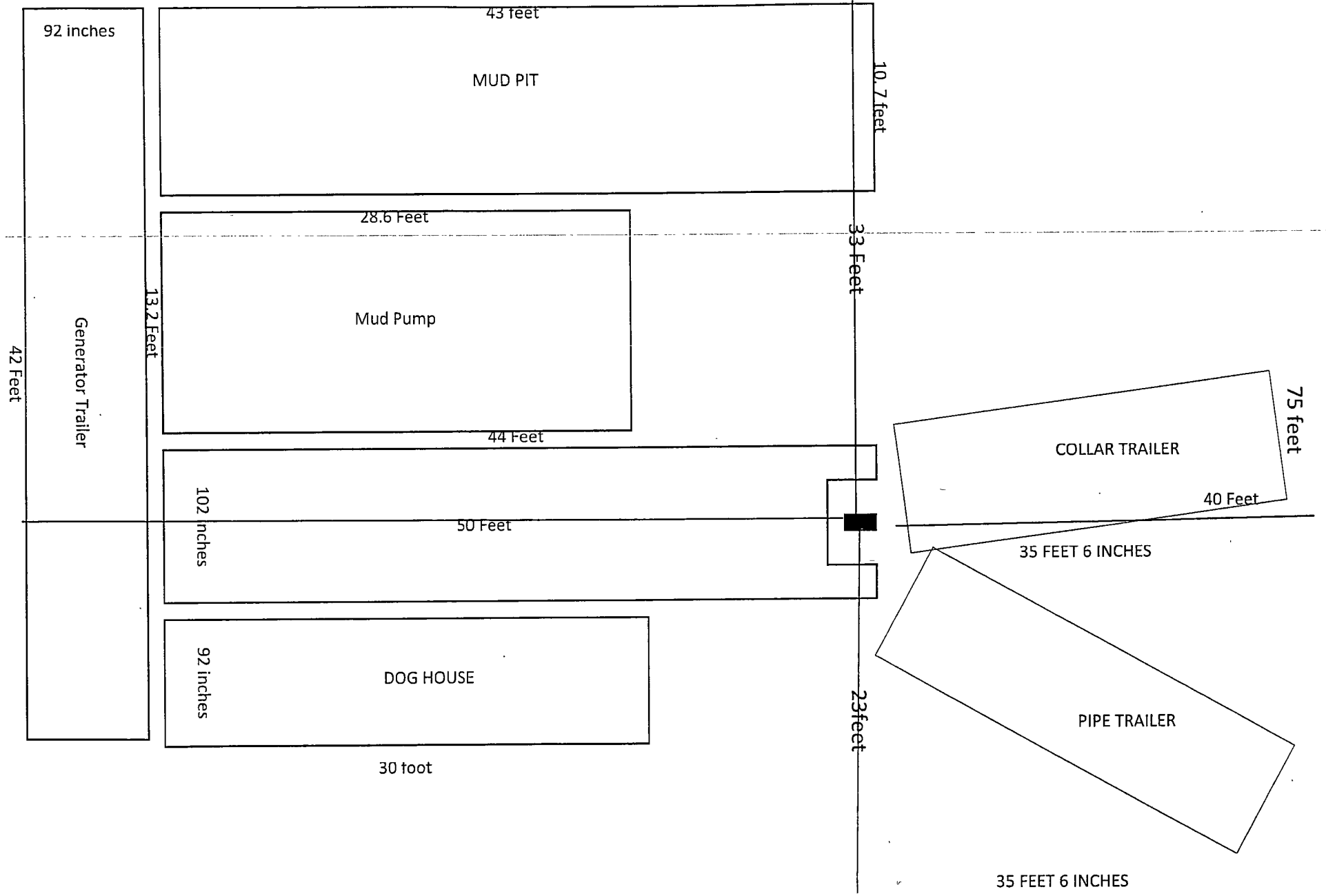
11" 3M BOPE & Closed Loop Equipment Schematic



Conventional Rig Location Layout



95 FEET



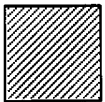
Ashton Rig "Spudder Rig" Layout



Proposed Interim Site Reclamation

Devon Energy Production Co.
Scratch Bear "24"
Federal Com 1H
1,980' FSL & 330' FWL
Sec. 24 - T18S - R33E
Lea County, NM

Proposed
Reclamation Area



1" : 60'

