Form 3160-3 (September 2001)

FORM APPROVED OMB No. 1004-0136 Expires March 31, 2007

UNITED STAT	ΓES			2.151.00 1.141.01			
DEPARTMENT OF THI		5. Lease Serial No.					
BUREAU OF LAND MA	NAGEMENT			Jicarilla Contract 110			
APPLICATION FOR PERMIT TO	DRILL OR	REENTER		6. If Indian, Allottee or	Tribe Name		
				Jicarilla Apache 7. If Unit or CA Agreeme	ent Name and No		
la. Type of Work: DRILL REEN	NTER			7. If Call of CA Agreem	ont, Ivame and Ivo.		
1b. Type of Well: Oil Well Gas Well Other		Single Zone Mu	ltiple Zone	8. Lease Name and Well I Jicarilla A#7F	Vo.		
2. Name of Operator				9. API Well No.			
CDX RIO, LLC	[2], DI	VI. (* 1. 1. 1. 1. )		30-039- 27070			
3a. Address		No. (include area code)		10. Field and Pool, or Exp	•		
2010 Afton Place, Farmington, New Mexico 87401	[(505) 326	<del></del>		Blanco Mesaverde/Ba 11. Sec., T., R., M., or Blk			
4. Location of Well (Report location clearly and in accordance w		uiremenis. *)		11. 5cc., 1., K., W., OI DIN	and Survey of Area		
At surface 660' FNL, 2055' FWL NSL-5	272			ے ا	1		
At proposed prod. zone				Section 17, T-26-N, R-5	j <b>ø</b> ₩		
14. Distance in miles and direction from nearest town or post office	*			12. County or Parish	13. State		
30 miles from Lindrith, New Mexico	·		<del>,</del>	Rio Arriba	NM		
5. Distance from proposed* location to nearest property or lease line, ft.	16. No. of	Acres in lease	,	g Unit dedicated to this well			
(Also to nearest drig. unit line, if any) 660			320 W/2				
to nearest well, drilling, completed,	earest well, drilling, completed,			M/BIA Bond No. on file			
1500'				al bond on file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6640' GR	22. Appro	eximate date work will	start*	23. Estimated duration			
00+0 GIX	24 44	achments					
The following, completed in accordance with the requirements of Or							
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	tem Lands, the	4. Bond to cover Item 20 above 5. Operator certifi	the operation cation. specific info	s unless covered by an exis			
25. Signature	Nan	ne (Printed/Typed)		Da	te		
(occoran)	Rich	ard Corcoran		7/5	/05		
Title							
Land Manager							
Approved by (Signature) Manlee us	Nan	ne (Printed/Typed)		Dat	5/10/06		
Title	Offi	ce FFO		<u> </u>			
Application approval does not warrant or certify that the applicant ho	lds legal or equit	able title to those rights	in the subject	lease which would entitle the	applicant to conduct		
operations thereon.  Conditions of approval, if any, are attached.					<del> </del>		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma States any false, fictitious or fraudulent statements or representations	ke it a crime for as to any matter	any person knowingly within its jurisdiction.	and willfully	to make to any department o	r agency of the United		
*(Instructions on reverse)				/ <u>2</u> 5	<b>13</b>		
This action is subject to technical and procedural review oursuant to 43 GFR 3165.3 M 2 and appeal pursuant to 43 GFR 3165.4	<b>306</b> 720	RILLING OPERATIONS A UBJECT TO COMPLIANS ENERAL REQUIREMEN	DE WITH ATT	ACHED	20		
E OF COM	n. 9			None Property	D		

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

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

CALC'D CORNER BY DBL. PROP. State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102
Revised June 10, 2003
Submit to Appropriate District Office

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

☐ AMENDED REPORT

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

1220 DOUGH DL. P	rancis Dr.,	Danca re, M	m G1909								
		1	WELL I	OCATIO	N AND	AC.	REAGE DED	ICATION P	LAT		
1 API	Number		-	<sup>2</sup> Pool Code				<sup>8</sup> Pool Nam	ne		· · · · · · · · · · · · · · · · · · ·
30-039-	$\mathcal{A}$	9595	723	19/7159	9	Bla	nco Mesaver	de/Basin I	Dakota		
<sup>4</sup> Property C	Code					perty l	Name			* 1	Well Number
33454	`				JIC	ARILLA	\ <b>A</b>				7F
OGRID No	D.		<sup>8</sup> Operator Name								* Elevation
	-		CDX GAS, LLC								6640'
222374			ODA ORO, EEO						<u></u>		0010
-					<sup>10</sup> Surf	ace	Location			· · · · · · · · · · · · · · · · · · ·	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/We		County
С	17	26-N	5-W	<u> </u>	660		NORTH	2055	WE	<u> </u>	RIO ARRIBA
<sup>11</sup> 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/We	st line	County
				<u> </u>							
MV - W/			<sup>15</sup> Joint or	Infill	Mark Consolida	ation C	ode	<sup>15</sup> Order No.			
DK - W/								115/	529	12	
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED											
NO ALLOW.	ABLE W						N UNTIL ALL EN APPROVED			EEN C	ONSOLIDATED
		ON A N	1011-DIN	NDAIGD (	71/11 11/A	3 1111	EN ALIKOVED	D1 1112 D1	101011		
'16 CALC'D CORN	ED	S 89-59	1 35 F	5331.	95' (C)		CALC'D CORN	IER 17 OI	PERATY	R CE	RTIFICATION
BY DBL. PRO		5 05 05	į	1 000	(0)		BY DBL. PR	on I			contained herein is
			660,	1							knowledge and belief
20	055'		10	1				į			
				<b></b>		$\dashv$			, 1	0	\
_								4/1	\//	en per	2011)
5314.45' (C)	1			N .				MICINO	eas	ouo	auro
ີ ທ				1				Signature Pich:	ard Co	Taore	<b>.</b> n
4.							•	Printed Nar		T COT 6	211
3						Land	Manag	ger			
ഹ	in the state of th										
								7/5	/05		
				<b>'</b>				Date			
ш				1	_			18 SUF	RVEYOR	CERT	TIFICATION
<del>δ</del>		LAT. 36°	29'33.4"N	(NAD 8	33)	1					shown on this plat
00-00-48		LONG. 1	07'23'06.	AM) W O	D 83)						surveys made by me same is true and
9	1							correct to the b			COMING TO STUDE COME
8								100	TO LO	005	
v				11					VURON		

Office	xico	Form C-103
District I Energy, Minerals and Natural 1625 N. French Dr., Hobbs, NM 88240	WELL API NO.	May 27, 2004
District II 1301 W. Grand Ave., Artesia, NM 88210 OIL CONSERVATION	DIVISION 30-039-	)9595
District III 1220 South St. Fran	SIAIE	ease FEE
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> Santa Fe, NM 87	6. State Oil & Gas Le	
1220 S. St. Francis Dr., Santa Fe, NM 87505	Jicarilla Contract 110	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLU DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FO	P CLICIT	it Agreement Name
PROPOSALS.)	Jicarilla A  8. Well Number	
1. Type of Well: Oil Well Gas Well X Other	7F	
2. Name of Operator	9. OGRID Number 2	222374
CDX RIO, LLC 3. Address of Operator	10. Pool name or Wil	dcat
2010 Afton Place, Farmington, New Mexico 87401	Blanco Mesaverde/Ba	sin Dakota
4. Well Location		
Unit Letter C : 660 feet from the North	line and2055feet from the	
Section 17 Township 26N 11. Elevation (Show whether DR,	Range 5W NMPM Ri	o Arriba County
11. Elevation (Show whether DR, 6640' GR  Pit or Below-grade Tank Application  or Closure	KKB, KI, GK, etc.)	>100
Pit type_New DrillDepth to Groundwater>50'_Distance from near-	est fresh water well >1000' Distance from neares	▼ :
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume	bbls; Construction Material	
12. Check Appropriate Box to Indicate Na	ature of Notice, Report or Other Da	ta
	_	
NOTICE OF INTENTION TO:  PERFORM REMEDIAL WORK □ PLUG AND ABANDON □	SUBSEQUENT REPO	TERING CASING
TEMPORARILY ABANDON		ND A
PULL OR ALTER CASING   MULTIPLE COMPL	CASING/CEMENT JOB	
OTHER: New Drill Pit X□	OTHER:	
	ertinent details, and give pertinent dates, ir	
<ol> <li>Describe proposed or completed operations. (Clearly state all p of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.</li> </ol>	e Completions: Attach wellbore diagram of	of proposed completion
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.		
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multipl or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 d	Construction Plan
of starting any proposed work). SEE RULE 1103. For Multiple or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener of project as per General Closure Plan submitted August, 2004  I hereby certify that the information above is true and complete to the be	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 cal.	Construction Plan lays from completion
of starting any proposed work). SEE RULE 1103. For Multiple or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener of project as per General Closure Plan submitted August, 2004  I hereby certify that the information above is true and complete to the be grade tank has been/will be constructed or closed according to NMOCD guidelines.	accordance with CDX RIO, LLC General Cal plan. The pit will be closed within 180 cal.	Construction Plan lays from completion  tify that any pit or below-OCD-approved plan
of starting any proposed work). SEE RULE 1103. For Multiple or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener of project as per General Closure Plan submitted August, 2004  I hereby certify that the information above is true and complete to the be grade tank has been/will be constructed or closed according to NMOCD guidelines.  SIGNATURE Many Oltmans.  TITLE A	st of my knowledge and belief. I further cer, a general permit or an (attached) alternative	Construction Plan lays from completion  tify that any pit or below-OCD-approved plan
of starting any proposed work). SEE RULE 1103. For Multiple or recompletion.  CDX RIO, LLC requests approval to construct a drilling pit in a submitted August, 2004. The pit will be a lined as per the gener of project as per General Closure Plan submitted August, 2004  I hereby certify that the information above is true and complete to the be grade tank has been/will be constructed or closed according to NMOCD guidelines  SIGNATURE Many Oltmans  TITLE A  Type or print name  Nancy Oltmans  E-mail address:	st of my knowledge and belief. I further cer, a general permit or an (attached) alternative	Construction Plan lays from completion  Tify that any pit or below-OCD-approved plan

CDX GAS, LLC LAT. = 36°29'33.4" JICARILLA A No. 7F, 660 FNL 2055 FWL LONG. = 107°23'06.0" SECTION 17, T26N, R5W, N.M.P.M., RIO ARRIBA COUNTY, N. M. GROUND ELEVATION: 6640', DATE: APRIL 02, 2005 NAD 83 ⑤ 4.7 REAR 4 В Wellhead to Bock 700' NEW ACCESS F 0.3 C 6.0 С C 8.0 **③** F 7.8 100 SCALE: 1"=100' 1 B' C 1.9 F 5.8 ② c' DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. NOTE: F 3.8 ELEV. A-A 6650 6640 6630 6620 C/L ELEV. B-B' 6650 6640 Daggett Enterprises, Inc. P. O. Box 15068 • Farmington, NM 87401 Phone (505) 326-1772 • Fox (505) 326-6016 NEW MEXICO L.S. No. 14831 6630 6620 C/L ELEV. C-C' 6650 6640 6630 6620 NOTE: CONTRACTOR SHOULD CALL ONE—CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

# Jicarilla A No. 7F General Drilling Plan CDX Rio, LLC Rio Arriba County, New Mexico

#### 1. LOCATION:

660' FNL & 2055' FWL, Section 17, T26N, R5W Rio Arriba County, New Mexico

Field: Blanco MV & Basin DK Surface: Jicarilla Contract #110 Minerals: Jicarilla Contract #110

### 2. SURFACE FORMATION, ESTIMATED TOPS AND WATER, OIL, GAS OR MINERAL BEARING FORMATIONS (TVD):

Formation Tops	Top MD (KB)	Top Subsea (KB)	Rock Type	Comments
Ojo Alamo Sandstone	2390	4262	Sandstone	Possible Differential, Gas, Water
Kirtland Formation	2752	3900	Shale	
Fruitland Formation	3042	3610	Coal, Shale, Sandstone	Possible Lost Circulation Zone, Gas, Water
Pictured Cliffs Sandstone	3171	3481	Sandstone	Possible Differential, Gas, Water
Lewis Shale	3302	3350	Shale	
Huerfanito Bentonite Bed	3641	3011	Shale	
Chacra Interval	4076	2576	Siltstone	Gas, Water
Mesaverde Formation (MVRD)	4846	1806	Coal,Sandstone,Shale	Possible Lost Circulation, Gas, Water
Cliff House Sandstone (MVRD)	4846	1806	Sandstone	Possible Lost Circulation, Gas, Water
Menefee Member (MVRD)	4932	1720	Coal,Sandstone,Shale	Possible Lost Circulation, Gas, Water
Point Lookout Sandstone(MVRD)	5397	1255	Sandstone	Possible Lost Circulation, Gas, Water
Mancos Shale	5580	1072	Shale	
Gallup Formation (GLLP)	6573	79	Siltstone, Shale	Gas
Greenhorn Limestone	7298	-646	Limestone	Gas
Graneros Shale	7400	-748	Shale	Gas, Water, Possible Overpressure
Dakota Formation (DKOT)	7377	-725	Sandstone,Shale,Coal	Gas, Water, Possible Overpressure
Two Wells Sandstone (DKOT)	7377	-725	Sandstone	Gas, Water, Possible Overpressure
Paguate Sandstone (DKOT)	7463	-811	Sandstone	Gas, Water, Possible Overpressure
Upper Cubero Sandstone(DKOT)	7501	-849	Sandstone	Gas, Water, Possible Overpressure
Main Body (DKOT)	7536	-884	Shale, Sandstone	Gas, Water, Possible Overpressure
Lower Cubero (DKOT)	7575	-923	Shale, Sandstone	Gas, Water, Possible Overpressure
Burro Canyon (DKOT	7615	-963	Sandstone	Gas, Water, Possible Overpressure
Morrison Formation			Shale, Sandstone	Gas, Water, Possible Overpressure
Proposed TD	7609	-957		

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected.

#### 3. PRESSURE CONTROL EQUIPMENT:

BOP equipment will be tested to its rated working pressure or 70-percent of the internal yield of the surface casing, but not to exceed 1,000 psi. See attachments for BOP and choke manifold diagrams.

#### **Production Hole BOP Requirements and Test Plan**

```
11" – 2,000 psi single ram (blind)
11" – 2,000 psi single ram (pipe)
```

Test as follows:

a)	Pipe rams:	1,000 psi (High)	250 psi (low)
b)	Choke manifold and lines:	1,000 psi (High)	250 psi (low)

All ram type preventers and related equipment will be hydraulically tested at nipple-up. They will also be retested in either of the following events:

- A pressure seal is broken.
- 30 days have elapsed since the last successful test of the equipment.

Furthermore, BOP's will be checked daily as to mechanical operating condition. All ram type preventers will have hand wheels, which will be operative and accessible at the time the preventers are installed. See attached Exhibit for details on the BOP equipment.

#### **AUXILIARY EQUIPMENT:**

- a) Manually operated kelly cock (upper and lower)
- b) Full opening manually operated safety valves in the full open position, capable of fitting all drill stem connections.

#### 4. CASING AND CEMENTING DESIGN:

**Casing Program:** 

Hole Size	<u>Depth</u>	Casing Size
12 ¼"	250'	9 5/8"
8 3/4"	3350' +/- Lewis seat	7"
6 1/4"	7609'	4 1/2"

Hole Size	Casing Type	Top (MD)	Bottom (MD)	Wt. (lb./ ft)	Grade	Thread	Condition
9-5/8"	Surface	0'	250'	36.0	J55	STC	New
7"	Intermediate	0'	3350' +/-	23.0	N80	LTC	New
4 1/2"	Production	0	7609'	11.6	N80	LTC	New

Casing Data				Collapse	Burst	Min. Tensile
OD	Wt/Ft	Grade	Thread	(psi)	(psi)	(Lbs.)
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
7"	23.0 lbs.	N80	LTC	3,830	6,340	442,000
4 1/2"	11.6 lbs.	N80	LTC	6,350	7,780	223,000

#### MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125 BURST: 1.00 TENSION: 1.80

Area Fracture Gradient Range: 0.7 – 0.8 psi/foot

Maximum anticipated reservoir pressure: 2,500 psi Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 3,500 - 3,750 psi

#### Float Equipment:

<u>Surface Casing</u>: Guide shoe on bottom and 3 centralizers on the bottom 3 joints.

<u>Intermediate Casing:</u> Float shoe on bottom joint and a float collar one joint up from float shoe. One centralizer 10 ft above float shoe and nine centralizers spaced every joint above the float collar. Stage tool above the Pictured Cliffs formation. One centralizer below stage tool and one centralizer above stage tool.

<u>Production Casing:</u> 4 1/2" cement nosed guide shoe and a float collar on top of bottom joint with centralizers over potential hydrocarbon bearing zones.

#### **Cementing Program:**

#### 9-5/8" Surface casing:

140 sxs Type III cement with 2% CaCl<sub>2</sub>, ¼#/sx celloflake. 100% excess to circulate cement to surface. WOC 12 hrs.

Slurry weight: 15.2 ppg Slurry yield: 1.27 ft<sup>3</sup>/sack

Volume basis:

 40' of 9-5/8" shoe joint
 17 cu ft

 250' of 12-1/4" x 9-5/8" annulus
 78 cu ft

 100% excess (annulus)
 78 cu ft

 Total
 173 cu ft

#### Note:

- 1. Design top of cement is the surface.
- 2. Have available 100 sx Type III cement with 2% CaCL<sub>2</sub> for top out purposes.

#### 7" Intermediate Casing:

1st Stage: 56 sacks of Type III cement

Slurry weight: 14.5 ppg Slurry yield: 1.4 ft<sup>3</sup>/sack

2<sup>nd</sup> Stage: (Stage tool at 3000' +/-): 302 sacks of Premium Lite FM

Slurry weight: 12.4 ppg Slurry yield: 1.92 ft<sup>3</sup>/sack

Volume Basis:	40' of 7" shoe joint	9 cu ft
	3100' of 7" x 8 3/4" annulus	466 cu ft
	250' of 7" x 9 5/8" csg	42 cu ft
	30% excess (annulus)	140 cu ft
	Total	657 cu ft

#### Note:

- 1. Design top of cement is surface.
- 2. Actual cement volumes to be based on caliper log plus 30%.

#### 4 1/2" Production casing:

Stage 1: 180 sacks of Premium Lite High Strength FM out guide shoe.

Slurry weight: 12.3 ppg Slurry yield: 2.13 ft<sup>3</sup>/sack

Volume basis:	40' of 4 1/2" shoe joint	5 cu ft
	A 1 /0 % C 1 / ADI 1 - 1 -	407 . 6

4 1/2 " x 6 1/4" hole 437 cu ft 4 1/2" x 7" casing 33 cu ft 30% excess (annulus) 131 cu ft Total 606 cu ft

#### Note:

- 1. Design top of cement is 3050 +/- ft. or 300 ft. into 7" intermediate casing.
- 2. Actual cement volumes to be based on caliper log plus 30%.

#### 5. MUD PROGRAM:

The surface hole will be drilled with spud mud. Gel and polymer sweeps will be used from surface to 250 feet as necessary to keep hole clean.

The intermediate hole will be drilled with water till mud up at about 2300 ft. From 2300' to 3500', intermediate casing depth, will be drilled with LSND mud. Anticipated mud weight ranges from 8.5-9.0 ppg. Mud weight will be increased as required to maintain hole stability and control gas influx.

The production hole will be drilled with air or air/mist.

Sufficient mud materials to maintain stable wellbore conditions (for either well control or lost circulation scenarios) will be maintained at the well site.

No chrome-based additives will be used in the mud system.

#### 6. **EVALUATION PROGRAM:**

Mud logger:

None Planned

Testing:

No DST is planned

Coring:

None Planned

Electric logs:

Intermediate Hole: Non Planned

Production Hole: TMD-L or Open Hole Platform Express

#### ABNORMAL PRESSURE AND TEMPERATURE: 7.

H <sub>2</sub> S	None
Coal	Fruitland
Minerals	None
Water	None
Static BHT	175° F
Lost Circulation	Possible
Hole Deviation	None
Abnormal Pressures	None
Unusual Drilling Problems	None

8. **ANTICIPATED STARTING DATE:** November 1, 2005

Anticipated duration: 16 days

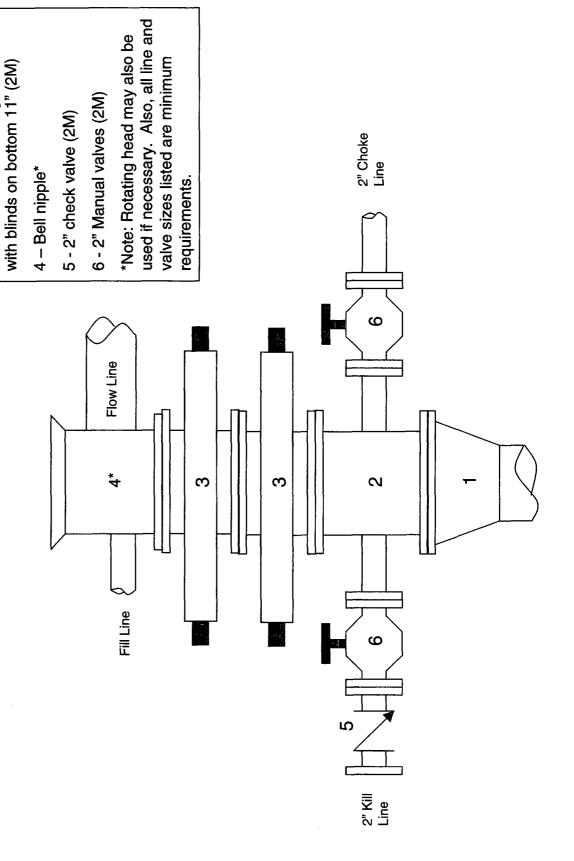
## **Jicarilla A No. 7F** 2000 psi BOP stack Minimum requirements

3 - A double or two single rams

2 - Drilling spool 11" (2M)

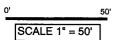
1 - Wellhead 9-5/8" (2M)

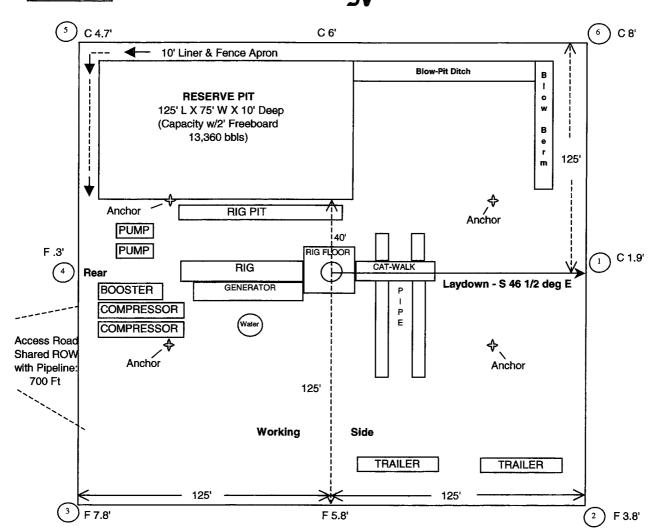
Components



### 3 - Mud cross with gauge (2M) flanged Note: All line and valve sizes listed are 2000 psi Choke Manifold 4 - Replaceable beam choke (2M) Minimum requirements 5 - Adjustable needle choke (2M) Jicarilla A No. 7F Components minimum requirements. below the gauge. 1 - 2" Valve (2M) 2 - 2" Valve (2M) 2" line to pit or mud/gas separator 2" bypass line 2" line to pit or mud/gas separator S 2" line from BOP (see BOP diagram)







#### CDX RIO, LLC

#### Wellsite Layout Plat with Cut & Fills Jicarilla A No. 7F

660' FNL & 2055' FWL Sec 17, T26N, R5W, NMPM Rio Arriba Co., New Mexico Elevation: 6640' UGL