Form 3160-3 (August 1999)

03 APR 14 AM 10: 21 **UNITED STATES** 

FORM APPROVED OMB No. 1004-0136

Expires November 30, 2000

DEPARTMENT OF THE INTERIOR

5. Lease Serial No.

Jicarilla Contract #101

BOILEAU OF LAND MANAGE	LITILITI	Olean ma Cont	acc // LOL			
APPLICATION FOR PERMIT TO DE	6. If Indian, Allottee or Tribe Name  Jicarilla Apache Tribe					
1a. Type of Work: X DRILL REENT	7. If Unit or CA Agreeme	7. If Unit or CA Agreement, Name and No.				
<b>'</b>		8. Lease Name and Well	No.			
b. Type of Well: Qil Well X Gas Well Other	Single Zone X Multiple Zone	Jicarilla (				
2 Name of Operator		9. APLWell No.	701982			
24 Address 125	Phone No. (include area code)	10. Field and Pool, or Ext	aloratory			
c/o Walsh Engineering,7415 E. Main, Farmington, NM 87402	A. Address 3b. Phone No. (include area code)					
4. Location of Well (Report location clearly and in accordance with any		Basin DK/Blanco				
At surface 2380' FNL and 2070' FEL			•			
At proposed prod. Zone	A STATE OF THE STA	G Sec. 11, T26	6N, R4W			
14. Distance in miles and direction from nearest town or post office*	July 2000 A	12. County or Parish	13. State			
21 miles south of Duk		Rio Arriba	NM			
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	Not of Acres in lease 17. Spacing Un	it dedicated to this well  320 acres E/2				
18. Distance from proposed lo cation* to nearest well, drilling, completed, applied for, on this lease, ft.	Proposed Depth 20 BLM/BIA I	3ond No. on file				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22	. Approximate date work will start*	23. Estimated duration				
7110' GL	June 1, 2003	June 1, 2003 3 weeks				
	24. Attachments					
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas Order No. 1, shall be attached t	to this form:				
Well plat certified by a registered surveyor.	4. Bond to cover the operation	ns unless covered by an existing	bond on file (see			
2. A Drilling Plan.	Item 20 above).					
3. A Surface Use Plan (if the location is on National Forest System Land	ds, th 5. Operator certification.					
SUPO shall be filed with the appropriate Forest Service Office.	Such other site specific infor authorized office.	mation and/or plans as may be re	quired by the			
25. Signature	Name (Printed/Typed)	Date	<del></del>			
Taul C. Thomps	Paul C. Thomps	on, P.E.	4/8/03			
Title	Agent					
Approved by (Signature)  /s/ David R. Sitzlef	Name (Printed/Typed)	Date	JUN 1 6 2004			
Title Assistant Field Manager	Office					
Application approval does not warrant or certify that the applicant holds operations thereon.	s legal or equitable title to those rights in the st	abject lease which would entitle t	the applicant to conduc			
Conditions of approval, if any, are attached.	<del></del>					
Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, make it		y to make to any department or a	gency of the United			
States any false, fictitious or fraudulent statements or representations as	to any matter within its jurisdiction.					

\*(Instructions on reverse)



PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

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

AND ESSIONAL

Certificate Number

• District II\* PO Drawer DD, Artesia, NM 88211-0719 OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 District III 1000 Rio Brazos Rd., Aztec, NM 87410

5290.56

AMENDED REPORT

strict IV 80x 2088,	Santa Fe,	NM 87504-20	88							L_] *	AMC NOC	U NEPUK
			NELL	LOCATI	ON AN	D AC	REAGE DEDI	CAT	ION PL	ΑТ		
30-035	PI Number	783	783 Pool Code 72319 \ 71599 BLANCO MESAV						Pool Name ERDE \ BASIN DAKOTA			
Property	Code		<u> </u>			operty ΔΡΙ					•We	11 Number 1C
OGRID	No.	JICARILLA C Operator Name						³E	levation			
17325	2				DILLER		NERGY, INC.	•	··.			7110′
UL or let no.	Section	Township	Range	Lot Idn	<sup>10</sup> Surfa		Location North/South line	Foot	from the	Eact /Wo	est line	County
G	11	26N	4W		238			070		ST	RIO ARRIBA	
	J	<sup>11</sup> Bo	ttom	Hole L	ocatio	on Įi	f Different	Fro	m Surf	ace .		AUITUA
UL or let no.	Section	Township	Range	Lat Idn	Feet from	m the	North/South line	Fee	from the	East/We	est line	County
Dedicated Acres		).O Acres		L	<sup>13</sup> Joint or :	Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Onder	No.			
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5280.00			·	11 -			2010 	5280.00	I hereby shown on notes of my super and corre	EYOR certify this plat aision, and ct to the of Sull and Seath	that the we twas plot- tryeys made of that the e best of a rvey: Ma of Profes C. EDW	AY 8, 2002 ssional Surveyo

# CORDILLERA ENERGY, INC. OPERATIONS PLAN Jicarilla C #1C

I. Location: 2380' FNL & 2070' FEL

Date: April 8, 2003

Sec 11, T26N, R4W

Rio Arriba County, NM

Field: Blanco MV & Basin DK

Elev: GL 7110'

Surface: Jicarilla Apache Tribe Minerals: Jicarilla Contract #101

II. Geology: Surface formation \_ San Jose

Α.	Formation Tops	Depths
	Ojo Alamo	3195′
	Kirtland	
	Pictured Cliffs	3585 <b>'</b>
	Cliff House	5505 <b>'</b>
	Menefee	5655 <b>'</b>
	Point Lookout	5865 <b>′</b>
	Greenhorn	7910 <b>′</b>
	Graneros	7985 <b>'</b>
	Dakota	8075 <b>′</b>
	Total Depth	8255 <b>′</b>

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 3585', 5505', 5865', 8075'.

- B. Logging Program: Induction/GR and density logs at TD.
- C. No over pressured zones are expected in this well. No  $H_2S$  zones will be penetrated in this well. Max. BHP = 2500 psig.

#### III. Drilling

- A. Contractor:
- B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The intermediate hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.5 ppg.

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

Jicarilla C #1C Operations Plan Pg #2

#### C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See the attached Exhibit #1 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

#### IV. Materials

A. Casing Program:			
Hole Size	Depth	Casing Size	Wt. & Grade
12-1/4"	250 <b>′</b>	9-5/8 <b>"</b>	36# J-55
8-3/4"	3885 <b>′</b>	7"	20# J-55

B. Float Equipment:

6-1/4"

a) Surface Casing: Notched collar on bottom and 3 centralizers on the bottom 3 joints.

4-1/2"

11.6# N-80

b) Intermediate Casing: 7" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Ten centralizers spaced every other joint above shoe and ten turbolizers every other joint from 1500'.

8255'

c) Production Casing: 4-1/2" whirler type cement nosed guide shoe and a float collar on top of the bottom joint.

Jicarilla C #1C Operations Plan Pg #3

#### V. Cementing:

Surface casing: 9-5/8" - Use 140 sx (165 cu. ft.) of Cl "B" with 2% CaCl<sub>2</sub> (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Intermediate Casing: 7" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. Lead with 495 sx (1035 cu.ft) of Type III 65/35 poz with 8% gel, 1%  $CaCl_2$ , 14#/sk. Celloflake. (Yield = 2.09 cu.ft./sk; slurry weight = 12.1 PPG). Tail with 100 sx (139 cu.ft.) of Type III with 1%  $CaCl_2$ , 14#/sk. Celloflake. (Yield = 1.39 cu.ft.) of Type III with 1%  $CaCl_2$ , 14#/sk. Celloflake. (Yield = 1.39 cu.ft./sk; slurry weight = 14.5 PPG). Total cement volume is 1174 cu.ft. (100% excess to circulate cement to surface). WOC for 12 hrs. Pressure test the BOP and casing to 1500 psi.

**Production Casing: 4-1/2"** - Blow hole clean. Precede cement with 20 bbls of gel water and 10 bbls of water. **Lead** with 295 sx (584 cu.ft.) of Premium Lite HS with 0.65% FL-52, 0.32% CD-32,  $\frac{1}{4}$  #/sk celloflake, and 4% phenoseal. (Yield = 1.98 cu.ft./sk; slurry weight = 12.5 PPG). **Tail** with 100 sx (196 cu.ft.) of Premium Lite HS with 0.65% FL-52, and 0.32% CD-32. (Yield = 1.96 cu.ft./sk; slurry weight = 12.5 PPG). Total cement volume is 780 cu.ft. (70% excess to circulate 100' above the intermediate casing shoe).

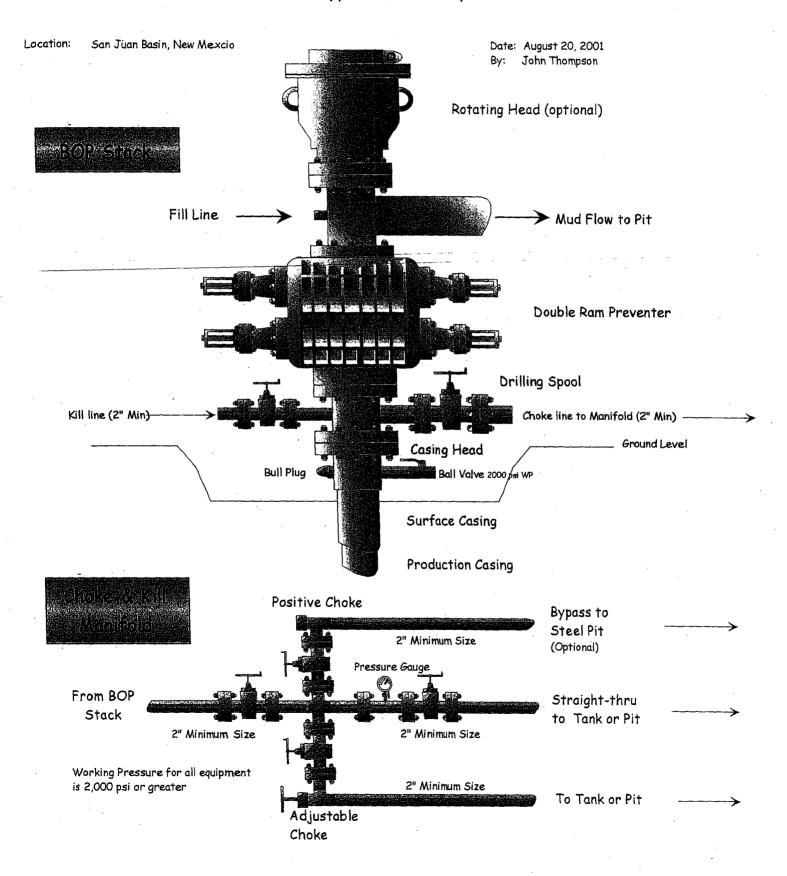
Paul C. Thompson, P.E.

## Cordillera Energy, Inc.

## Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

### Typical BOP setup



## COPULIERA ENERGY, INC. JICARITA C #1C 2380' FNE & 2070' FEL, SECTION 11, T26N, R4W, NMPM RIO ARRIBA COUNTY, NEW MEXICO GROUND ELEVATION: 7110'

