

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. CONTRACT 104
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CONOCO INC.		7. If Unit or CA Agreement, Name and No.
Contact: VICKI WESTBY E-Mail: Vicki.R.Westby@conoco.com		8. Lease Name and Well No. JICARILLA E #16
3a. Address 10 DESTA DR., ROOM 608W MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799	9. API Well No. 30-039-27072
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NENE 600FNL 600FEL At proposed prod. zone 380 880		10. Field and Pool, or Exploratory TAPACITO PC/BLANCO MV Basin Dakota
14. Distance in miles and direction from nearest town or post office*		11. Sec., T., R., M., or Blk. and Survey or Area A Sec 21 T26N R4W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease	12. County or Parish RIO ARRIBA
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 5917 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) GL 6768	22. Approximate date work will start	17. Spacing Unit dedicated to this well 320.00 E/2 NW 160 N/4 PL
20. BLM/BIA Bond No. on file		23. Estimated duration

24. Attachments

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

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) VICKI WESTBY	Date 11/16/2001
Title AUTHORIZED SIGNATURE		
Approved by (Signature) <i>Angie Medina-Jones</i>	Name (Printed/Typed)	Date 11-2-02
Title Acting Assist Field Manager	Office	

Application approval does not warrant or certify 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.

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.

Additional Operator Remarks (see next page)

Electronic Submission #9025 verified by the BLM Well Information System
For CONOCO INC., sent to the Rio Puerco
Committed to AFMSS for processing by Angie Medina-Jones on 11/16/2001

NOTED FOR NS

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
CONTRACT #104

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. JICARILLA E 16
2. Name of Operator CONOCO INC.		9. API Well No. 30-039-27072
3a. Address 10 DESTA DR., ROOM 608W MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 915.686.5799 Ext: 5799	10. Field and Pool, or Exploratory PICTURED CLIFFS/MESAVERDE
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T26N R4W NENE 380FNL 880FEL		11. County or Parish, and State RIO ARriba COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) 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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations 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 recompleat 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 requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Conoco Inc. proposes to move this location from 660'FNL & 660'FEL, to 380'FNL & 880'FEL, Section 21, T26N-R4W. The original APD was filed on November 16, 2001. This well will be drilled and equipped in accordance with the attachments submitted herewith, which have been revised for the new location. The application for Non-Standard Location will be filed separately.

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

**Electronic Submission #10336 verified by the BLM Well Information System
For CONOCO INC., will be sent to the Rio Puerco**

Name (Printed/Typed) VICKI WESTBY	Title AUTHORIZED SIGNATURE
Signature <i>Vicki Westby</i> (Electronic Submission)	Date 05/10/2002

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>Patricia M. Nelson</i>	Lands and Mineral Resources	Date 7-12-02
Conditions of approval, if any, are attached. Approval of this notice 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		Office

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.

**** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT ** DRAFT ****

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DC, Artesia, NM 88211-0719

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

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102

Revised February 21, 1994

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-21012	Pool Code 5920-72319-71599	Pool Name Tapacito Pictured Cliffs-Blanco Mesaverde-Basin Dakota
Property Code 18022	Property Name JICARILLA E	Well Number 16
GRID No. 005073	Operator Name CONOCO, INC.	Elevation 6768'


¹⁰ Surface Location

UL or lot no	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
A	21	26N	4W		380	NORTH	880	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

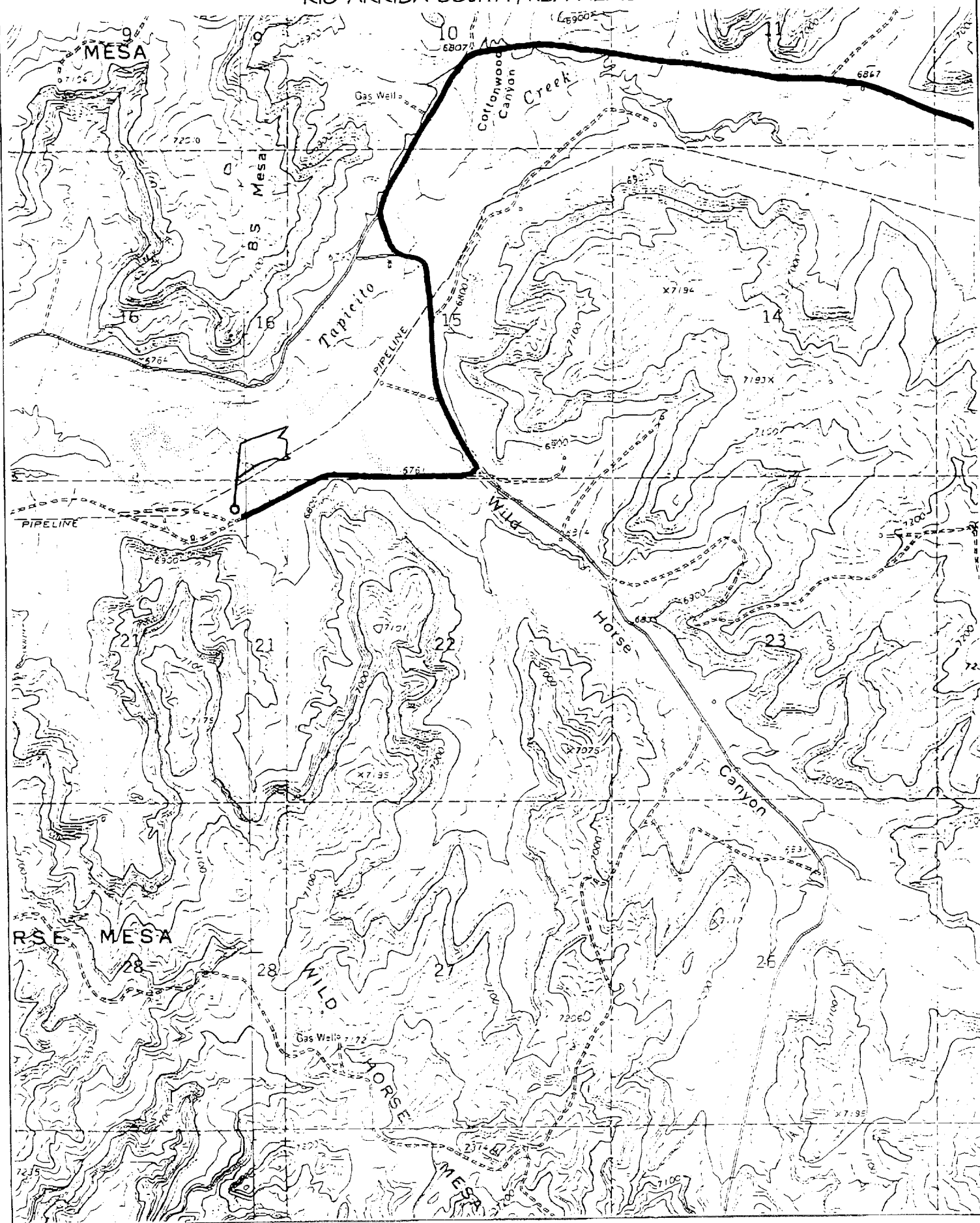
UL or lot no	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 160.0 Acres (NE/4) - PC 320.0 Acres (E/2) - MV/DK					Joint or Infill	Consolidation Code	Order No.		

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

<div>16</div> <div>5274.72'</div> <div>380'</div> <div>880'</div> <div>Jicarilla Contract #104</div> <div>5280.00'</div> <div>21</div> <div>5270.75'</div>	<div>¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Vicki R. Westby Printed Name Sr. Title Analyst Title Date</div> <div>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. Survey Date: FEBRUARY 20, 2002 Signature and Seal of Professional Surveyor <div> JASON C. EDWARDS Certificate Number 15269</div></div>
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CONOCO, INC. JICARILLA E #16

380' FNL & 880' FEL, SECTION 21, T26N, R4W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



DRILLING PROGRAM - JICARILLA E 16



San Juan Business
Unit

Well: JICARILLA E 16 Area: SOUTH AFE #: 3447 AFE #: 365915

Field Name: JICARILLA-TRIBAL Rig: Key 49 State: NM County: RIO ARRIBA API #:

Location: Surface

Lat: 36.478202 Long: -107.250211 Footage X: 880 FEL Footage Y: 380 FNL Sec.: 21 Survey: 26N Abstract: 4W

ERA (Emergency Response Area)

Lat: Long: "Hud Drilled"

Formation Data : Ground Level = 6768 FT Assume KB = 6781 FT

Formation Coll & Casing Points	Depth (IVD in Ft)	BHP (PSIG)	BHT	Remarks
Surface Casing	500			Severe lost circulation is possible. 12 1/4" Hole. 9 5/8", 36 ppf, J-55, STC casing. Will test to 1500 psi. Circulate cement to surface. 100% Excess.
OJAM	2374			Possible water flows <i>Macromer at 1350'</i>
KRLD/FRLD	3160			Gas
PCCF	3416	325	125	Gas; possible lost circulation
LEWS	3578			
CHRA	4362			
CLFH	5060			Gas; possibly wet
MENF	5189			Gas; possibly wet
PTLK	5561	560	160	Gas, Possible Lost Circulation
Total Depth	5901			7 7/8" Hole. 4 1/2", 10.5 ppf, J-55, STC casing. Circulate cement a minimum of 100' inside the previous casing string. No open hole logs. Cased hole TDT with GR to surface.

Logging Program

Intermediate Logs: ☐ Log only If show ☐ GR / ILD ☐ Triple Combo ☐ Other

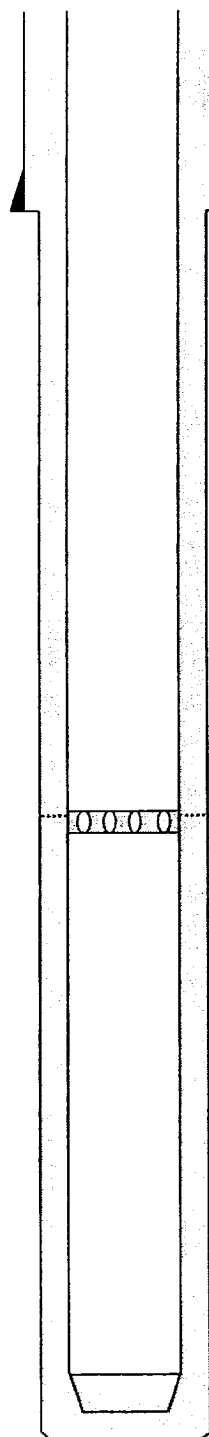
TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☒ TDT ☐ Other

Additional Information:

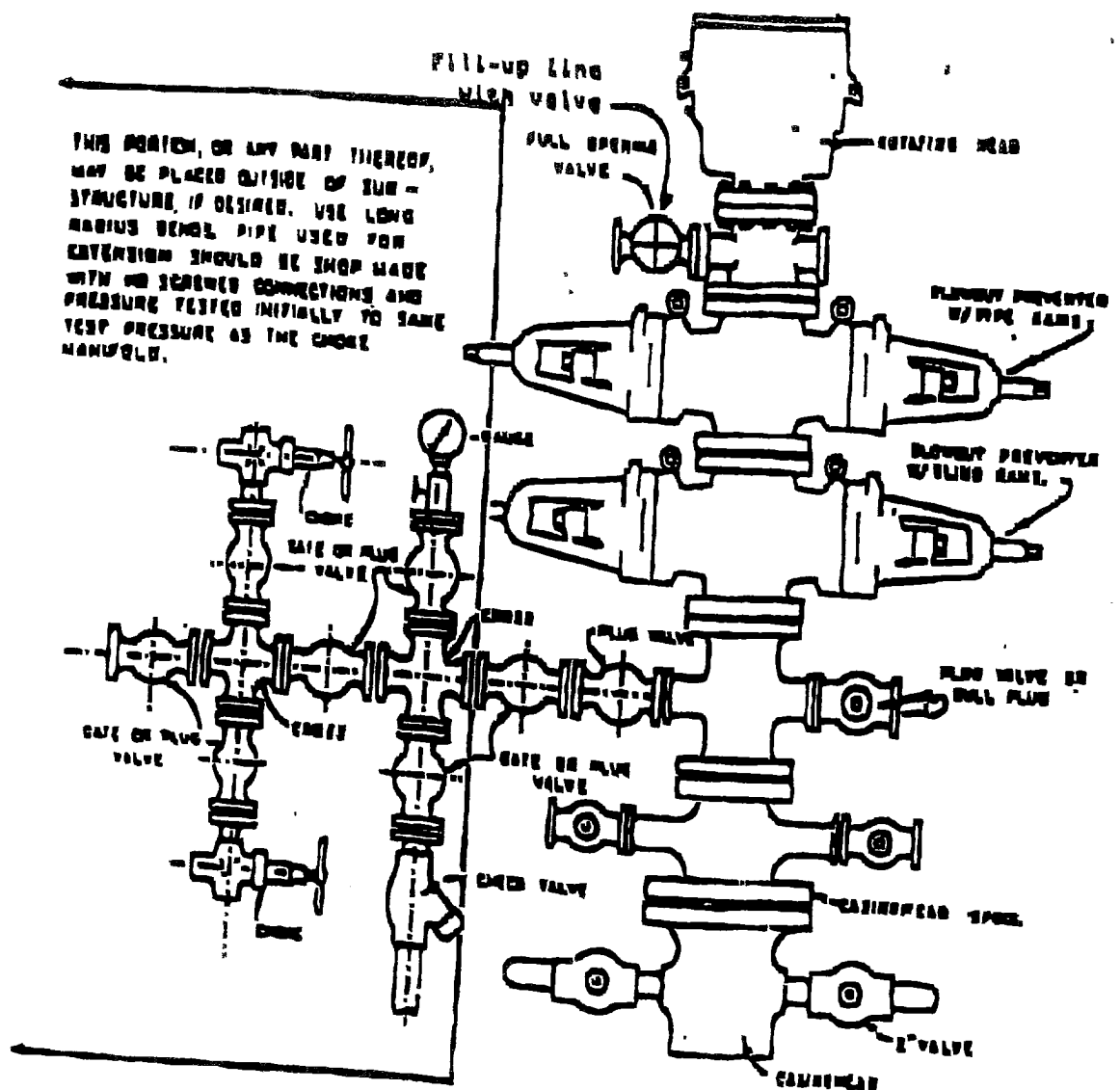
Comments

Cementing Summary

Jicarilla E 16 (v3.1)

		OH						
		Depth	Excess					
	9-5/8" Sfc Csg	0	Class 'H' Cement	306 sx	Slurry Volume	330.6 cu ft		
			Flocele (if req'd)	0.25 lb/sk		58.9 bbl		
			CaCl2	2.00% bwoc-db	Slurry Density	16.4 ppg		
			Defoamer (if req'd)	0.05 gal/bbl	Slurry Yield	1.08 cu ft/sk		
					Mix Fluid	4.45 gal/sk		
	9-5/8" shoe	500						
	Stage #2	60%	Blend	617 sx	Slurry Volume	1,747 cu ft		
	Lead		Class 'H' Cement	84 lb/sk		311 bbl		
			San Juan Poz	lb/sk	Slurry Density	11.4 ppg		
			Econolite	3.00% bwoc	Slurry Yield	2.83 cu ft/sk		
		Silicalite-blended	10 lb/sk	Mix Fluid	17.29 gal/sk			
		Flocele	0.5 lb/sk					
		Defoamer (if req'd)	0.05 gal/bbl					
	PCCF	3,416						
	OH Size	7-7/8 in						
	DV Tool #1	4,850						
	Stage #1	60%	Blend	251 sx	Slurry Volume	427 cu ft		
			Class 'H' Cement	47 lb/sk		76 bbl		
			San Juan Poz	24 lb/sk	Slurry Density	12.8 ppg		
	CLFH	5,060	Bentonite	3.00% bwoc	Slurry Yield	1.70 cu ft/sk		
	MENF	5,189	Halad-344	0.40% bwoc	Mix Fluid	8.26 gal/sk		
			CFR-3	0.20% bwoc				
			HR-5	0.05% bwoc				
			Silicalite-blended	20 lb/sk				
			Flocele	0.25 lb/sk				
	PTLK	5,561	Defoamer (if req'd)	0.05 gal/bbl				
	4-1/2" Csg	5,901						
	Shoe							

Notes: 1) Conoco to verify TOC's & DV depths and hole sizes.



BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of sub-structure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

1. Two rams with one blind and one pipe ram.
2. Kill line (2 inch maximum).
3. One kill line valve.
4. One choke line valve.
5. Two chokes (reference diagram No. 1).
6. Upper kelly cock valve with handle.
7. Safety valve and subs to fit all drill strings in use.
8. Two-inch minimum choke line.
9. Pressure gauge on choke manifold.
10. Fill-up line above the upper most preventor.
11. Rotating head.

Cathodic Protection System Description

Anode Bed Type	Deep Well	
Hole Size	8"	
Hole Depth	200' - 500'	As required to place anodes below moisture and in low resistance strata.
Surface Casing	8" Diam., \geq 20' Length, Cemented In Annular Space	When needed, casing will be installed at an adequate depth to control ground water flow. Casing will extend a minimum of 2' above grade, be surrounded by a concrete pad, and sealed with a PVC cap. Steel casing will be substituted when boulders are encountered.
Vent Pipe	1" Diam. PVC	Vent pipe will extend from bottom of hole, through top of casing cap, and sealed with a 1" perforated PVC cap.
Type Of Anodes	Cast Iron Or Graphite	
Number Of Anodes	8 - 20	Sufficient quantity to achieve a total anode bed resistance of < 1 ohm and a design life \geq 20 years.
Anode Bed Backfill	Lorance SW Calcined Petroleum Coke Breeze	Installed from bottom of hole to 10' above top anode.
Anode Junction Box	8 - 20 Circuit Fiberglass Or Metal	Sealed to prevent insect & rodent intrusion.
Current Splitter Box	2 - 5 Circuit Metal	Sealed to prevent insect & rodent intrusion.
DC / AC Cable	DC: #2, #4, #6, #8 Stranded Copper (One Size Or Any Combination Of) With High Molecular Weight Polyethylene (HMWPE) Insulation. AC: #8 Stranded Copper HMWPE	18" depth in typical situation, 24" depth in roadway, & 36" depth in arroyos and streams. EXCEPTION: If trenching is in extremely hard substratum, depth will be 6 - 12" with cable installed in conduit. Installed above foreign pipelines if 1' clearance is available, if not, installed under foreign pipeline with 1' clearance (AC cable always installed under foreign pipeline in conduit).
Power Source	1) Rectifier 2) Solar Power Unit 3) Thermoelectric Generator	Choice of power source depending on availability of AC & other economic factors.
External Painting	Color to be selected according to BLM specifications.	Paint applied to any surface equipment associated with the CP system which can reasonably be painted.