

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, 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-101
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
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Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address. CONOCO INC. 10 DESTA DRIVE STE 100W MIDLAND, TEXAS 79705		RECEIVED AUG - 8 1994 OIL CON. DIV. DIST. 3	OGRID Number 005073
Property Code NA	Property Name Hubbard LS		API Number 30 - 030-045-11265
			Well No. 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	30	32N	11W		1650	North	990	West	

8 Proposed 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

Proposed Pool 1 Blanco Pictured Cliffs	Proposed Pool 2 Blanco Mesaverde
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Work Type Code A	Well Type Code G	Cable/Rotary R	Lease Type Code P	Ground Level Elevation 6476'
Multiple Yes	Proposed Depth 5637'	Formation PC / Mesaverde	Contractor	Spud Date

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
Casing	Program	Will	Remain	Unchanged	

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

It is proposed to (a) add perfs to the existing Mesaverde completion, (b) Squeeze across the Pictured Cliffs if CBL indicates cement top is not high enough, and (c) complete the Pictured Cliffs formation. The well would then be equipped as a dual producer. The procedure for these actions is attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: Jerry W. Hoover

Title: Sr. Conservation Coordinator

Date: 8/5/94

Phone: (915) 686-6548

OIL CONSERVATION DIVISION

Approved by:

Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3

Approval Date: AUG - 8 1994

Expiration Date: AUG - 8 1995

Conditions of Approval:

Attached ☐

Hubbard LS #2 Completion Procedure

Summary of Work Recommended

- * Freepoint and back off 4-1/2" csg
- * Run GR/CBL
- * Squeeze if necessary
- * Stimulate the Cliffhouse
- * Stimulate the Pictured Cliffs
- * Test and turn to production as a dual

Proposed Well Data:

TD: 5652' PBTD: 5637' Elevation: 6476' GL Zero: 13' AGL

Location: 1650' FNL & 990' FWL, Section 30, T32N-R11W
San Juan County, New Mexico

Casing: 9-5/8", 36#, J-55, ST&C set @ 172' w\ 125 sxs circ.
7", 23#, K-55, set @ 5290' w\ 500 sxs. TOC @ 4150'(TS).
4-1/2", 10.5#, J-55, ST&C set @ 5652' w\100 sxs.

Existing

Perfs: Point Lookout: 5334-42, 5360-68, 5423-31, 5448-56, 5518-22, 5542-46 (1 spf).

Proposed

Perfs: Cliffhouse and Menefee: 4650, 87, 4723, 25, 27, 31, 33, 48, 50, 52, 4830, 34, 38, 48, 52, 56, 72, 75, 78, 83, 86, 91, 4957, 61, 65. (25 total)

Pictured Cliffs: 3077-95, 3111-18 (2 spf)

Tubular Specs:

OD	GRADE	WT	ID	DRIFT	BBL/FT	COLLAPSE	BURST	SF
9-5/8"	K-55	36	8.921	8.599	0.0773	1414	2464	70%
7"	K-55	20	6.456	6.331	0.0404	1589	2618	70%
4-1/2"	K-55	10.5	4.052	3.927	0.0159	2807	3353	70%
2-3/8"	J-55	4.7	1.995	1.901	0.00387	6480	6160	80%

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-11265	Pool Code 72359	Pool Name Blanco Pictured Cliffs
Property Code NA	Property Name Hubbard LS	Well Number 2
OGRJD No. 005073	Operator Name CONOCO INC.	Elevation 6476'

¹⁰ Surface Location

UL or lot no. E	Section 30	Township 32N	Range 11W	Lot Idn	Feet from the 1650	North/South line North	Feet from the 990	East/West line West	County San Juan
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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
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¹² Dedicated Acres 160 154.94	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

¹⁶ 1650' 990'					¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature <u>Jerry W. Hoover</u> Printed Name <u>Jerry W. Hoover</u> Title <u>Conservation Coordinator</u> Date <u>8/24/94</u> 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. Date of Survey _____ Signature and Seal of Professional Surveyer: _____ Certificate Number _____

RECEIVED
AUG 28 1994
OIL CON. DIV.
DIST. 3

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-11265		Pool Code 72319	Pool Name Blanco Mesaverde
Property Code NA	Property Name Hubbard LS		Well Number 2
OGRID No. 005073	Operator Name CONOCO INC.		Elevation 6476'

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
E	30	32N	11W		1650	North	990	West	San Juan

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

¹² Dedicated Acres 2.29	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

	<p>RECEIVED AUG 08 1994 OIL CON. DIV. DIST. 3</p>		<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature <u>Jerry W. Hoover</u></p> <p>Printed Name <u>Sr. Conservation Coordinator</u></p> <p>Title <u>8/16/94</u></p> <p>Date</p>
			<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p>
			<p>Certificate Number</p>

Hubbard LS #2
Completion
Page 2

1. MIRU completion rig
 - A. POOH and stand back 2-3/8" production string.
2. MIRU wireline unit.
 - A. GIH w\ wireline set RBP and set in 4-1/2" csg @ 5300'
 - B. Run CBL strip from RBP @ 5300' to 4600'(or until cement top is found.
NOTE: If Cement is below 5000' we will complete the Cliffhouse through the 7" casing. If it is above 5000' we will complete the Cliffhouse through both strings of casing. The following procedure assumes the cement top is below 5000', as is expected.
3. Free point and back off 4-1/2" casing. POOH.
4. Run CBL from free point to surface to determine whether squeeze work will be necessary.
5. Pressure test casing to 1000 psi. (Max casing pressure = 1589)
NOTE: Be prepared to squeeze across Pictured Cliffs as follows:
6. If necessary, squeeze across the PC as follows:
 - A. GIH w\ 4" casing gun loaded with 23g charges @ 2 spf and perforate squeeze holes at 3140'.
 - B. RIH w\ RBP and pkr on 2-3/8" tbg. Set RBP @ 3160 and pkr @ 3040'. (Test RBP to 1000 psi). Dump 2 sxs sand on RBP.
 - C. Establish pump in rate of 1-2 BPM w\ 2% KCL.
 - D. Pump 150 sxs class B neat.
 - E. Displace w\ 15 bbls 2% KCl
 - F. POOH w\ 2-3/8" tbg and packer. Shut down overnight.
 - G. Drill up cement to RBP and test squeeze to 1000 psi.
 - H. Circulate sand off RBP and POOH w\ 2-3/8" tbg and RBP.

7. Perforate the Cliffhouse and Menefee under a lubricator as follows:

A. RIH w\ 7" RBP and set @ \pm 5000'.

B. RIH w\ 4" HSC loaded at 1 spf, 0.35" holes for select fire.

C. Perforate the following depths:

Cliffhouse and Menefee: 4650, 87 4723, 25, 27, 31, 33, 48, 50, 52, 4830, 34, 38, 48, 52, 56, 72, 75, 78, 83, 86, 91, 4957, 61, 65. (25 total)

8. Stimulate the Cliffhouse and Menefee as follows:

NOTE: Max pressure 3300 psi.

Pump Schedule:

Volume (gals)	Fluid Type	Stage	Proppant (ppg)	Rate (BPM)	Prop Type
1,500	15% HCl	Acid		15-20	50:7/8" Balls
3,700	2% KCl	Flush		15-20	
Retrieve	balls with	wireline	junk	basket	
40,000	Slickwater	Pad		40	
30,000	Slickwater		0.5	40	20/40
40,000	Slickwater		1.0	40	20/40
30,000	Slickwater		1.5	40	20/40
10,000	Slickwater		2.0	40	20/40
3,420	Slickwater	Flush			

Totals:	153,720 gals	Slickwater
	120,000 lbs	20/40 Sand
	3,800 gals	2% KCl Water
	1,500 gals	15% HCl

9. Prepare to stimulate the Pictured Cliffs

A. RIH w\ RBP and set @ 3300'. Dump 2 sxs sand on RBP.

10. Perforate the Pictured Cliffs under a lubricator as follows:

A. RIH w\ 4" HSC loaded with 2 spf (0.4" holes)

B. Perforate the following depths:

Pictured Cliffs: 3077-95, 3111-18 (2 spf)

- 11. Breakdown and Fracture stimulate the PC according to the following pump schedule**

Volume (gals)	Fluid Type	Stage	Rate (BPM/SCF)	Prop (lb/gal)	Prop Type
1,800	15% HCL	Acid	5		
5,200	30# gelled water	Flush	5		
	15 min shut-in				
2,200	30# gelled water	Injection	10		
	45 min shut-in				
6,000	Spectra Frac G-3000	Pad	10		
5,000	70% Spectra Foam 3000	0-4 ppg	7.2/5467	2	16/30
35,000	70% Spectra Foam 3000	4 ppg	8.1/5048	4	16/30
5,200	30# gelled water	Flush	10		

Totals:	24,120 gals	Spectra Frac G-3000/30# gel
	1800 gals	Gallons 15% HCL w\
		2 gpt Cl-15
		2 gpt InFlo-50
		5 gpt Ferrotrol 300I
	341,333 scf	Nitrogen (including cool down)
	150,000 lbs	16/30 mesh Arizona

NOTE: 2- 400 bbl frac tanks loaded w\ 2% KCl are required.

12. Clean out sand and RIH w\ production equipment

- A. After flowback clean out hole w\ Nitrogen jet.
- B. POOH w\ RBP.
- C. Clean out remainder of hole to TD with bailer or Nitrogen.
- D. RIH w\ 2-3/8" production string landed @ $\pm 5450'$ and 7" production packer @ 3250'.
- E. RIH w\ 1-1/4" production tbg landed @ 3100'.
- F. Tie in surface equipment and test.

Prepared by: _____
Terry D. Gottberg
Engineer

concur: _____
Sourcing Team Rep.

cc: Well File
Gilbert Hughes (Farmington)
Greg Vick (Farmington)

Existing Wellbore

Hubbard LS #2

1650' FNL & 990' FWL, Sec. 9
T31N-R12W, San Juan Co., NM

GLE: 6476'

KBE: 6489'

SURFACE CASING

9 5/8", 36#, K-55, STC @ 172'

TOC @ Surface

TUBING

2 3/8", 4.7#, J-55, EUE @ 5536'

INTERMEDIATE CASING

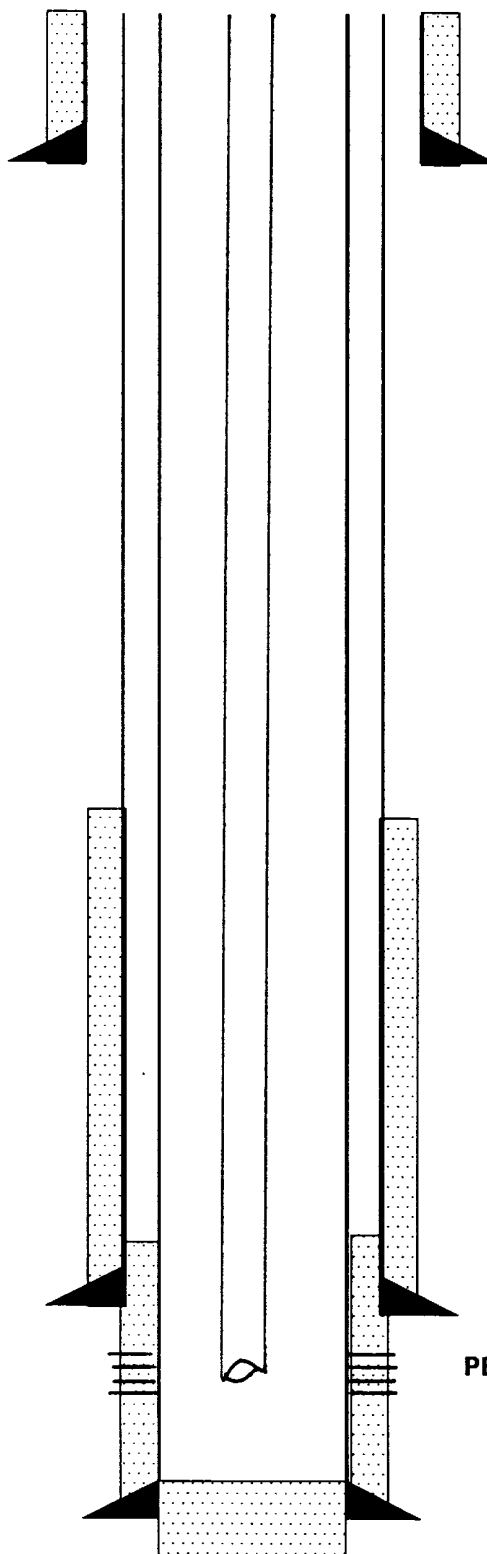
7", 23#, K-55, STC @ 5290'

TOC @ 4150' (TS)

PRODUCTION CASING

4 1/2", 10.5, K-55, STC @ 5652'

w\ 100 sxs.



PERFS: 5334-42, 5360-68, 5448-56,
5518-22, 5542-46 (1 spf)

PBTD: 5637'

TD: 5652'

DATE: 1-20-94

Proposed
Wellbore

Hubbard LS #2

1650' FNL & 990' FWL, Sec. 9
T31N-R12W, San Juan Co., NM

RECEIVED

AUG 17 1994

D. C. D.
ARTESIA OFFICE

GLE: 6476'
KBE: 6489'

SURFACE CASING

9 5/8", 36#, K-55, STC @ 172'
TOC @ Surface

TUBING

2 3/8", 4.7#, J-55, EUE @ 5536'

INTERMEDIATE CASING

7", 23#, K-55, STC @ 5290'
TOC @ 4150' (TS)

PRODUCTION CASING

4 1/2", 10.5, K-55, STC @ 5652'
w/ 100 sxs.

PC Perfs: 3077-95, 3111-18 (2 spf)

Perfs: 4650, 87, 4723, 25, 27, 31,
33, 48, 50, 52, 4830, 34, 38, 48,
52, 56, 72, 75, 78, 83, 86, 91,
4957, 61, 65. (1 apf)

PERFS: 5334-42, 5360-68, 5448-56,
5518-22, 5542-46 (1 spf)

PBTD: 5637'

TD: 5652'

DATE: 1-20-94

