FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004 Form 3160-3 (September 2001) **UNITED STATES** Lease Serial No. NM-109407 DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. 1a. Type of Work: 🗶 DRILL REENTER 8. Lease Name and Well No. Strat 1b. Type of Well: O Oil Well O Gas Well O Other O∖ Single Zone O Multiple Zone Federal Strat Test C-1C Name of Operator 9. API Well No. Northstar Oil and Gas 30045 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PO Box 93, Farmington, NM 87499 505-327-5751 Wildean Mancos 11. Sec., T., R., M., or Bik. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.*) 1214' FNL 1478' FEL NWNE Sec 35 T24N R11W 🧢 Same as Above At proposed prod. zone 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* 12.5 Southwest of Blanco Trading Post San Juan County NM Distance from proposed 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest 1214' property or lease line, ft. 1280 NA to be plugged (Also to nearest drig. unit line, if any) 20. BLM/BIA Bond No. on file 18. Distance from proposed location* 19. Proposed Depth to nearest well, drilling, completed, applied for, on this lease, ft. 0000932 RLB 22. Approximate date work will start* 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) -6340 KB 6540 Upon approval 10 days 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. Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. 25. Signature Name (Printed/Typed) John C. Corbett Title Approved by Name (Printed/Typed) David J. Mankiewicz Title Office

A pplication approval does not warrant or certify the 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.

*(Instructions on reverse)

DMILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3185.4

DISTRICT I 1825 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

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

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

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

Certificate Number

☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

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Form 3160-5 (June 1990)

UNITED STATES

DEPARTMENT OF THE INTERIOR

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993 Designation and Serial No.

BUREAU OF 1	J. Lea	NM -109407			
	6. If Ir	ndian, Allottee or Tribe Name			
	AND REPORTS ON WELLS		•		
Do not use this form for proposals to d	•	rent reservoir.			
Use "APPLICATION F	OR PERMIT - " for such proposals	7.161	nit or CA, Agreement Designation		
SUBMI					
1. Type of Well					
Oil Well Gas Well X Other		li Name and No.			
2. Name of Operator		Federal Strat Test C-1C			
Northstar Oil and Gas Corp.		9. AP	I Well No.		
3. Address and Telephone No.	7400 (505) 227 5754				
P.O. Box 93, Farmington, NM 8 4. Location of Well (Footage, Sec., T., R., M., or Survey I			10. Field and Pool, or Exploratory Area		
1214' FNL & 1478' FEL	to in paori,		Indesignated - Strat Test Ounty or Parish, State		
Section 35, T24N, R11W NMPN			San Juan Co., NM		
12 CHECK APPROPRIATE BOX(s			T, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACT	TION			
X Notice of Intent	X Abandonment		hange of Plans		
	Recompletion	<u> </u>	ew Construction		
Subsequent Report	Plugging Back	N	on-Routine Fracturing		
	Casing Repair	w	ater Shut-Off		
Final Abandonment Notice	Altering Casing	c	onversion to Injection		
	Other	D	ispose Water		
			results of multiple completion on Well Recompletion Report and Log Form.)		
13. Describe Proposed or Completed Operations (Clearly state a					
subsurface locations and measured and true vertical depths for a	markers and zones pertinent to this work.)*				
This well is planned to be drilled	as a Stratigraphic Test Well				
No completion is to be attempted	_ ,	tely plugged			
Cement plugs will be set:	. It was be drained and minicula	tory pluggod.			
From surface to 50'					
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14. I hereby certify that the foregoing is true and correct	1				
Signed Signed	Title President	Date	March 20, 2003		
(This space for Federal or State office use)					
Approved by Original Signed: Stephen	Mason Title	Date	4/14/13		
Conditions of approval, if any:			•		
Title 19 I S C Section 1001 makes it a crime for any necess kee	singly and willfully to make to any department or a				

representations as to any matter within its jurisdiction.

Northstar Oil and Gas Corp. Federal Strat Test 1C-1 1214' FNL, 1478' FWL NWNE Sec. 35, T24N, R11W San Juan County, New Mexico

The Federal Strat Test 1C-1 is to be drilled on Federal surface and minerals administered by the Bureau of Land Management. The proposed location is approximately 13.5 miles SW of NM-44 from the Blanco Trading Post. Drilling and plugging operations will last approximately ten days. All operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of this application and any conditions of approval will be furnished to the field representative to insure compliance.

Drilling Program:

1. Estimated Tops of Important Geologic Markers:

<u>Formation</u>	Depth(TVD)	<u>Subsea</u>
Alluvium	0'	<u>0'</u>
Kirtland Formation	30'	6,502
Fruitland Formation	637'	5,895'
Pictured Cliffs Sandstone	965'	5,567'
Cliff House Sandstone	1,692'	4,840'
Mancos Shale	3,531'	3,001'
T.D.	4,000'	2,532'

All tops are projected from the Roadrunner #1, Sec. 36, T24N, R11W

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Substance	Formation	Depth(TVD)
Gas	Fruitland Coal	925'
Water	Cliff House	1,692'
Other Mineral Zones	N/A	N/A

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

- 3. Pressure Control Equipment: The BOP to be used is detailed in the attached diagram. An upper Kelly cock valve will be employed with an accessible handle
- 4. Mud Program:

The surface hole will be drilled with a gel-lime slurry mixed to 40 – 50 sec./qt viscosity. Beneath surface mud will be conditioned for coring operations.

NORTHSTAR OIL AND

P.O. Box 93

Farmington, NM 87499

(505) 327-5751

April 11, 2003

070 Farmington, NM

Mr. Stephan Mason Bureau of Land Management 1235 La Plata Highway Farmington, NM 87401

Subject: Additional Technical Information

Application to Drill Federal Strat Test 1C-1

Dear Mr. Mason:

Please accept this letter as an addendum to Part 6 of the drilling plan of the referenced APD.

The surface hole will be a 7" hole drilled to 300' GLE. The 4.5" casing will be cemented back to surface with 100 sacks of Class "B" cement (yield = 1.18 cf/sack) which is 150% excess.

(0.1568 cubic ft / linear ft)(300') = 47.04 cubic ft 47.04 cubic ft / 1.18 cubic ft/sack class B = 39.9 sx(100 sx / 39.9 sx) - 1 = 150% excess

We will wait on surface cement 12 hours to obtain a compressive strength of 500# before drilling out.

We will test the BOP to 1250#.

(4000' depth)(0.433 #/ft gradient)(70%) = 1212.4#

For plugging purposes, the stratigraphic test hole will be 3.5" O.D. The 100' minimum plugs will be 10 sx class B each which is 76% excess.

(0.0668 cubic ft/linear ft)(100') = 6.68 cubic ft6.68 cubic ft / 1.18 cubic ft/sack class B = 5.66 sx (10 sx / 5.66 sx) - 1 = 76% excess

Please contact Northstar Oil and Gas at (505) 327-5751 with any questions.

Respectfully,

Northstar Oil and Gas Corp.

la C. Calita

John C. Corbett

President

Northstar Oil and Gas Corp. Federal Strat Test 1C-1 1214' FNL, 1478' FWL NWNE Sec. 35, T24N, R11W San Juan County, New Mexico

Fluid properties will be:

Weight – 8.4 to 8.8 #/gallon
Viscosity – 34-45 sec. qt
Plastic Visc. – 4-8 cps
Fluid Loss – 8-12 cc's API
pH 8.3 – 8.5
Solids Content – 5-1/2% or less
Annular velocity – 120'/min during normal drilling

Sufficient quantities of mud materials will be maintained or readily accessible for the purpose of assuring well control during the course of drilling operations.

5. Testing, Logging and Coring

This well will be cored in potential pay zones. Open hole logs will include induction-electric and gamma logs for correlation purposes. Drill stem testing is not anticipated. There will be no cased hole logs run as there will be no production casing.

6. Proposed Casing and Cementing Program will be as follows:

Surface casing will be 300' of 4.5", 10.5# J-55 ST&C new casing. It will be cemented to surface using three centralizers and 200 sacks Class "B" cement with 2% CaCl and 1/4#/sack cellophane flakes. Cement will be displaced with water to 30' above the shoe. Rig will wait on cement until a compressive strength of 500# is reached.

There will be no production casing. After drilling operations are completed the hole will be plugged with class "B" cement as follows:

- 1. Circulate and condition hole to clean with mud.
- 2. Mix and pump class "B" cement plugs as follows: From surface to 50'

A 100' plug across the surface casing shoe with 100% excess.

A 100' plug across the top of the Fruitland Formation with 100% excess.

A 100' plug across the Pictured Cliffs Formation with 100% excess.

A 100' plug across the top of the Mesa Verde with 100% excess.

7. When the well is completed as a dry hole the "Well Completion and Recompletion Report Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (A.O.).

