

UNITED STATES
DEPARTMENT OF THE INTERIOR - 1 AM 11:15
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078110
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Dugan Production Corp.		7. If Unit or CA Agreement, Name and No.
3a. Address 709 East Murray Drive Farmington, NM 87401	3b. Phone No. (include area code) 505-325-1821	8. Lease Name and Well No. Federal I #101-S
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 1510' FSL and 670' FEL, Lat. 36.75206 N. At proposed prod. zone Same as above. Long. 108.25434 W.		9. API Well No. 30-045-34294
14. Distance in miles and direction from nearest town or post office* Approx. 1/2-miles East of Farmington, New Mexico		10. Field and Pool, or Exploratory Basin Fruitland Coal
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 670 Feet	16. No. of acres in lease 2497.51 Acres	11. Sec., T. R. M. or Blk. and Survey or Area I Sec. 1, T29N, R14W NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1150 Ft.	19. Proposed Depth 1260 Feet	12. County or Parish San Juan
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-5441'	22. Approximate date work will start* ASAP	13. State NM
23. Estimated duration 5-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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature *Kurt Fagrelus* Name (Printed/Typed) Kurt Fagrelus Date April 30, 2007

Title Geologist

Approved by (Signature) *[Signature]* Name (Printed/Typed)

Date

Title

Office

Application approval 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.
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 page 2)

A water based gel mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 970' - 1110'. The interval will be fracture stimulated.

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

RCVD JUL 2 '07
OIL CONS. DIV.
DIST. 3

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

7-17-07 NMOCB

BH

80

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

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-102
Revised February 21, 1994

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

2007 MAY -1 AM 11:15

AMENDED REPORT
RECEIVED
BLM

210 FARMINGTON, NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-3429		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 3682	*Property Name FEDERAL I		*Well Number 101S
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 5441'


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
I	1	29N	14W		1510	SOUTH	670	EAST	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 320.0 Acres - (5/2)					¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

16 1254.00' LOT 4	5280.00'			1320.00' LOT 1	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Kurt Fagrelis</i> Signature Kurt Fagrelis Printed Name Geologist Title May 1, 2007 Date
	1320.00'	LOT 3	LOT 2		
1 DUGAN SF-078110					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, APRIL 14, 2006 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269
2640.00'	5253.60'			LAT: 36.75206°N LONG: 106.25434°W DATUM: NAD1983 670' 1510'	

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045- 34294
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease Federal <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Dugan Production Corp.		6. State Oil & Gas Lease No. Federal SF-078110
3. Address of Operator 709 East Murray Drive, Farmington, New Mexico 87401		7. Lease Name or Unit Agreement Name Federal I
4. Well Location Unit Letter <u>I</u> : <u>1510</u> feet from the <u>South</u> line and <u>670</u> feet from the <u>East</u> line Section <u>1</u> Township <u>29N</u> Range <u>14W</u> NMPM County <u>San Juan</u>		8. Well Number #101-S
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5441' G.L.		9. OGRID Number 006515
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type <u>Drilling</u> Depth to Groundwater <u>+100'</u> Distance from nearest fresh water well <u>+1000'</u> Distance from nearest surface water <u>+200'</u>		
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u> </u> bbls; Construction Material <u>Synthetic</u>		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:
REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Reserve pit for drilling (lined) ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 970' - 1110'. The interval will be fracture stimulated.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOC guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Note: Modified only to comply with Federal stipulations.

SIGNATURE Kurt Fagrelus TITLE Geologist DATE April 30, 2007
Kurt Fagrelus kfagrelus@duganproduction.com 505-325-1821

Type or print name
For State Use Only

E-mail address: Deputy Oil & Gas Inspector,
District #3 Telephone No.

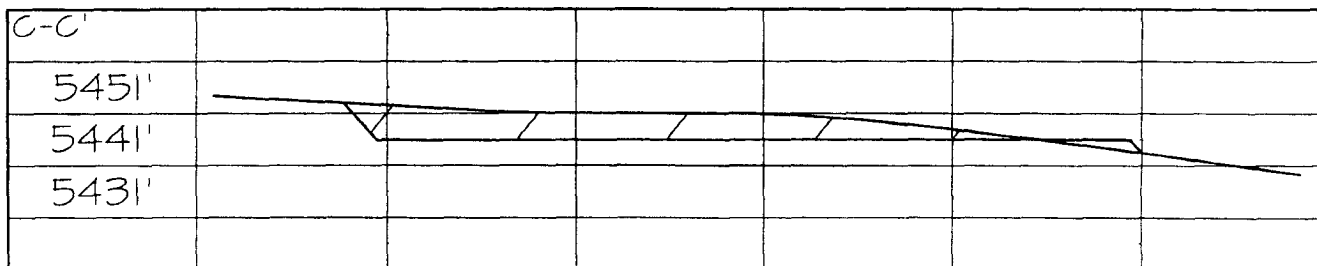
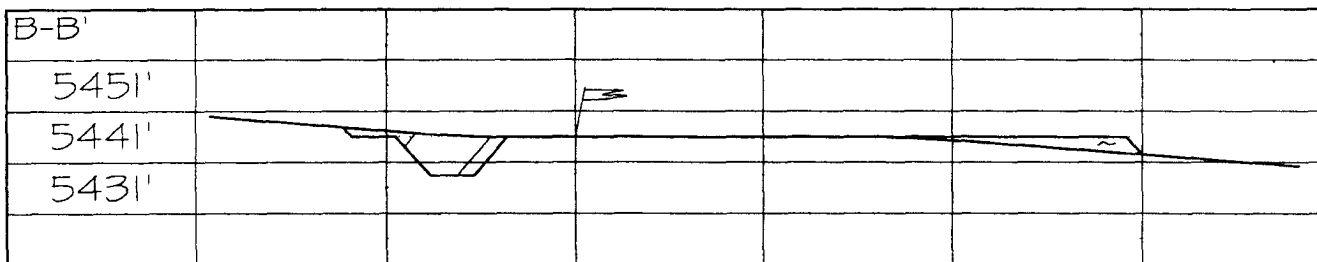
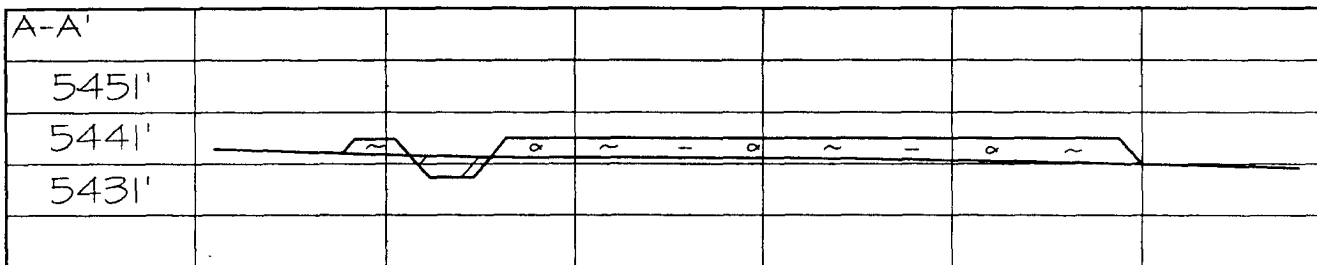
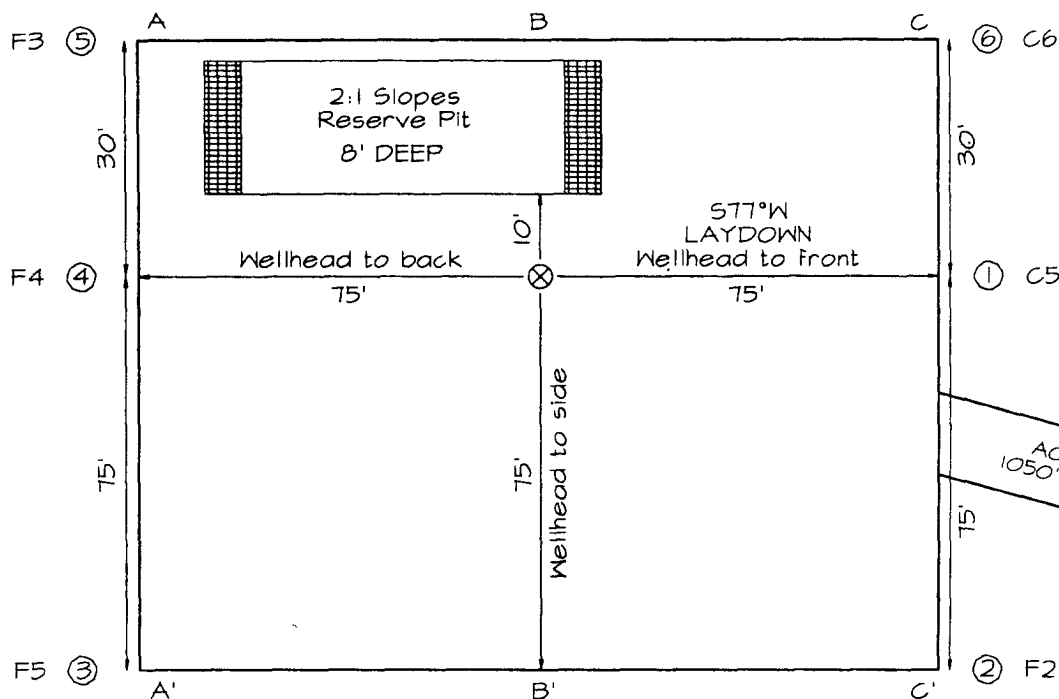
APPROVED BY: [Signature] TITLE DATE JUL 17 2007
Conditions of Approval (if any):

DUGAN PRODUCTION CORPORATION FEDERAL I #101S
1510' FSL & 670' FEL, SECTION 1, T29N, R14W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5441'

LATITUDE: 36.75206° N
LONGITUDE: 108.25434° W
 DATUM NAD1983

PLAT NOTE:

SURFACE OWNER
 Fee Land



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

EXHIBIT B
OPERATIONS PLAN
Federal I #101-S

APPROXIMATE FORMATION TOPS:

Kirtland	Surface
Fruitland	770'
Pictured Cliffs	1110'
Total Depth	1260'

Catch samples every 10 feet from 900 feet to total depth.

LOGGING PROGRAM:

Run cased hole GR-CCL-CNL from total depth to surface.

CASING PROGRAM:

<u>Hole</u> <u>Size</u>	<u>Casing</u> <u>Size</u>	<u>Wt./ft.</u>	<u>Setting</u> <u>Depth</u>	<u>Grade and</u> <u>Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	1260'	J-55

Plan to drill a 12-1/4" hole and set 120' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 14#, J-55 production casing will be run and cemented. Cased hole GR-CCL-CNL log will be run. Productive zone will be perforated and fractured. After frac, the well will be cleaned out and production equipment will be installed.

CEMENTING PROGRAM:

Surface: Cement to surface with 70 cf Class B + 2% CaCl₂.
Circulate to surface.

Production Stage-Cement with 115 cf 2% lodense with
1/4# celloflake/sx followed by 80 cf Class "B" with
1/4# celloflake/sx.
Total cement slurry for production stage is 195 cf
Circulate cement to surface.

An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers will be determined based on API standards. Centralizers to impart a swirling action around

the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

WELLHEAD EQUIPMENT:

Huber 8-5/8"x5-1/2" casing head, 1000# WP, tested to 2000#.
Huber 5-1/2"x2-7/8" tubing head, 1000# WP, tested to 2000#.

BOP and Related Equipment will include for a 2000 psi system:

(Exhibit D)

Annular preventer, double ram, or 2 rams with one being blind and one being a pipe ram.

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string connections in use.

Pressure gauge on choke manifold.

2" minimum choke line.

Fill-up line.

Contacts:

Dugan Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 (H)
	320-8247 (M)

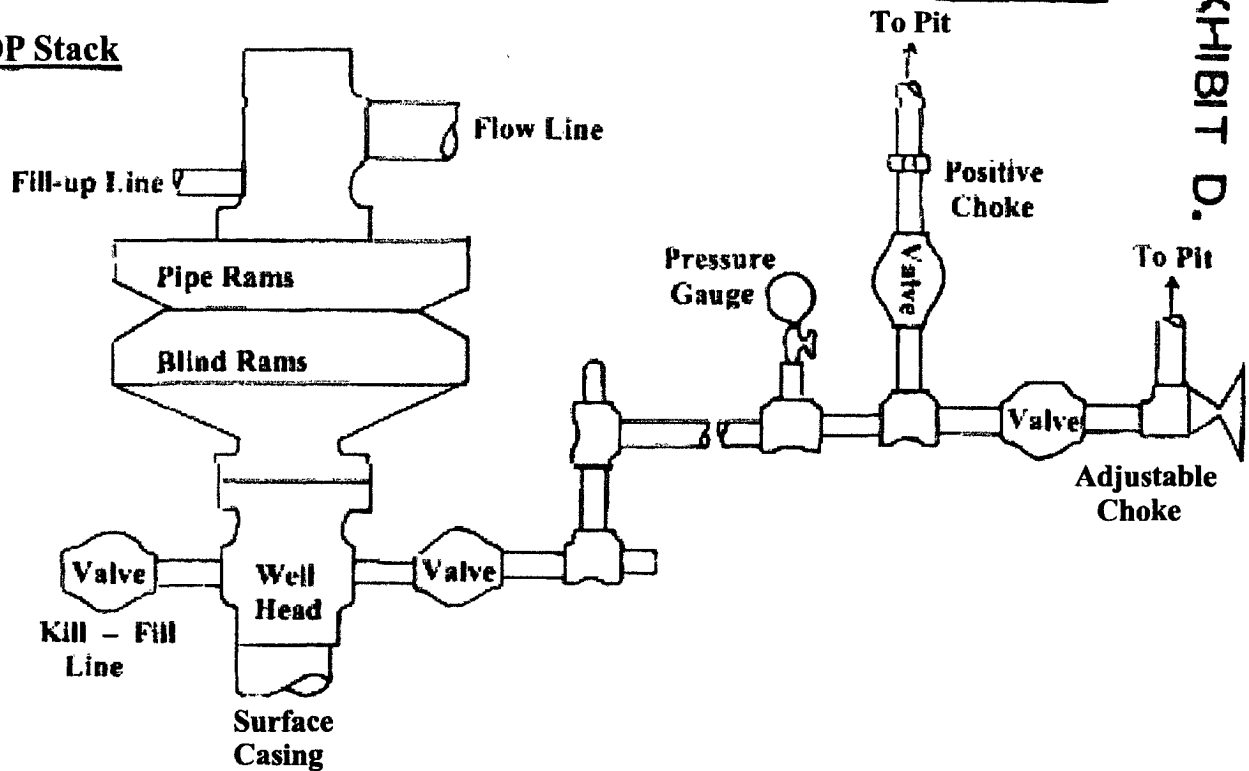
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

John Alexander	325-6927 (H)
	320-1935 (M)

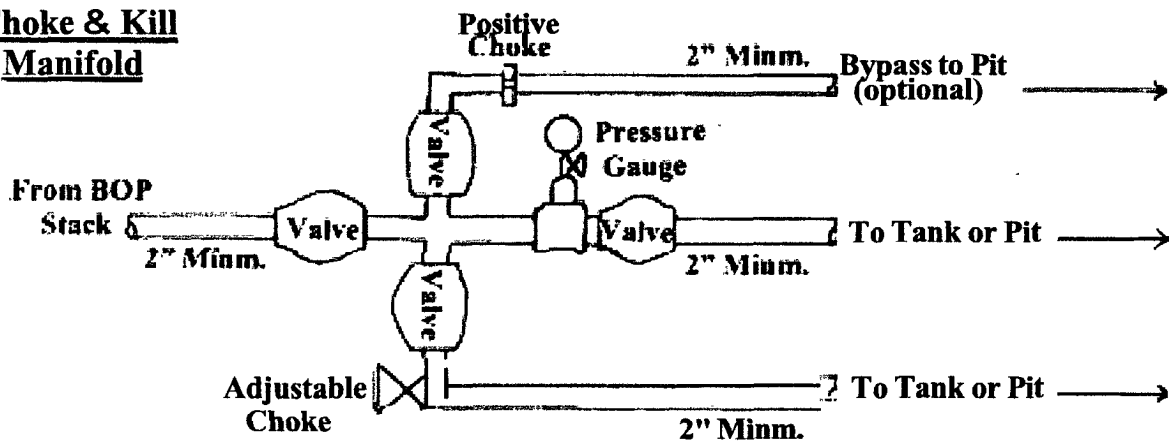
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment is 2,000 psi or greater

DUGAN PRODUCTION CORP.
Federal I #101-S