

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

SG Interests I, LTD c/o NIKA Energy Operating

3a. Address

P.O. Box 2677 Durango, CO 81302

3b. Phone No. (include area code)

(970) 259-2701

4. Location of Well (Report location clearly and in accordance with any State requirements. \*)

At surface 1980' FNL & 660' FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*

approximately 17 miles southeast of Corrales, New Mexico

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

1,576.96

17. Spacing Unit dedicated to this well

N/2 320

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.

See attached map

19. Proposed Depth

655'

20. BLM/BIA Bond No. on file

NM 1935

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6,728 GR

22. Approximate date work will start\*

as soon as permitted

23. Estimated duration

1 month

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

Name (Printed/Typed)

Date

Title

President NIKA Energy Operating/ Agent for SG Interests I, LTD

William Schwab III

6/28/06

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

FFO

8/2/06

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 reverse)

SG Interests I, LTD. proposes to drill a well to develop the Basin Fruitland Coal formation at the above described location in accordance with the attached drilling and surface use plans.

The surface is under jurisdiction of the Bureau of Land Management, Farmington Field Office.

This location has been archaeologically surveyed by Aztec Archaeological Consultants. Copies of their report have been submitted directly to the BLM.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1381 W. Grand Avenue, Artesia, NM 88210  
District III  
1900 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised June 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number <b>30-031-21093</b>	Pool Code <b>71629</b>	Pool Name <b>Basin Fruitland Coal</b>
Property Code <b>35912</b>	Property Name <b>FEDERAL 20-6-8</b>	Well Number <b>2</b>
OGRID No. <b>20572</b>	Operator Name <b>SG INTERESTS I, LTD.</b>	Elevation <b>6728'</b>

**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
<b>E</b>	<b>8</b>	<b>20N</b>	<b>6W</b>		<b>1980</b>	<b>NORTH</b>	<b>660</b>	<b>WEST</b>	<b>McKINLEY</b>

**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

Dedicated Acres <b>320 M/2</b>	Joint or Infill	Consolidation Code	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 80.0 ch. 1980' 660' LAT. 35.98115° N LONG. 107.50281° W	N 89°57' W	80.08 ch.	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>[Signature]</i> Printed Name: <b>William Schwab</b> Title and E-mail Address: <b>Acquisitions, SG Interests</b> Date: <b>11/1/05</b>
N 0°03' W 800'			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: <b>October 30, 2005</b> Signature and Seal of Professional Surveyor: <i>[Signature]</i> <b>WILLIAM E. MAHNKE II</b> Certificate Number: <b>8466</b>
	N 89°53' W	79.96 ch.	

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

WELL API NO.  
30-031-21093  
5. Indicate Type of Lease  
STATE ☐ FEE ☐ FED ☒  
6. State Oil & Gas Lease No.  
Federal NM 113428

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)		7. Lease Name or Unit Agreement Name Federal 20-6-8
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		8. Well Number #2
2. Name of Operator SG Interests I, Ltd		9. OGRID Number
3. Address of Operator C/O Nika Energy Operating, PO Box 2677, Durango, CO, 81303		10. Pool name or Wildcat Basin Fruitland Coal
4. Well Location Unit Letter <u>E</u> : <u>1980</u> feet from the <u>North</u> line and <u>660</u> feet from the <u>West</u> line Section <u>8</u> Township <u>20N</u> Range <u>6W</u> NMPM County <u>McKinley</u>		
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>6,728'</u>		
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type <u>Drilling</u> Depth to Groundwater <u>&gt;100ft</u> Distance from nearest fresh water well <u>&gt;1,000 ft</u> Distance from nearest surface water <u>&gt;800 feet</u>		
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>1000 Bbls</u> ; 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 ☐

OTHER: Pit Application ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

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.

Drilling Pit application for New Well.

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 NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE William Schwab III TITLE Agent for SG Interests, Ltd. DATE 6/28/06

Type or print name William Schwab III

E-mail address: tripp@nikaenergy.com

Telephone No. 970-259-2701

For State Use Only

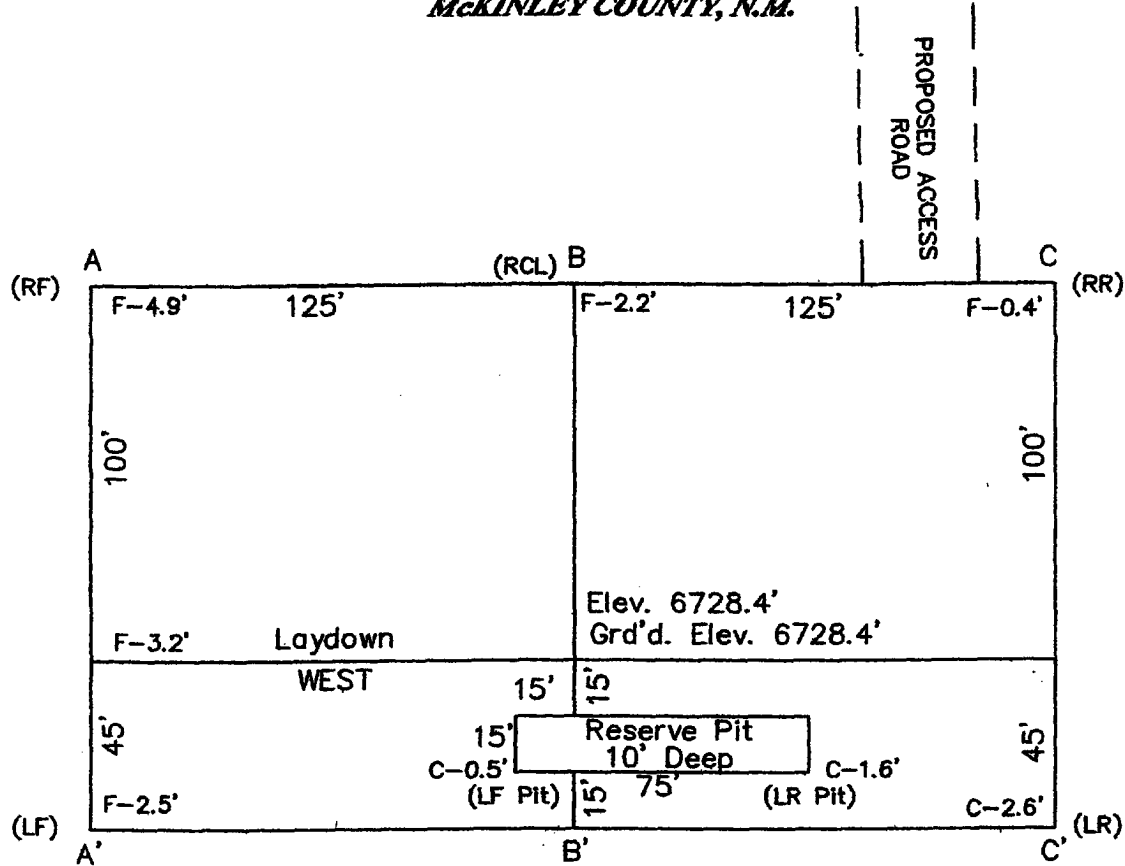
APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. # DATE AUG 03 2006

Conditions of Approval (if any):

# SG INTERESTS I, LTD.

FEDERAL 20-6-8 #2

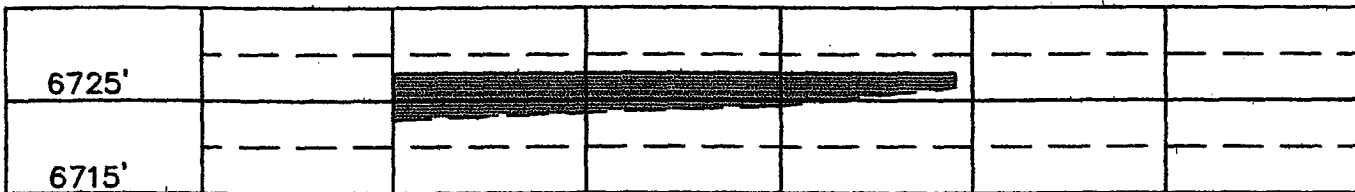
1980' FNL, 660' FWL SECTION 8, T20N, R6W, NMPM  
McKINLEY COUNTY, N.M.



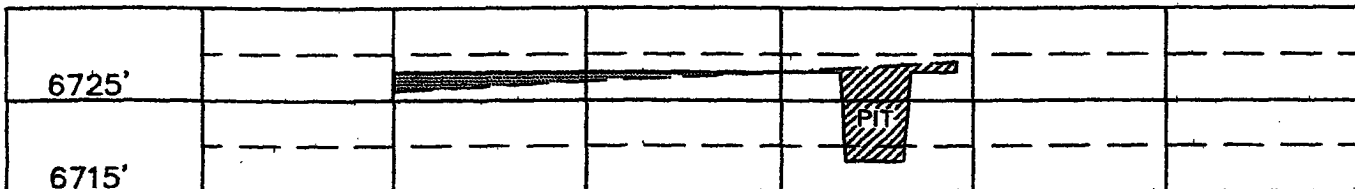
Scale: 1"=50'



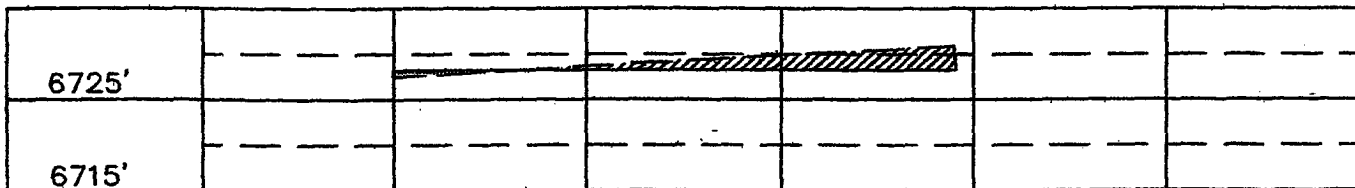
A-A' Vert.: 1"=20' Horiz.: 1"=50' C/L



B-B'



C-C'



SG Interests I, Ltd.  
(Agent: Nika Energy Operating, LLC)  
PO Box 2677  
Durango, CO 81302  
(970) 259-2701

Federal 20-6-8 #2  
SWNW Sec 8-20N-R6W  
1980' FNL & 660' FWL  
McKinley County, New Mexico

### EIGHT POINT DRILLING PROGRAM

1. Estimated Formation Tops:

Ojo Alamo	surface
Kirtland	105'
Fruitland	280'
PC	505'
Total Depth	655'

2. Estimated Depth of Anticipated Minerals:

Fruitland (Gas)	480'
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3. Minimum Specifications for Pressure Control Equipment:

BOP equipment and accessories will meet or exceed BLM requirements outlined in 43 CFR Part 3160.

A 2000 psig double ram hydraulic BOP will be used (see attached diagram). Accessories to the BOP will meet BLM requirements for a 2000 psig system. The accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill line, kill line and line to choke manifold will be 2". BOP's will be function tested every 24 hours and will be recorded on IADC log.

Surface casing will be tested to 1500 psig for 30 minutes.

## Eight Point Drilling Program - Federal 20-6-8 #2

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Accessories to BOPE will include upper and lower Kelly cocks with handles, stabbing valve to fit drill pipe on floor at all times, string float at bit, 2000 psig choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge.

#### 4. Casing and Cementing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg Size</u>	<u>Wt. Grd. Jt</u>
12-1/4"	0-150'	7" 45/8"	20#, J-55, STC
7-7/8"	0-655'	4-1/2"	10.5#, J-55, STC

Surface Casing will be cemented with 140 sx (165 cu ft) class B w/2% CaCl and 1/4#/sx of celloflake (Yield = 1.18 cuft/sx, Weight = 15.6 #/gal). Cement volumes include excess to circulate cement to surface. A guide shoe, insert float and three (3) centralizers will be used. WOC time is 8 hours. The casing will be pressure tested to 1500 psig.

Production Casing will be cemented with <sup>180</sup>80 sx <sup>212</sup>(118 cu ft) class B w/2% CaCl and 1/4#/sx celloflake (Yield = 1.18 cuft/sx, Weight = 15.6 #/gal). Cement volume includes excess to circulate cement to surface. In the event cement is not circulated a temperature survey will be run to determine the actual cement top. Cementing equipment will include a guide shoe, float collar and 7 centralizers. Class G or H cement may be used depending on availability of Class B. *per Tripp Schwab 7/31/00*

#### 5. Mud Program:

A native water based mud system (FW) will be used initially followed by a low-solids, non-dispersed gel system (LSND) as needed to condition the hole for logs. Adequate amounts of lost circulation and weighting material will be on location if needed as well as sorbitive agents to handle potential spills of fuel or lubricants.

<u>Depth</u>	<u>Type</u>	<u>Wt (ppg)</u>	<u>Vis (sec)</u>	<u>Wtr loss</u>
0-150'	FW	± 8.5	30-33	NC
150'-TD	FW & LSND	± 8.7-9.1	30-50	8-10 cc

NIKA ENERGY OPERATING, LLC  
SG INTERESTS I, LTD.

WELL NAME: Federal 20-6-8 #2

FIELD NAME: Basin Fruitland Coal

LOCATION: Sec 8-T20N-R6W  
UL E; 1980' FNL & 660' FWL  
McKinley County, New Mexico

PROPOSED TD: 655'

DRILLING SKELETON:

<u>Interval</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Depth</u>
Surface	12-1/4"	8-5/8"	150'
Production	7-7/8"	4-1/2"	655'

MUD PROGRAM:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Weight</u>	<u>Funnel Viscosity</u>	<u>Water Loss</u>
0 - 150'	Native	8.5 - 9.1	30 - 50	N/C
150' - TD	Native/LSND	8.5 - 9.1	30 - 50	8 - 10

CORE PROGRAM: None

ELECTRICAL LOGGING PROGRAM: Openhole logs will include a GR/Caliper and a DIL/Formation Density log from TD to the surface casing shoe

Fruitland Drilling Program - Federal 20-6-8 #2

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CASING AND CEMENTING PROGRAM:

<u>Interval</u>	<u>Size, Wt, Grade, Thread</u>	<u>Depth</u>	<u>Cement</u>
Surface	8-5/8", <sup>24#</sup> 20#, J-55, ST&C	150'	140 sx Class B w/2% CaCl + 1/4#/sx celloflake
Production	4-1/2", 10.5#, J-55, ST&C	TD	80 sx Class B. Both slurries to contain 1/4#/sx celloflake.

WELLHEAD: 3000# Independent Style

BLOWOUT PREVENTION EQUIPMENT REQUIREMENTS:

<u>Description</u>	<u>Rating</u>
Double Ram Type Preventer	2000 psi
Rotating Head	2000 psi

BOPE testing will be done by third party testers in accordance with Onshore Order No. 2. The test must be performed and recorded using a test pump, calibrated test gauges and properly calibrated strip or chart recorder. The test gauges and recorders must be of the proper range and resolution commensurate with the authorized test pressure. The test must be recorded in the driller's log and will include a low pressure test requirement of 250 psig held for 5 minutes and a high pressure test requirement held for 10 minutes. Casing pressure tests must be held for 30 minutes with no more than 10 percent pressure drop during the test.



## Fruitland Drilling Program - Federal 20-6-8 #2

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### GEOLOGIC PROGNOSIS:

Elevations: GL ~ 6728', KB ~ 6733'

### Formation Tops:

<u>Formation</u>	<u>Depth</u>
Ojo Alamo	surface
Kirtland	105'
Fruitland	280'
Coal Top	480'
PC	505'
Total Depth	655'

Note: TD will be 150' below the lowest coal. The company man will be on location once coals are penetrated until TD to monitor drilling breaks and to insure that 150' of rathole is drilled. When the hole is logged, if a coal zone is indicated within 150' of bottom, additional hole is to be drilled to provide 150' of rathole. Log of offset well(s) (Federal 20-6-4 #4, Federal 20-6-3 #3) are enclosed for correlation.

### MUD PROGRAM:

A fresh water native mud (using lime, benex & gel additions) will be used to drill the surface hole. The 7-7/8" hole should be drilled with native mud and a LSND mud as necessary for hole stability just before the top of the Fruitland formation is encountered.

At the top of the Fruitland formation mud weights should be sufficient to control pressures; viscosity should be in the 30 - 50 sec range with a water loss of 8 - 10 cc, as needed.

The Fruitland Coals are expected to be under-pressured to normal-pressured and may encounter lost circulation. LCM should be stored on location and used as needed in the event of lost circulation. Barite should also be on location in the event an over-pressured zone is encountered and a kick is taken.

### CASING AND CEMENTING PROCEDURE:

Note: Notify BLM 24 hours prior to spud and testing of BOP's and cementing. 505-599-8907. Note the new (June 1, 2005) Federal (BLM) requirements for the testing and test recording of the Blow-out Preventer Equipment. A copy is attached to the approved APD.

#### Surface Casing:

1. Drill to a minimum of 150' to accommodate tallied 8-5/8" casing plus 3'. Casing tally to be taken on location.
2. Use a landing joint of 8-5/8" casing to set casing at ground level. Guide shoe on casing should be not more than 2 feet off bottom. Casing head flange to be set at ground level.
3. Displace hole with casing volume of fresh water ahead of cement.
4. Pump Class B cement with 2% CaCl at 5-7 barrel per minute.
5. Drop top plug and displace with fresh water when preflush returns are observed at the surface. Do not over-displace.
6. If plug does not bump, hold pressure for a minimum of three hours.
  - a. Wait on cement a minimum of 8 hours or until surface samples are hard \*, whichever is longer before nipping up the BOP. Install test plug in casing head and pressure test stack to 2000 psig for 30 minutes.
    1. \* Note: The BLM requirement is a minimum of 250 psi @ 60degrees F compressive strength before BOP may be nipped up.
    2. Notes: Use a standard 8-5/8" guide shoe, a 8-5/8" insert float, 3 centralizers and 1 stop ring. Set insert on top of first joint. Bakerlok shoe, float collar and bottom two joints of casing.

Production Casing:

1. Roll casing off truck with thread protectors in place.
2. Visually inspect, rabbit, number, and tally casing on racks. Remove thread protectors and clean threads. Use quick release protectors while running casing. Do not move or roll casing without thread protectors in place.
3. Change out pipe rams to accommodate 4-1/2" casing.
4. Bakerlok 4-1/2" float shoe to bottom of first joint of casing.
5. Bakerlok 4-1/2" differential float collar to top of first joint of casing. Bakerlok second joint of casing into top of float collar. Run "marker joint" 100' above top coal as per openhole logs.
6. Casing should be made up to proper torque (1320 ft-lb for 10.5# or 1540 ft-lb for 11.6#) using an API thread compound.
7. Casing should be run no faster than 2 feet per second (20 seconds per 40 foot joint). At the first indication of mud loss, the running time should be doubled to 40 seconds per joint (1 foot per second).
8. Break circulation at 300 feet and 550 feet and circulate a minimum of 15 minutes. Make sure that the hole is not flowing. Adjust mud properties as necessary. Circulate the last joint of casing to TD. Kick pumps in slowly to minimize surge pressures.
9. Turbolizing centralizers should be run on each of the first 7 joints. A stop-ring should be used to hold the first centralizer in place. Place the remaining centralizers on collars.
10. After casing is landed at TD, circulate hole until mud properties measured at the flowline are within the ranges given in the "Mud Program" of this drilling prognosis.
11. Rig up rotational cementing head and return lines. Chixson should be long enough to allow 25'-30' reciprocation.
12. Pump 10 barrels of fresh water. Pump 20 barrel chemical wash. Pump cement slurry. Wash lines.
13. Drop top plug and displace with water. Do not over-displace. Pipe should be rotated at 10-20 RPM or reciprocated at least 20 feet every two to three minutes throughout displacement.
14. Bump plug with 500 psi over final displacement pressure. Hold pressure for 5 minutes. If plug does not bump, hold initial shut down pressure on casing for 5 minutes. Then check to see that float is holding (flow back into cement pump tank).

## Fruitland Drilling Program - Federal 20-6-8 #2

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### Production Casing cont.

15. Set slips, cut off casing and nipple down BOP. A thread protector or some other appropriate obstruction should be placed on the top of the casing stub to prevent loss of material downhole.

### Cement Slurry Designs and Notes

<u>Slurry</u>	<u>Cement &amp; Additives</u>	<u>Water Requirements</u>	<u>Weight</u>	<u>Yield</u>
Production cu.ft/sk	Class B + 1/4#/sx celloflake	5.2 gals/sx	15.6 ppg	1.18

Figure slurry volume as follows: Calculate slurry using caliper volume + 50% excess.  
Cement volume shown in this prognosis is based on hole and casing size and surface/long string annular volumes plus percentage excess shown above.

### NOTES:

1. Pump rates should be a minimum of 4 BPM through displacement.
2. Slurry weights should be measured using a mud balance at least every 10 minutes during mixing.
3. At least two samples of the tail should be caught and monitored at room temperature for thickening time.
4. Run Temperature Log if cement does not circulate.

Blow Out Preventer (BOP) Exhibit #1

2-M SYSTEM

