

RECEIVED

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

DEC 31 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

Bureau of Land Management  
Farmington Field Office

5. Lease Serial No.

NMNM 099732

6. If Indian, Allottee or Tribe Name

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

Federal 21-6-29

8. Lease Name and Well No

1

9. API Well No.

30-043-21056

10. Field and Pool, or Exploratory

Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area

A Section 29, T21N, R6W

12. County or Parish

Sandoval

13. State

NM

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 Lot A: 935' FNL & 980' FEL

At proposed prod. zone

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

approximately 28 miles Southwest of Counselor, New Mexico

15. Distance from proposed\*

location to nearest  
property or lease line, ft.  
(Also to nearest drig. unit line, if any)

935'

16. No. of Acres in lease

2,361.92

17. Spacing Unit dedicated to this well

N/2 320.00 acres

RCVD FEB 7 '08

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

See attached map

19. Proposed Depth

1000'

20. BLM/BIA Bond No. on file

PIB0003277

OIL CONS. DIV.

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

6,889 GR

22. Approximate date work will start\*

as soon as permitted

23. Estimated duration

1 month

DIST. 3

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

William Schwab III

Title

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

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

FEO

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.

A new access road approximately 1002.86' in length would be required for this location.

This APD is also serving as an application for an on-lease pipeline tie of approximately 1002.86 feet; to parallel the proposed access road.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

NMOC

FEB 07 2008

AV

This action is subject to technical and procedural review pursuant to 43 CFR 3165.9 and appeal pursuant to 43 CFR 3165.4

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

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, 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 & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

*API Number 30-043-21056		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 35513	*Property Name FEDERAL 21-6-29		*Well Number 1
*OGRID No. 20572	*Operator Name SG INTERESTS I, LTD.		*Elevation 6889

**10 Surface Location**

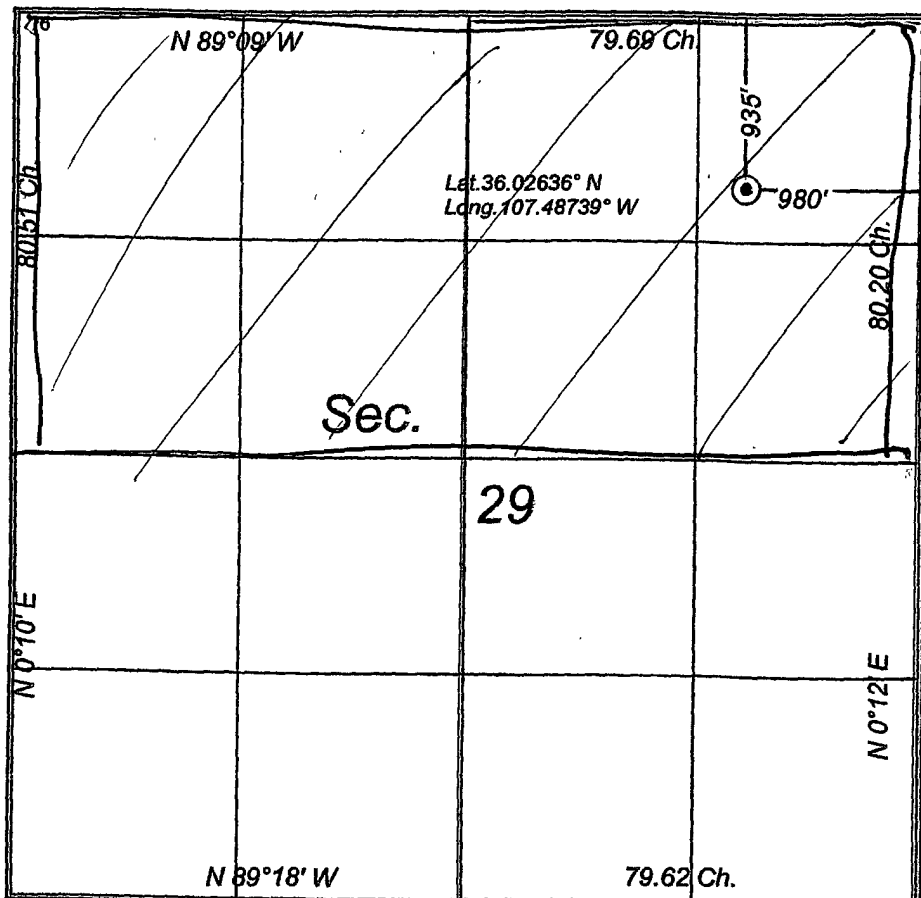
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	21N	6W	935		North	980	East	Sandoval

**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 320 N/2	*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.



**17 OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *William Schwab* Date: 12/27/2007  
Printed Name: William Schwab

**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: 31 Oct 2007  
Signature and Seal of Professional Surveyor: *William E. Mahnke II*  
Certificate Number: 8466

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. <u>30-043-21050</u>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED X
6. State Oil & Gas Lease No. Federal NMNM 099732
7. Lease Name or Unit Agreement Name Federal 21-6-29
8. Well Number #1
9. OGRID Number <u>20572</u>
10. Pool name or Wildcat Basin Fruitland Coal

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.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator SG Interests I, Ltd

3. Address of Operator  
C/O NIKA Energy Operating, PO Box 2677, Durango, CO, 81303

4. Well Location

Unit Letter A: 935 feet from the North line and 980 feet from the East line

Section 29 Township 21N Range 6W NMPM County Sandoval

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6,889'

Pit or Below-grade Tank Application ☒ or Closure ☐

Pit type Drilling Depth to Groundwater >1,000 ft. Distance from nearest fresh water well >1,000 ft Distance from nearest surface water >500 ft

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume 1000 Bbls; Construction Material Synthetic

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: Pit Application ☒

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/Completion pit to be located approximately 15 feet from well head. Pit multi-use drilling and completion to avoid additional site disturbance and pit will be considered out of service once production tubing set. Pit to be 75 feet long by 15 feet wide by 10 feet deep. Pit to be constructed, operated and closed in accordance with NMOC guidelines and SGI procedures

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 ☐.

SIGNATURE William Schwab III TITLE Agent for SG Interests, Ltd. DATE 12/27/2007

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 DATE FEB 07 2008  
Conditions of Approval (if any): District #3

**Sandoval Co., NM**



6890

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

**Federal 21-6-29 #1**  
**NE Sec 29-21N-R6W**  
**935' FNL & 980' FEL**  
**Sandoval County, New Mexico**

**EIGHT POINT DRILLING PROGRAM**

**1. Estimated Formation Tops:**

Ojo Alamo	300'
Kirtland	450'
Fruitland	625'
Coal Top	825'
PC	850'
Total Depth	1000'

**2. Estimated Depth of Anticipated Minerals:**

Fruitland (Gas)	825'
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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.

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"	0-180'	8-5/8"	24.0#, J-55, STC
7-7/8"	0-1000'	4-1/2"	10.5#, J-55, STC

Surface Casing will be cemented with 125 sx (148 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 100% 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 290 sx (342 cu ft) class B w/2% CaCl and 1/4#/sx celloflake (Yield = 1.18 cuft/sx, Weight = 15.6 #/gal). Cement volume includes 50% 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. Type 5 or Class G cement may be used depending on availability of Class B.

**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>
0-180'	FW	± 8.5	30-33	NC
180'-TD	FW & LSND	± 8.7-9.1	30-50	8-10 cc

**6. Testing, Coring and Logging Program:**

No DST's or cores are planned. Openhole logs, if run, will include GR, Induction, Density and Caliper Logs. The GR-Density logs will be run from TD to the top of the Fruitland formation. GR-Induction-Caliper logs will be run from TD to the bottom of the surface casing.

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

**Federal 21-6-29 #1**  
**NE Sec 29-21N-R6W**  
**935' FNL & 980' FEL**  
**Sandoval County, New Mexico**

**EIGHT POINT DRILLING PROGRAM**

**1. Estimated Formation Tops:**

Ojo Alamo	300'
Kirtland	450'
Fruitland	625'
Coal Top	825'
PC	850'
Total Depth	100'

**2. Estimated Depth of Anticipated Minerals:**

Fruitland (Gas)	825'
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**3. Minimum Specifications for Pressure Control Equipment:**

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

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.

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<u>Hole Size</u>	<u>Interval</u>	<u>Csg Size</u>	<u>Wt, Grd, Jt</u>
12-1/4"	0-180'	8-5/8"	24.0#, J-55, STC
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**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>
0-180'	FW	± 8.5	30-33	NC
180'-TD	FW & LSND	± 8.7-9.1	30-50	8-10 cc

**6. Testing, Coring and Logging Program:**

No DST's or cores are planned. Openhole logs, if run, will include GR, Induction, Density and Caliper Logs. The GR-Density logs will be run from TD to the top of the Fruitland formation. GR-Induction-Caliper logs will be run from TD to the bottom of the surface casing.



**BLOWOUT PREVENTION EQUIPMENT REQUIREMENTS:**

<b><u>Description</u></b>	<b><u>Rating</u></b>
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.

**GEOLOGIC PROGNOSIS:**

**Elevations:** GL ~ 6889', KB ~ 6892'

**Formation Tops:**

<b><u>Formation</u></b>	<b><u>Depth</u></b>
Ojo Alamo	300'
Kirtland	450'
Fruitland	625'
Coal Top	825'
PC	850'
Total Depth	1000'

**Note:** TD will be 150' below the lowest coal. The company man will be on location once coal(s) 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.

## **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 185' 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.  
Drop 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. Pressure test casing and BOP to 1500 psig for 30 minutes. Low pressure test BOP and Casing 250# for 10 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, an 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.

**Cement Slurry Designs and Notes**

<b><u>Slurry</u></b>	<b><u>Cement &amp; Additives</u></b>	<b><u>Water Requirements</u></b>	<b><u>Weight</u></b>	<b><u>Yield</u></b>
Surface	Class B + 1/4#/sx celloflake, and 2% CaCl	5.2 gals/sx	15.6 ppg	1.18 cu. ft/sk

Calculate slurry using estimated volume + 100% excess.

Production	Class B + 1/4#/sx celloflake, and 3# gilsonite	5.2 gals/sx	15.6 ppg	1.18 cu. ft/sk
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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.

# 2-M SYSTEM

