A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

RCVD JUL 15 '08
OIL CONS. DIV.
DIST. 3

Form 3160-3
(September 2001)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

2007 JUN 13 PM 3:50
RECEIVED

5. Lease Serial No.: **NOG-0203-1570**

6. If Indian, Allottee or Tribe Name: **NAVAJO ALLOTMENT**

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

1a. Type of Work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: **NAVAJO 20-6-5 #2**

2. Name of Operator: **SG Interest I, LTD**

9. API Well No.: 30-031-21100

3a. Address: **P.O. Box 2677, Durango, CO 81302**

3b. Phone No. *(include area code)*: **(970) 259-2701**

10. Field and Pool, or Exploratory: **Basin Fruitland Coal**

4. Location of well *(Report location clearly and In accordance with any State requirements.*)*
At surface: **670' FNL & 1017' FWL**
At proposed prod. zone

11. Sec., T., R., M., or Blk. And Survey or Area: **Lot 4, Section 5, T-20-N, R-6-W, NMPM,**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: **Approximately 19.2 miles southwest of Counselor Trading Post, NM off US Highway 550.**

12. County or Parish: **McKinley**

13. State: **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg unit line, if any): **670'**

16. No. of Acres in lease: **136.65 Acres**

17. Spacing Unit dedicated to this well: 293.54 **W1/2, ~~269.85~~ Acres**

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: **BIA Bond Number-LPM 8842198**

21. Elevations (Show whether DF. RT, GR, etc.): **6714 GR**

22. Aproximate 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 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 a authorized officer

25. Signature: Juan E. Betoni | Name *(Printed/ Typed)*: **Juan E. Betoni** | Date: 6-13-07

Title: **Land Consultant**

Approved By *(Signature)*: Original Signed: Stephen Mason | Name *(Printed/ Typed)* | Date: JUL 14 2003

Title: AFM | Office: FFO

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 c operations thereon.
Conditions of approval, if any, are attached.

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

itle 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 Unite States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

* (Instructions on reverse)

NMOCD JUL 17 2008

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 June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹API Number	²Pool Code	³Pool Name
30-031-21100	71629	Basin Fruitland Coal

⁴Property Code	⁵Property Name	⁶Well Number
37257	NAVAJO 20-6-5	2

⁷OGRID No.	⁸Operator Name	⁹Elevation
20572	SG INTERESTS I, LTD.	6714

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
4	5	20N	6W		670	North	1017	West	McKinley

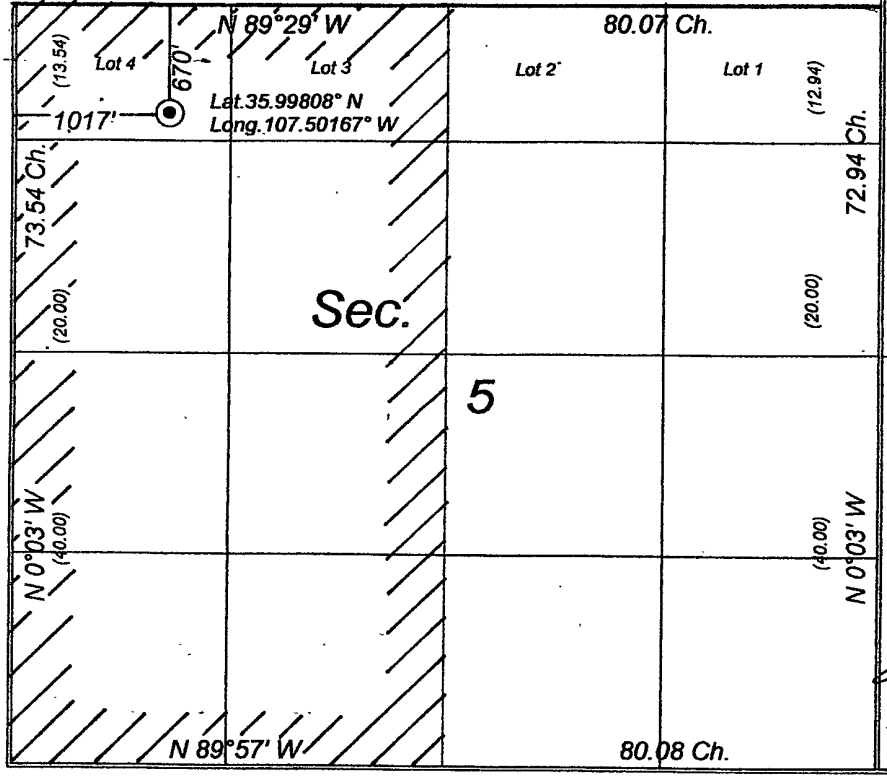
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹²Dedicated Acres	¹³Joint or Infill	¹⁴Consolidation Code	¹⁵Order No.
293.54			

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



¹⁷ OPERATOR CERTIFICATION

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

Signature

S.M. Libby

Printed Name

Agent - max.libby@dorellis-associates.com

Title and E-mail Address

June 13, 2007

Date

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.

16 Mar 2007

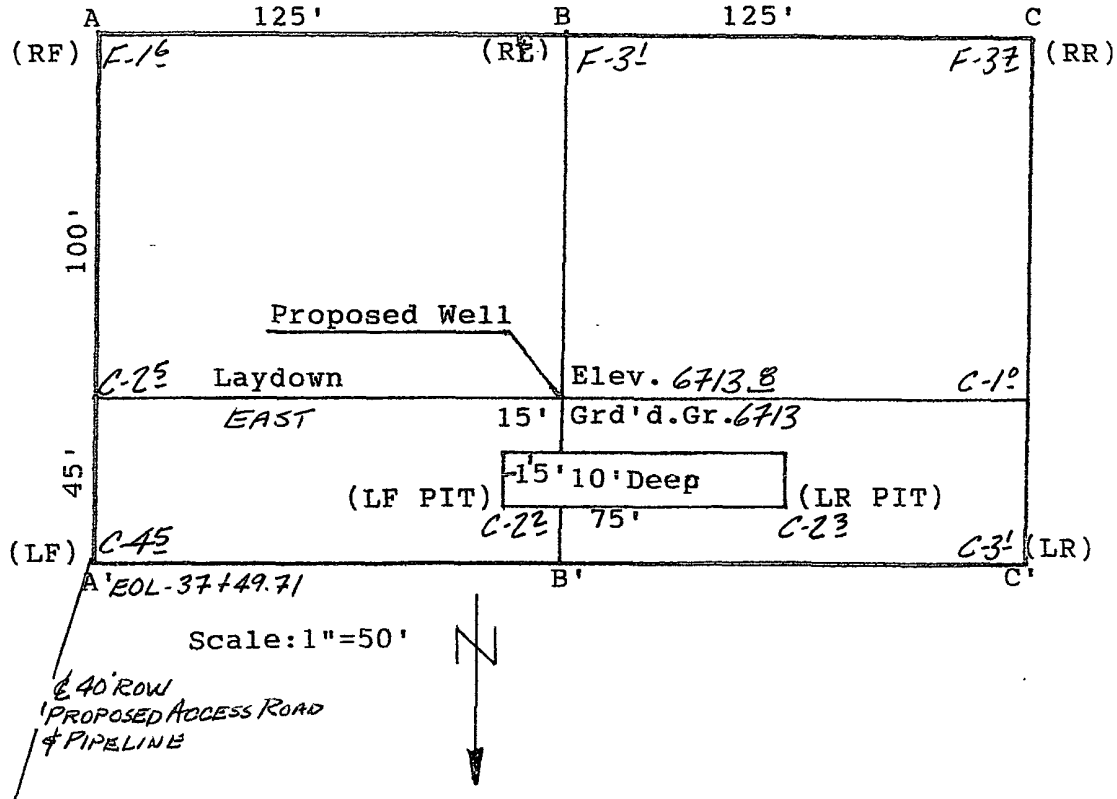
Date of Survey

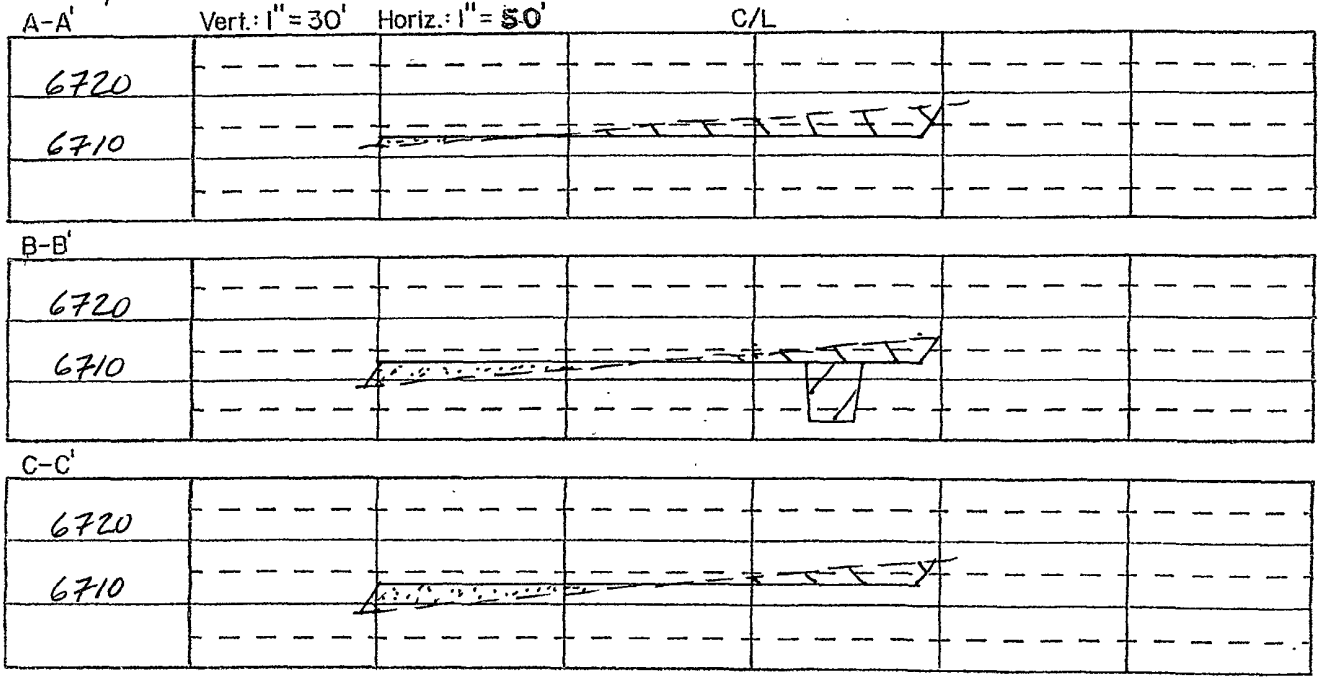
Signature and Seal of Professional Surveyor:

William E. Mahnke II

Certificate Number 8466

SG INTERESTS I, LTD.
NAVAJO 20-6-5 #2
670'FNL & 1017'FWL
Sec.5, T20N, R6W, NMPM
McKinley Co., NM





Access Description for Navajo 20-6-5 #2

From Counselor Trading Post on U.S. Hwy. 550, travel south on US 550 ± 0.1 miles, turn right on dirt road with sign "Star Lake Compressor-26 miles". This is the 0 miles point for this description. Follow dirt road.

4.3 miles- Turn left at "Ojo Encino School" sign,
11.0 miles- Transition to pavement with sign "N 474",
14.5 miles- Turn right off pavement through cattle guard onto dirt road,
19.2 miles- Turn left off road through Federal 21-6-32 #3 well and follow flagged access road ±3800 feet southerly to location.

NIKA ENERGY OPERATING, LLC
SG INTERESTS I, LTD.

WELL NAME: Navajo 20-6-5 #2

FIELD NAME: Basin Fruitland Coal

LOCATION: Sec 5, T20N, R6W
Lot 4
McKinley County, New Mexico

PROPOSED TD: 1000'

DRILLING SKELETON:

Interval	Hole Size	Casing Size	Depth
Surface	12-1/4"	8-5/8"	~~150'~~ 180'
Production	7-7/8"	4-1/2"	1000'

MUD PROGRAM:

Interval	Mud Type	Mud Weight	Funnel Viscosity	Water Loss
0 - 150'	Native	8.5 - 9.1	30 - 50	N/C
150'-1000'	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 Formation Density log from TD to the surface casing shoe.

CASING AND CEMENTING PROGRAM:

Interval	Size, Wt, Grade, Thread	Depth	Cement
Surface	8-5/8", 24#, J-55, ST&C	180'	130 sx Class B. 2% CaCl, ¼#sx celloflake
Production	4-1/2", 10.5#, J-55, ST&C	TD	330 sx Class B. ¼#sx celloflake, 3# Gilsonite

WELLHEAD: 3000# Independent Style

BLOWOUT PREVENTION EQUIPMENT REQUIREMENTS:

Description	Rating
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 ~ 6714'

Formation Tops:

Formation	Depth
Ojo Alamo	275'
Kirtland	400'
Fruitland	600'
Coal Top	800'
PC	825'
Total Depth	1000'

Note: TD will be 200' 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 200' 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 200' 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 180' 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** nippling 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 nippled 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.

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 500 feet and one joint above TD. 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 10 joints and joint 12, 14, and 16. 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 <u>not</u> 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).

Production Casing cont.

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

Cement Slurry Designs and Notes

Slurry	Cement & Additives	Water Requirements	Weight	Yield
Production	Class B or G + 1/4#/sx Celloflake, and 3# gilsonite	5.2 gals/sx	15.6 ppg	1.18 cu. ft / sk

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.

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

Navajo 20-6-5 #2
NW Sec 5-20N-R6W
670' FNL & 1017' FWL
McKinley County, New Mexico

EIGHT POINT DRILLING PROGRAM

1. Estimated Formation Tops:
2.

Ojo Alamo	275'
Kirtland	400'
Fruitland	600'
Coal Top	800'
PC	825'
Total Depth	1000'

3. Estimated Depth of Anticipated Minerals:

Fruitland (Gas)	800'

4. 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.

5. Casing and Cementing Program:

Hole Size	Interval	Csg Size	Wt, Grd, Jt
12-1/4"	0-180'	8-5/8"	~~24~~20#, J-55, STC
7-7/8"	0-1000'	4-1/2"	10.5#, J-55, STC

Surface Casing will be cemented with 130 sx (~~110~~ 153 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 330 sx (~~280~~ 389 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.

6. 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.

Depth	Type	Wt (ppg)	Vis (sec)	Wtr loss
0-180'	FW	± 8.5	30-33	NC
180'-TD	FW & LSND	± 8.7-9.1	30-50	8-10 cc

7. Testing, Coring and Logging Program:

No DST's or cores are planned. Openhole logs 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.

8. Anticipated Abnormal Pressures and Temperatures:

No abnormal pressures or temperatures are expected in this well. Maximum anticipated Fruitland reservoir pressure is 300 psig with a normal temperature gradient.

9. Operations:

Anticipated spud date is July 2007 or as soon as permits are received and work can be scheduled. Estimated drilling time is 4 - 5 days. The Fruitland will be completed as a cased hole completion, perforated and hydraulically fracture stimulated. Completion operations are expected to take 5 - 7 days and will commence as soon after completion of drilling operations and scheduling allow.

2-M SYSTEM