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Form 3160-3
(August 2007)

MAY 05 2011

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR Farmington Field Office
BUREAU OF LAND MANAGEMENT Bureau of Land Management

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED OCT 17 '11
OIL CONS. DIV.
DIST. 3

1a. Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No NM99737
1b Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name Federal
2 Name of Operator SG Interests I, Ltd		7 If Unit or CA Agreement, Name and No Federal 21-7-17 SWD
3a. Address PO Box 2677, Durango, CO 81302		8 Lease Name and Well No #42
3b Phone No. (include area code) 970-259-2701		9 API Well No. 30-043-21116
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1980 FSL, 1965 FEL At proposed prod. zone		10 Field and Pool, or Exploratory
14 Distance in miles and direction from nearest town or post office* Approximately 17 miles southwest of Counselors Trading Post, New Mexico		11 Sec, T R M or Blk and Survey or Area Section 17, T21N, R07W
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 1965'	16 No of acres in lease 2240	17 Spacing Unit dedicated to this well E/2, 320
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 9,868'	19 Proposed Depth 6,600'	20 BLM/BIA Bond No on file NM1935
21 Elevations (Show whether DF, KDB, RT, GL, etc) 6681 ft	22 Approximate date work will start* 10/01/2011	23 Estimated duration 30 days

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

24. Attachments

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

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must 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 | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM |

25 Signature 	Name (Printed/Typed) William Schwab III	Date 05/05/2011
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Title
Agent for SG Interests I, Ltd

Approved by (Signature) 	Name (Printed/Typed) AFM	Date 10/12/11
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Title AFM	Office FFO
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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 USC Section 1001 and Title 43 USC 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

(Continued on page 2)

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT
must HAVE SWD Permit NMOC Santa Fe

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOC FOR A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOC PART 19 15 17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS

NMOC
10-25-11

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 SWD Permit

Due to the potential for useable water to be present in the Dakota sands in this wellbore, **the Dakota sands will not be approved for disposal of produced Fruitland coal water.** Disposal will be limited to the Morrison, Bluff and Entrada sands, **only**, provided NMOCD approval of these zones is obtained by the operator. (CEH 5/23/11.)

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

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Form C-102

Energy, Minerals & Natural Resources Department

Revised October 12, 2005

OIL CONSERVATION DIVISION MAY 05 2011

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

1220 South St. Francis Dr.

Santa Fe, NM 87505

Barrington Field Office
Bureau of Land Management

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21116	² Pool Code 96436	³ Pool Name SWD ENTRADA
⁴ Property Code 38870	⁵ Property Name FEDERAL 21-7-17 SWD	
⁷ OGRID No 20572	⁸ Operator Name SG INTERESTS I, LTD.	⁶ Well Number 42
		⁹ Elevation 6681

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
J	17	21 N	7 W		1980	South	1965	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

¹² Dedicated Acres	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 N 89°43' W 79.49 Ch. 80.94 Ch. 17 Lat. 36.04969° N Long. 107.59739° W 1980' N 89°49' W 79.57 Ch.	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 unless 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>William Schwab</i> 11/22/2009 Date 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: 11 Nov 2010 Signature and Seal of Professional Surveyor: <i>William E. Mahnke II</i> Certificate Number: 8466	
	80.87 Ch. N 0°04' E	
	N 0°07' E	

Bearings shown are from BLM Plat

SG INTERESTS I, Ltd.
c/o NIKA ENERGY OPERATING, LLC
SALT WATER DISPOSAL for FRUITLAND COAL FIELD
DRILLING PROCEDURE
WS

WELL NAME: Federal 21-7-17 SWD #42

FIELD NAME: Salt Water Disposal
Basin Fruitland Coal

LOCATION: NWSE Section 17-T21N-R7W
Lat 36.04969°N, Long -107.59739°W
Sandoval County, New Mexico

ELEVATION: 6681 GL

PROPOSED TD: 6600'

DATE: April 2011

NOTE: Review APD Stipulations before moving on location. Review regulatory notification requirements and notify accordingly. Comply with all safety and environmental requirements.

NOTIFY: BLM Field Office Manager (Inspection and Enforcement Section) 24 hours before SPUD, CEMENTING OR PLUGGING OPERATIONS at (505) 599-8907.

DIRECTIONS: From Counselor Trading Post on US Hwy 550, travel south on Hwy 550 \pm 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 (Rd # 46):

- AT: 15.4 miles – Turn right (northwest) and follow access road,
- " 16.1 miles – Turn left (west) still following access road,
- " 16.5 miles – Turn right and follow access road \pm 1675 feet to location.

DRILLING SKELETON:

<u>Interval</u>	<u>Hole Size</u>	<u>Casing Size</u>	<u>Depth</u>
Surface	17"	13-3/8"	700'
Intermediate	12-1/4"	9-5/8"	4800'
Production	8-3/4"	7"	6600'

MUD PROGRAM:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Weight</u>	<u>Funnel Viscosity</u>	<u>Water Loss</u>
0' – 700'	Native	8.5 - 9.1	30 - 50	1 - 10
700' – TD	Native/LSND	8.5 – 9.3	30 – 50	8 – 10

CASING AND CEMENTING PROGRAM:

<u>Interval</u>	<u>Size, Wt, Grade, Thread</u>	<u>Depth</u>	<u>Cement</u>
Surface	13-3/8", 54.5#, J-55, ST&C	700'	710 sx Type III or V w / 3# Gilsonite + 1/4#/sx celloflake
Intermediate	9-5/8", 36#, J-55, ST&C	4800'	1911 sx Type V w / 1/4#/sx celloflake & 3# gilsonite
Production	7", 26#, N-80, LT&C	TD	1 st stage - 248 sx Type III or V With 1/4#/sx celloflake & 3# gilsonite
		5100'	2 nd stage – 365 sx 65/35 STD/POZ with 8% Bentonite, 10% Gypsum-60, 5# Gilsonite + 1/4# celloflake.
			Tail with 182 sx Type III or V with 1/4# celloflake & 3# Gilsonite.

Salt Water Disposal – Federal 21-7-17 SWD #42

WELLHEAD:

3000# 13-5/8" 3M x 13-3/8" 8rd casing head
3000# 11" 3M x 11" 3M casing spool with Ball valves,
3000# 11" 3M x 7-1/16" 3M tubing with RTJ flanged gate valves",
3000# B2P, 7-1/16" 3M x 3-1/8" 3M Upper tree adapter with RTJ flanged gate valve.

BLOWOUT PREVENTION EQUIPMENT REQUIREMENTS:

<u>Description</u>	<u>Rating</u>
Double Ram Type Preventer	3000 psi
Rotating Head	3000 psi

BOPE testing will be done by a third party tester 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 of 1000 psi held for 10 minutes. Casing and manifold pressure tests must be held for 30 minutes with no more than 10 percent pressure drop during the test.

GEOLOGIC PROGNOSIS:

Elevations: GL ~ 6881', KB ~ 6896'

<u>Formation Tops</u>	<u>Depth</u>
Ojo Alamo	175'
Pictured Cliffs	675'
Bentonite	850'
LaVentana	1340'
Cliff House	1800'
Point Lookout	2950'
Mancos	3070'
Gallup	3825'
Dakota	4950'
Morrison	5225'
Entrada	6150'
Total Depth	6600'

Note: TD will be 100' below the bottom of the Entrada. A mud logger will be on location from drilling of the surface shoe to TD to monitor drilling breaks and to insure that 100' of rathole is drilled.

MUD PROGRAM:

A fresh water native mud (using lime, benex & gel additions) will be used to drill the surface hole. The 8-3/4" hole should be drilled with native mud and a LSND mud as necessary for hole stability from the surface shoe to TD.

At the top of the Fruitland, and Mesa Verde formations 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 Coal and Mesa Verde 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, 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. NMOCD needs to be notified 24 hrs in advance of cementing.

Surface Casing:

1. Drill to a minimum of 700' to accommodate tallied 13-3/8" casing plus 3'. Casing tally to be taken on location.
2. Use a landing joint of 13-3/8" casing to set casing at ground level. Guide shoe on casing should be not more than 10 feet off bottom. Casing head flange to be set at ground level.
3. Roll casing off truck with thread protectors in place.
4. Change out pipe rams to accommodate 13-3/8" casing.
5. 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.
6. Bakerlok 13-3/8" guide shoe to bottom of first joint of casing.
7. Bakerlok 13-3/8" differential float collar to top of first joint of casing. Bakerlok second joint of casing into top of float collar
8. Casing should be made up to proper torque using an API thread compound (13-3/8" J55 54.5# minimum torque is 3860 ft lbs, optimum torque is 5140 ft lbs, and maximum torque is 6430 ft lbs).
9. 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).
10. Break circulation at 350 feet, and 600 feet and circulate each 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.

Surface Casing cont.

11. Centralizers should be run on each of the first 10 joints, joint #12 and #14 (12 total). A stop-ring should be used to hold the first centralizer in place. Place the remaining centralizers on collars.
12. 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.
13. Rig up rotational cementing head and return lines. Chixson should be long enough to allow 25'-30' reciprocation.
14. Pump 10 barrels of fresh water. Pump 20 barrel chemical wash. Pump cement slurry. Wash lines.
15. 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.
16. 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).
17. Wait on cement a minimum of 8 hours or until surface samples are hard, whichever is longer before nipping up the BOP. The BLM requirement is a minimum of 250 psi @ 60degrees F compressive strength before BOP may be nipped up. Follow BOP test procedure outlined in the APD stipulations.

Intermediate Casing:

1. Drill to a minimum of 4800' to accommodate tallied 9-5/8" casing plus 3'. Casing tally to be taken on location.
2. Roll casing off truck with thread protectors in place.
3. Change out pipe rams to accommodate 9-5/8" casing.
4. 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.
5. Bakerlok 9-5/8" guide shoe to bottom of first joint of casing.
6. Bakerlok 9-5/8" differential float collar to top of first joint of casing. Bakerlok second joint of casing into top of float collar
7. Casing should be made up to proper torque using an API thread compound (9-5/8" J55 36# minimum torque is 2960 ft lbs and maximum torque is 4930 ft lbs).
8. 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).
9. Break circulation at 2000 feet, and 4000 feet and circulate each 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.

Intermediate Casing cont.

10. Centralizers should be run on each of the first 10 joints, and every 3rd joint to surface (36 total). A stop-ring should be used to hold the first centralizer in place. Place the remaining centralizers on collars.
11. After casing is landed just above TD, circulate hole until mud properties measured at the flowline are within the ranges given in the “Mud Program” of this drilling prognosis.
12. Rig up rotational cementing head and return lines. Chixson should be long enough to allow 25'-30' reciprocation.
13. Pump 10 barrels of fresh water. Pump 20 barrel chemical wash. Pump cement slurry. Wash lines.
14. 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.
15. Bump plug with 500 psi over final displacement pressure. Hold pressure for 4 hours or until cement is set, to avoid the potential of collapsed casing. If plug does not bump, hold initial shut down pressure on casing for 4 hours or until cement is set.
16. NDBOP, set slips, install intermediate casing spool. NUBOP.

Wait on cement a minimum of 8 hours or until surface samples are hard, whichever is longer **before** nipping down the BOP. The BLM requirement is a minimum of 250 psi @ 60degrees F compressive strength **before** BOP may be nipped down then up. Follow BOP test procedure outlined in the APD stipulations.

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 7" casing.
4. Bakerlok 7" differential float shoe to bottom of first joint of casing.
5. Bakerlok 7" 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 Entrada as per mud log. Bakerlok above and below 2nd stage “Cementing Stage Tool” located @ 5100'.
6. Casing should be made up to proper torque using an API thread compound (7" N80 26# minimum torque is 3890 ft lbs and maximum torque is 6490 ft lbs).
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 5000 feet and 6100 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. Centralizers should be run on each of the first 10 joints, every other joint for the next 35 joints, and every third joint from #45 to surface (total 65 centralizers). A stop-ring should be used to hold the first centralizer in place. Place the remaining centralizers on collars. Make certain that a centralizer is on both the joint above **and** below the stage tool.

Production Casing cont.

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 1st stage cement slurry.
13. Drop 1st plug and displace with water. Do not over-displace.
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).
15. Drop trip bomb. When bomb is in the stage collar, bump bomb with 1000 psi until port holes are opened. Circulate minimum 4 hours with mud until 1st stage is set.
16. Pump 10 barrels of fresh water. Pump 20 barrel chemical wash. Pump 2nd stage cement slurry. Tail in with 100sx Type III or V.
17. Drop closing plug and displace with water. Do not over displace.
18. Bump plug with 1000# over final displacement pressure to close stage collar. Hold pressure for 5 minutes. Then check to see if holes are closed (flow back into cement pump tank).
19. Set slips, nipple down BOP and cut off casing. Nipple up wellhead.

Cement Slurry Designs and Notes

<u>Slurry</u>	<u>Cement & Additives</u>	<u>Water Requirements</u>	<u>Weight</u>	<u>Yield</u>
Surface	Type III or V, 3# Gilsonite, w/ ¼# Superflake	5.2 gals/sk	15.6 ppg	1.18 cu ft/sk
Intermediate	Type III or V, 3# Gilsonite, w/ ¼# Superflake	5.2 gals/sk	15.6 ppg	1.18 cu.ft/sk
Production				
1 st Stage	Type III or V, 3# Gilsonite ¼#/sx Superflake	5.2 gals/sk	15.6 ppg	1.18 cu.ft/sk
2 nd Stage lead	65/35 STD/POZ w/ 8% Bentonite, 10% Gypsum-60, 5# Gilsonite & ¼# Superflake	11.71 gals/sk	12.5# ppg	2.14 cu ft/sk
2 nd Stage tail	Type III or V, 3# Gilsonite ¼#/sx Superflake	5.2 gals/sk	15.6 ppg	1.18 cu.ft/sk

Cement Slurry Designs and Notes cont.

Figure slurry volume as follows:

- Surface:** Calculate slurry based on hole and casing size annular volumes plus 100% excess.
- Intermediate:** Calculate slurry based on hole and casing size annular volumes plus 50% excess
- Production:** Calculate slurry using caliper volume + 30% excess cement. Volume shown in this prognosis is based on hole and casing size annular volumes plus 30% excess.

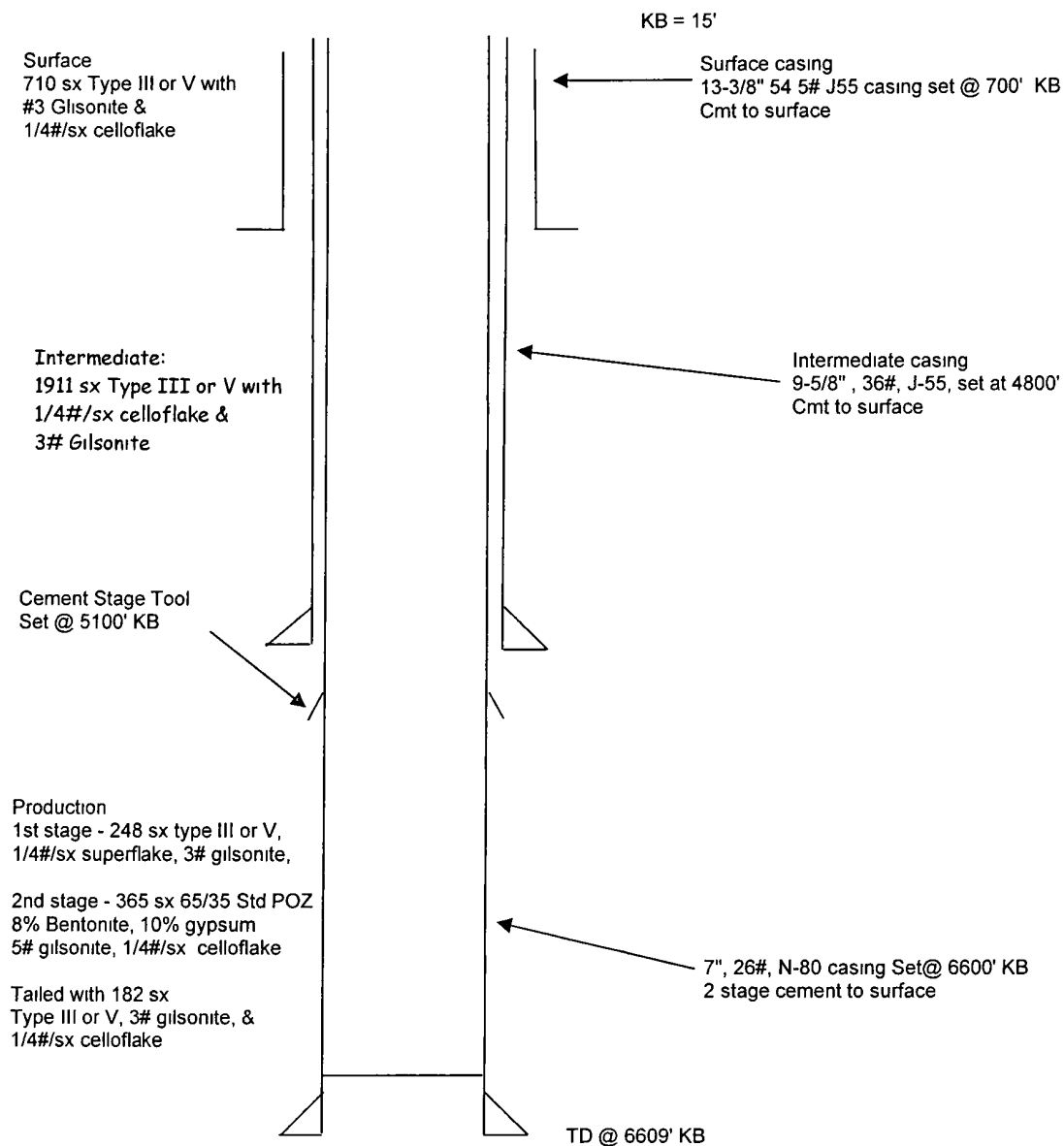
NOTES:

1. Pump rates should be a minimum of 4 BPM throughout displacement, **except** when displacing the 1st stage production string and the plug is moving thru the stage tool slow rate to 1BPM, then increase rate back to 4 BPM until plug is bumped.

Slurry weights should be measured using a mud balance at least every 10 minutes during mixing.

2. At least two samples of all three leads and one sample of the final tail should be caught and monitored at room temperature for thickening time.
3. Run Temperature Log after Intermediate casing cement job to determine TOC. ***Perform any necessary cement remediation on intermediate casing BEFORE continuing drilling.*** Run temperature log on surface and production casing if cement does not circulate.

Casing & Cementing Wellbore Diagram



NOTIFICATION SCHEDULE

Purpose or Reason

<u>Regulatory</u>	<u>Phone Number</u>	<u>Comments</u>
BLM	505-599-8907	Notify 24 hours before spud, testing BOP's, running casing, or cementing.
BLM	505-599-8900	Changes or questions regarding approved plans or drilling ops.
BLM	505-327-2186 505-326-0253 505-334-1266	Emergency program changes after normal business hours. Wayne Townsend Steve Mason Jim Lovato
NMOCD	505-334-6178 <i>116</i> Monica Kuehling <i>Brandon Powell</i>	Notify 24hrs before cementing.
<u>Drilling Issues</u>		
Tripp Schwab tripp@nikaenergy.com	970-259-2701 970-769-3589 970-769-3589	Office Mobile Home

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

Federal 21-7-17 SWD #42
NWSE/4 Sec 17, T21N-R7W
1980' FSL & 1965' FEL
Lat 36.04969, Long -107.59739
Sandoval County, New Mexico

EIGHT POINT DRILLING PROGRAM

1. Estimated Formation Tops: Depth

Ojo Alamo	175'
Pictured Cliffs	675'
Bentonite	850'
LaVentana	1340'
Cliff House	1800'
Point Lookout	2950'
Mancos	3070'
Gallup	3825'
Dakota	4950'
Morrison	5225'
Entrada	6150'

2. Estimated Depth of Anticipated Minerals:

Gas	Fruitland	650'
Oil	Menefee	2100'
Oil	Entrada	6150'

3. Minimum Specifications for Pressure Control Equipment:

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

A 3000 psig double ram hydraulic BOP will be used (see attached diagram). Accessories to the BOP will meet BLM requirements for a 3000 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, 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>
	17"	0- 700	13-3/8"	54.5#, J-55,
STC				
	12-1/4"	0-4800'	9-5/8"	36#, J-55,
STC				
	8-3/4"	0-6600'	7"	26#, N-80,
LTC				

Surface Casing will be cemented with 710 sx (838 cu ft) Type III or V w/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, float collar and 12 centralizers will be used. WOC time is 8 hours. The casing will be pressure tested to 1000 psig.

Intermediate Casing will be cemented with 1911 sx (2255 cu ft) Type III or V w/1/4#/sx of celloflake (Yield = 1.18 cuft/sx, Weight = 15.6 #/gal). Cement volumes include 50% excess to circulate cement to surface. A guide shoe, float collar and 36 centralizers will be used. WOC time is 8 hours. The casing will be pressure tested to 1000 psig.

Production Casing will be cemented in two (2) stages. Stage tool will be placed at $\pm 5100'$. First stage will be cemented with 248 sx (293 cu ft) Type III or V with $1/4\#/sx$ celloflake (Yield = 1.18 cu ft/sx, Weight = 15.6 #/gal). Cement volume includes 30% excess to circulate cement past stage tool. After the stage tool has been opened circulation will be established and continue for 4 hours. The Second stage will be cemented with 365 sx (781cu ft) 65/35 STD/POZ with 8% Bentonite, 10% Gypsum-60, 5# Gilsonite and $1/4\#/sx$ celloflake (Yield = 2.14 cu ft/sx, Weight = 12.5 #/gal). The second stage will be tailed in with 182 sx Type III or V with $1/4\#$ celloflake and 3# Gilsonite to cover the stage tool. Cement volume includes 30% excess. 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, differential float collar, stage tool, and 65 centralizers.

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</u>
<u>loss</u>	0-700'	FW & LSND	$\pm 8.5-9.1$	30-50	1-10
cc	700'-TD	FW & LSND	$\pm 8.5-9.3$	30-50	8-10
cc					

6. 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 and GR-Induction-Caliper logs will be run from TD to the bottom of the surface casing.

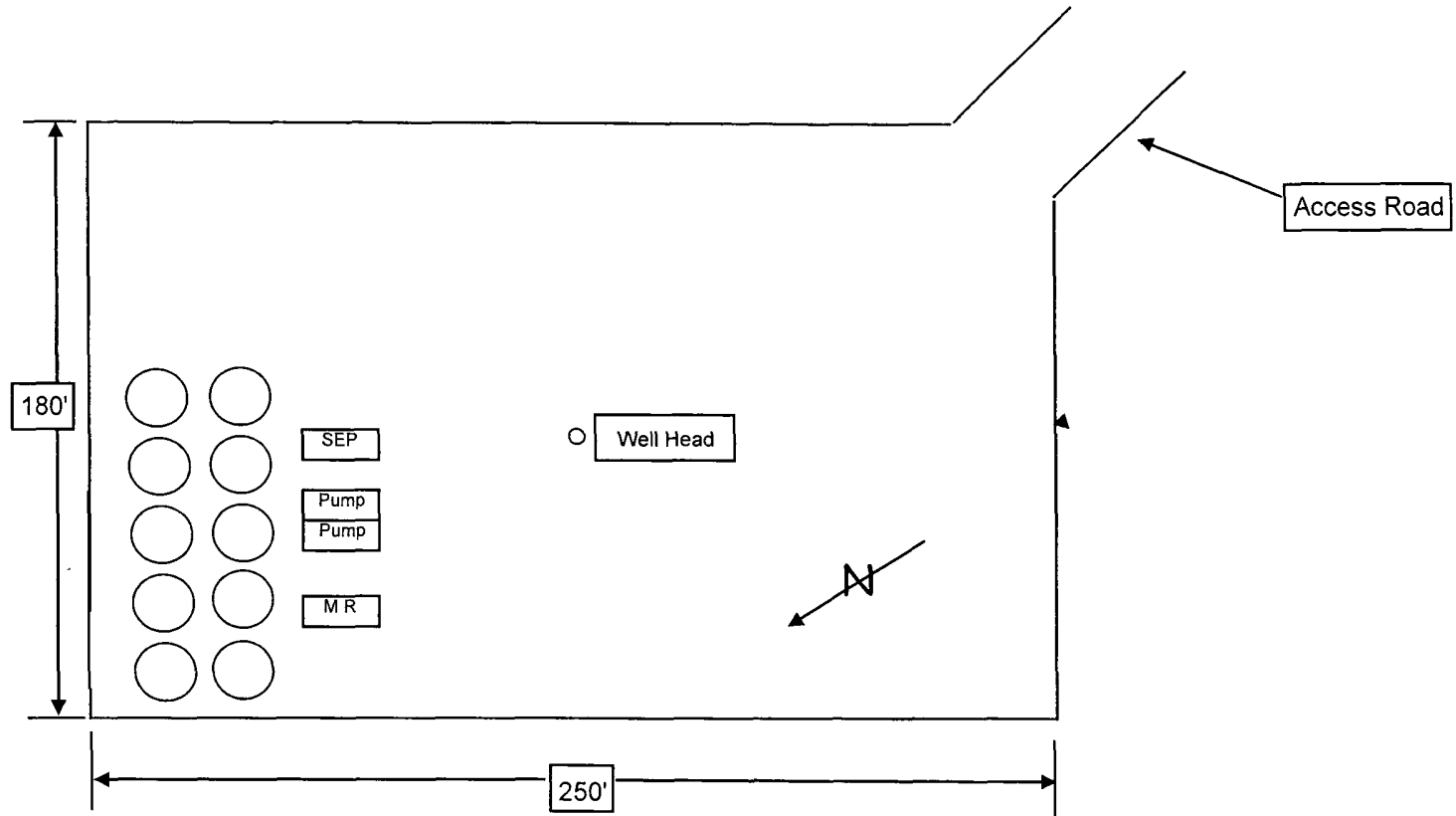
7. Anticipated Abnormal Pressures and Temperatures:

No abnormal pressures or temperatures are expected in this well. Maximum anticipated Fruitland reservoir pressure is 300 psig with a normal temperature gradient. Maximum anticipated Menefee reservoir pressure is 1000# with a normal temperature gradient.

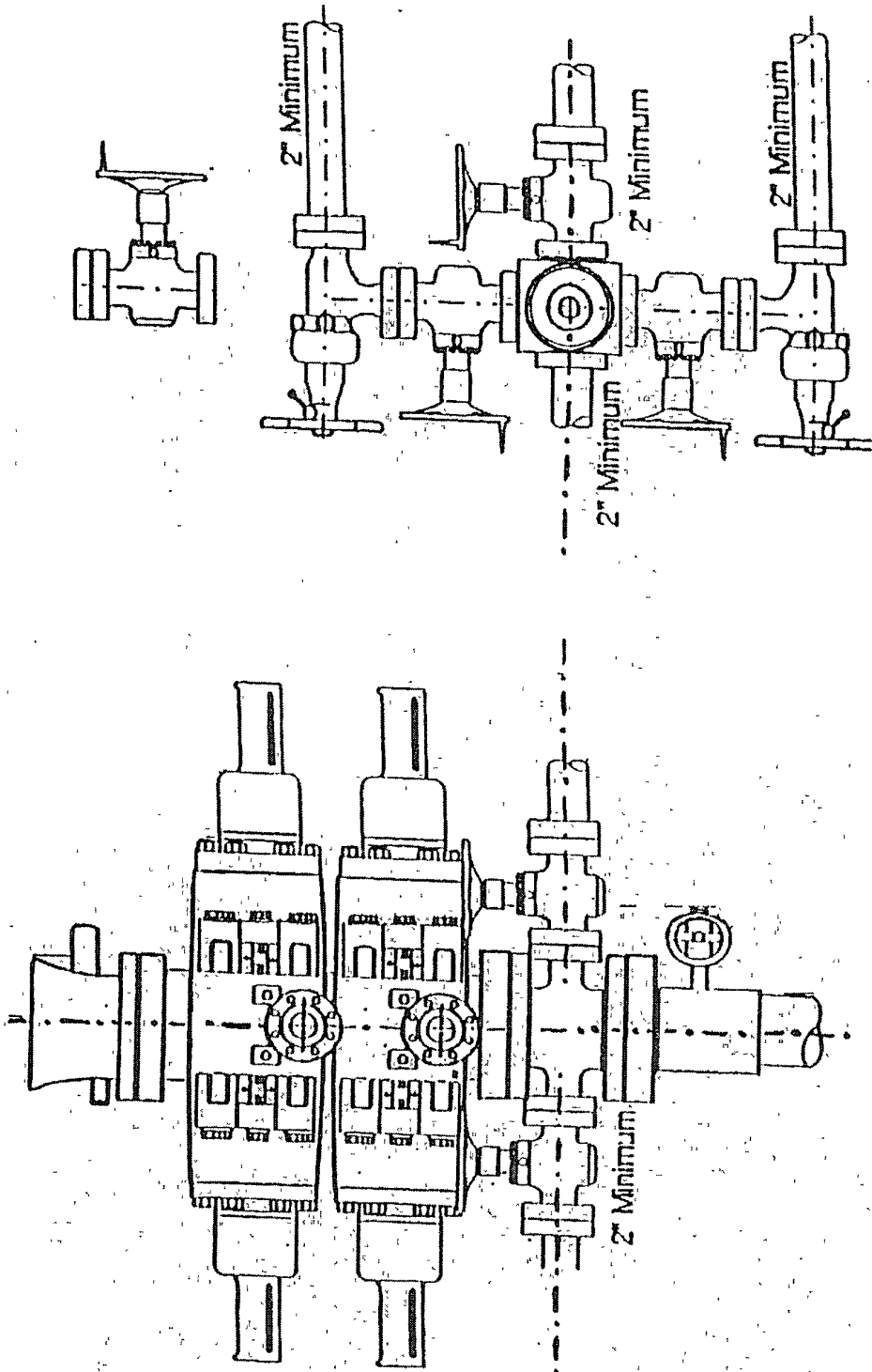
8. Operations:

Anticipated spud date is October 2011 or as soon as permits are received and work can be scheduled. Estimated drilling time is 30 days. The Dakota, Morrison, Bluff and Entrada will be completed as a cased hole completion, perforated and hydraulically fracture stimulated. Completion operations are expected to take 20 to 25 days and will commence as soon after completion of drilling operations and scheduling allow.

Proposed Equipment Layout
Federal 21-7-17 SWD#42



2-M SYSTEM



SG Interests I, Ltd.
Existing Wells within a 1 Mile Radius of the
Proposed Federal 21-7-17 SWD #42
T21N, R07W, Section 17
Sandoval County, New Mexico

