Form 3160-3 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEN	FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004
:DC0 -	Expires January 31, 2002

DEC	3	7	209. Lease Serial No.
	w	Щ	[1] Lease Serial No.

Bureau ot	NMNM-099739 ac63 If Indian, Allottee or Tribe Nam			
Famin-	ac62 If Indian,	Allottee or T	Tribe Nam	

	APPLICAT	ION FOR P	ERMIT TO DR	RILL OR F	REENTER		ton Field	Officei			
la. Type of Work:	☑ DRILL		☐ REENTER	t					or CA Agreemen ral 21-7-35	t, Name an	d No.
1b. Type of Well:	Oil Well	☐ Gas Well	Other	Ø	Single Zone	Multi	ple Zone	8. Lease N	fame and Well No		
2. Name of Operat	or				-			9. APLW	ell No.//9 2	10/00	`
	s.I, LTD.c/o.N	IKA Energy Op	nerating	r 				00	143-2	1000	<u>'</u>
a. Address				3b. Phone N	lo. (include a	rea code)		10. Field an	nd Pool, or Explo	ratory	
	7 Durango, Co) 259-2701				Fruitland Coal	10	
		n clearly and in a 0' FNL & 1725'	accordance with any a	State require	ments. *)			11. Sec., 1.	, R., M., or Blk.	ana Survey	or Area
At surface		U FNL & 1/25	C					12	,		
At proposed pro	d. zone							り Secti	on 35, T21N, R	7W	
I. Distance in miles	and direction f	rom nearest tow	n or post office*					12. County	or Parish	13. S	tate
		thwest of Cou	inselor, New Mexic					Sand			_NM_
 Distance from pr location to neare 	•			16. No. of	Acres in lea	se	17. Spacing	g Unit dedica	ted to this well		
property or lease (Also to nearest	line, ft.	fam)							RCVD F	EB 7 '()8
. Distance from pro			30'	1,440.00 19. Propos	ad Donth			320.00 acre			
to nearest well, di	rilling, complete			15.11opos	oca Depui		20. BLW/E	olm Bollu No	OIL CO	NS DI	U
applied for, on the	is lease, ft.	See a	attached map	app	rox. 1000'		PIBO	003277	OIL OU	Bens FLT	Ψ.
. Elevations (Show	w whether DF,	KDB, RT, GL,	etc.)		ximate date	work will s	tart*	23. Estima	ted duration		
6,645 GR				as s	oon as pem	itted		1 m	onth DIS	3T. 3	
				24. Att	achments						
	an (if the locati	ion is on Nation	nal Forest System I st Service Office).	ands, the	5. Oper 6. Such	20 above). itor certifica	ation.		red by an existing or plans as may		Ì
.Signature	1			Nam	e (Printed/Ty William Sc	•			Date	12/27/	2007
tle President NIK	A Energy One	erating/ Agent f	for SG Interests I,	LTD						_	1
oproved by (Signatu	rg) ////	enteal	17		e (Printed/Ty	ped)			Date	2/5/	108
tle		AF		Offic	ce F	Z()				/ 	
oplication approval of erations thereon. Inditions of approva			the applicant holds l	egal or equit	able title to the	ose rights in	the subject l	ease which w	yould entitle the a	pplicant to	conduc
			ction 1212, make it representations as to				d willfully to	make to any	department or a	gency of th	e Unite
nstructions on revers	se)					,	<u> </u>	· — — ·			
interests I, LTD. lling and surface	proposes to use plans.	drill a well to de	evelop the Basin F	Fruitland Co	al formation	at the abo	ve describe	d location in	accordance w	th the atta	ached
e surface is unde	r jurisdiction o	f the Bureau of	f Land Manageme	nt; Farming	ton Field O	fice. PF	IOR	TO C	ASING	& CE	ΞΜΙ
			d by Aztec Archae								

This APD is also serving as an application for an on-lease pipeline tie of approximately 4,059.06 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

A new access road approximately 4059.06 feet in length would be required for this location.



This action is subject to technical and procedural review pursuant to 43 CFR 3165 3 and appeal pursuant to 43 CFR 3165 4

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

District I 1625 N. French Dr., Hobbs, NM 89240

District II 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazas Rd., Aztec, NW 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 Pool 30 - 043 - 21060 116				² Pool Code 1162	9 9	Darin Fr	uitlana	(Coal		
'Property C					⁵ Property l	Varme L		''	Vell Number	
3697	77				FEDERAL 2	1-7-35		1		
'OGRID I	Ve.				" Operator l	Varme		1	Elevation	
2057	12			S	G INTERES	TS I. LTD.		ϵ	6645	
	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	
В	35	21N	7W		860	North	1725	East	Sandoval	
			11 Bo	ottom Ho	le Location I	Different Fron	n Surface			
UL or lot no.	Section	Township	Range				Feet from the	East/West line	County	
" Dedicated Acres	Joint or	Infill C	onsolidation (Code BOr	đer No.					
E/2.	320									

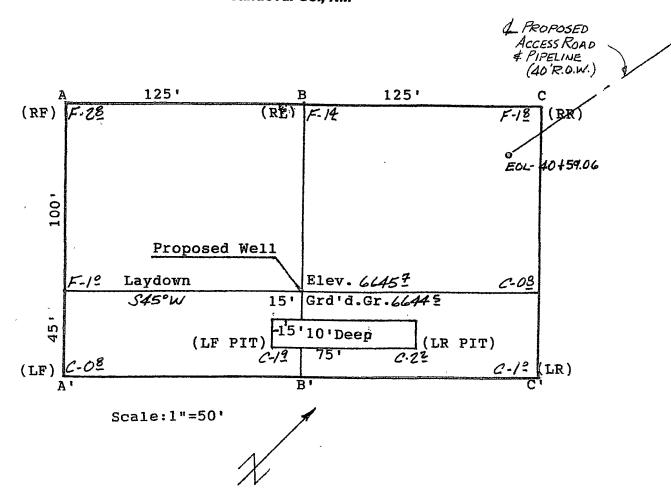
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

80.65 Ch.	89°44' W Lat.36.01247° Long.107.5433		h. 1725'	17 OPERATOR CERTIFICATION I hereby certify that the information canatined 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 hale 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 hegetofore entered by the division.
98	Sec.		80.66 C	Nilliam Schusb For Printed Name
0°01' W		35	E	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
N 89°	56' W 39.91 Ch.	N 89°29′ W 3	9.84 Ch.	Signature and Scal of Professional Surveyor William: E. Mahnike II Certificate Number



Office	State of New Me	exico	Form C-103
District I	Energy, Minerals and Natu	ıral Resources	WELL API NO.
1625 N. French Dr., Hobbs, NM 88240 District II			30.043 21M100
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease
<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran		STATE FEE FED X
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM	Santa Fe, NM 8'	/505	6. State Oil & Gas Lease No.
87505			Federal NMNM 099739
A contract of the contract of	CES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC			Federal 21-7-35
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well 🛛 Other		8. Well Number #1
	ests I, Ltd		9. OGRID Number
2. Name of Operator SG Inter-			20572
3. Address of Operator			10. Pool name or Wildcat
C/O Nika Energy Operating,	PO Box 2677, Durango, CO,	81303	Basin Fruitland Coal
4. Well Location		6 . 6 . 1 . 5	. ••
	from the <u>North</u> line and <u>1725</u>		
Section 35 Townsh	nip 21N Range 7W 11. Elevation (Show whether DR	NMPM PVP PT GP ata)	County Sandoval
	6,645'	, KKD, K1, GK, etc.)	The second second
Pit or Below-grade Tank Application 🛛 or			Experience of the control of the con
Pit type <u>Drilling</u> Depth to Groundwa	ter <u>>1,000</u> Distance from nearest fres	1 water well_>1,000 ft	Distance from nearest surface water_>500 ft
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume	1000 Bbls; Co	nstruction Material <u>Synthetic</u>
12. Check A	Appropriate Box to Indicate N	lature of Notice,	Report or Other Data
	-	1	•
NOTICE OF IN PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON	REMEDIAL WOR	SEQUENT REPORT OF: ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRI	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMENT	
OTHER BUA II II	5 ⊅	07:150	
OTHER: Pit Application 13 Describe proposed or complete	eted operations (Clearly state all	OTHER:	I give pertinent dates, including estimated date
			each wellbore diagram of proposed completion
or recompletion.		<u>-</u>	
Drilling/Completion pit to be locate	ad approximately 15 foot from y	roll hood. Dit multi	use drilling and completion to avoid
			-use drilling and completion to avoid tubing set. Pit to be 75 feet long by 15
			with NMOCD guidelines and SGI
procedures			
		,	•
	,		
		,	
I hereby certify that the information a grade tank has been/will be constructed or	ibove is true and complete to the beclosed according to NMOCD guidelines	est of my knowledge Ⅺ, a general permit □ •	e and belief. I further certify that any pit or below- or an (attached) alternative OCD-approved plan .
			1 1
SIGNATURE WALL	TITLE	Agent for SG Inte	erests I, Ltd. DATE 12/27 (2007)
Type or print name William Schwa	ıb III / E-mail address: tri	pp@nikaenergy.com	Telephone No. 970-259-2701
For State Use Only	Z man address. tr	PP WIII. WOII OI E J. WOIII	
	1/1-1	Deputy Oil & G	FEB 0 7 2008
APPROVED BY: Conditions of Approval (if any):	TITLE T	Distric	Sas Inspector, DATE 2008
Committee of Experience (if ally).			-

SG INTERESTS I, LTD. FEDERAL 21-7-35 #1 860' FNL & 1725' FEL Sec.35, T21N, R7W, NMPM Sandoval Co., NM



A-A'	Vert.: I"= 30'	Horiz.: 1"= \$.0'	С,	/L ·	· · · · · · · · · · · · · · · · · · ·	
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6640		455250	<u> </u>			
		 				
B-B'				T	<u></u>	
4650		 				
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6650		 				
6640		 				
		+				

Fruitland Drilling Program – Federal 21-7-35 #1 Page 2

DRILLING SKELETON:

Interval	Hole <u>Size</u>	Casing <u>Size</u>	<u>Depth</u>
Surface	12-1/4"	8-5/8"	180'
Production	7-7/8"	4-1/2"	715'

MUD PROGRAM:

Interval	Mud	Mud	Funnel	Water
	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Loss</u>
0 - 180'	Native	8.5 - 9.1	30 - 50	N/C
180'-715'	Native/LSND	8.5 - 9.1	30 - 50	8 - 10

CORE PROGRAM: None

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

CASING AND CEMENTING PROGRAM:

<u>Interval</u>	Size, Wt, Grade, Thread	<u>Depth</u>	Cement
Surface	8-5/8", 24#, J-55, ST&C	180' -	125 sx Class B. 2% CaCl, ¼#sx celloflake
Production	4-1/2", 10.5#, J-55, ST&C	TD	210 sx Class B. 1/4#sx celloflake, 3# Gilsonite

WELLHEAD:

3000# Independent Style

BLOWOUT PREVENTION EQUIPMENT REQUIREMENTS:

<u>Description</u>	Rating
Double Ram Type Preventer Rotating Head	2000 psi 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 ~ 6645', KB ~ 6648'

Formation Tops:

<u>Formation</u>	<u>Depth</u>	
Ojo Alamo	15' (Surface)	
Kirtland	165'	
Fruitland	340'	
Coal Top	540'	
PC	565'	
Total Depth	715'	

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** 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.

Fruitland Drilling Program – Federal 21-7-35 #1 Page 6

Cement Slurry Designs and Notes

Slurry	Cement & Additives	Water <u>Requirements</u>	<u>Weight</u>	Yield
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

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

Federal 21-7-35 #1 NE Sec 35-21N-R7W 860' FNL & 1725' FEL Sandoval County, New Mexico

EIGHT POINT DRILLING PROGRAM

1. Estimated Formation Tops:

Ojo Alamo	15'
Kirtland	165'
Fruitland	340'
Coal Top	540'
PC	565'
Total Depth	715'

2. Estimated Depth of Anticipated Minerals:

Fruitland (Gas)

540'

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>	Wt, Grd, Jt
12-1/4"	0-180'	8-5/8"	24.0#, J-55, STC
7-7/8"	0-715'	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 210 sx (248 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>	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

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.

