OCD-ARTESI CONTACT RECEIVING D-06-67 OF COPIES REQUIRED (Other instructions on BLM Roswell District (formerly 9-331C) reverse side) Modified Form No. UNITED STATES NM060-3160-2 c/K DEPARTMENT OF THE INTERIOR LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT NM-0554221 APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 6. IF INDIAN, ALLOTTEE OR TRIBE NAME la. TYPE OF WORK Like Apprex DRILL X ปีG BACK 7. UNIT AGREEMENT NAME Dw Stebo Nash Unit b. TYPE OF WELL Rel 11-POTASHGLE 8. FARM OR LEASE NAME MULTIPLE OIL GAS Nash Draw UM WELL X WELL RECEIVED 9. WELL NO. 3a. Area Code & Phone No. 2. NAME OF OPERATOR #48 MAY 1 6 2006 STRATA PRODUCTION COMPANY 21712 505-622-1127 3. ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT Nash Draw Dringhin C O. Box 1030, Roswell, New Mexico 88202-1030 11. SEC., T., R., M., OR BLK. 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) Maish Draw; relawore AND SURVEY OR AREA At surface Bone Spring SL: 2415' FSL & 1646' FWL BHL: 500' FNL & 1000' FWL Section 11-23S-29년 Section 12-23S-29E At proposed prod. zone 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 12. COUNTY OR PARISH 13. STATE 9 miles north east of Loving, New Mexico Eddv NM 17. NO. OF ACRES ASSIGNED 16. NO. OF ACRES IN LEASE 15. DISTANCE FROM PROPOSED \* TO THIS WELL LOCATION TO NEAREST 880 Lse/5123 Unit 160 PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION\* 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING, COMPLETED 12,857 OR APPLIED FOR, ON THIS LEASE, FT. Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START\* Carbbed Controlled Water Della 2985' GR PROPOSED CASING AND CEMENTING PROGRAM 23. THREAD TYPE QUANTITY OF CEMENT HOLE SIZE CASING SIZE WEIGHT/FOOT GRADE SETTING DEPTH Circ to Surface WITNESS 17 1/2" 13 3/8" 48# H-40 STC NEW 310° Circ to Surface WITHESS 11 3/4" 54# LTC NEW 12 1/2" J-55 3110' 10 3/4" 8 5/8" 32# J-55 LTC NEW+HD-513 7350 Circ to Surface TOC @ 5000 CIRC. TO SURF. 7 7/8" 5 1/2" 17# N-80 12.857' MD LTC NEW+HD-513 Strata Production Company proposes to drill to a depth sufficient to test the Delaware If productive, 5 1/2" casing will be set. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal Regulations. Specific program:: as set out in Onshore Oil & Gas Order #1 are outlined in the Ællowing attachments: NMOCD Form C-102 Well Location and Acreage Dedication Plat Hole Prognosis Surface Use and Operating Plan approval subject to Exhibit "A" Equipment Description Exhibit "B" Planned Access Roads General requirements and Exhibit "C" One Mile Radius Map SPECIAL STIPULATIONS Exhibit "D" Drilling Rig Layout Plan ATTACHED Exhibit "E" Vertical Plan & Horizontal Plan View ALCON ! Notifications to Area Potash Leaseholders Archaelogical Report Statement Accepting Responsibility Pit or Below Grade Tank Registration NSL - 5427 IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. SIGNED (This space for ederal or State office use) PERMIT NO APPROVAL DATE APPROVED BY /s/ Linda S. C. Rundell MAY 1 0 2006 DIRECTOR

\*See Instructions On Reverse Side

CONDITIONS OF APPROVAL, IF ANY

# 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

<sup>4</sup> Property Code

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

<sup>1</sup> API Number

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Santa Fe, NM 87505

<sup>2</sup> Pool Code

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

		NASH DRAW						48				
7 OGRID	No.								<sup>9</sup> Elevation			
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District I 1625 N. French Dr., Hobbs, NM 88240

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1301 W. Grand Avenue, Artesia, NM 88210

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1220 S. St. Francis Dr., Santa Fe, NM 87505

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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

Pool Code	3 Pool Name	
VELL LOCATION AND	ACREAGE DEDICATION PLAT	
i		AMENDED REPORT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name	
	47545	Mash Draw Delausre/	Pene Spring (Alaka San
<sup>4</sup> Property Code	5 P1	roperty Name	<sup>6</sup> Well Number
	NAS	H DRAW	48
7 OGRID No.	8 O	perator Name	<sup>9</sup> Elevation
·	STRATA PROD	UCTION COMPANY	2985
	<sup>10</sup> Su	face Location	

North/South line

K	12	23-S	29-E		2415	SOUTH	1646	WEST	EDDY
11 Bottom Hole Location If Different From Surface									
UL or let no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

500 23-S NORTH 1000 WEST **EDDY** 12 Dedicated Acre <sup>13</sup> Joint or Infill 15 Order No. 160

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.		1		**
(16 (3)				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
BOTTOMHOLE LOCATION				owns a working 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 working interest, or to a voluntary
	y ana	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	pooling agreement or a compulsory pooling arder heretafare entered by the division.  12/12/05
		Project C	14a	Signafure Date  Kelly M. Britt  Printed Name
		11		
	SEY	•		<sup>18</sup> 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.
				DECEMBER 6, 2005  Date of Sarvey, N. R. R. E. O. O.
		÷	·	Signature and Seat of Photostonal Surveyor
				DAN R. REDDY NAMPE 279#5412

# SURFACE USE PLAN FORM 3160-3 APPLICATION FOR PERMIT TO DRILL STRATA PRODUCTION COMPANY NASH DRAW #48 WELL 2415' FSL & 1646' FWL SECTION 12-23S-29E EDDY COUNTY, NEW MEXICO

Submitted with Form 3160-3, Application For Permit to Drill covering the above captioned well. The purpose of the plan is to describe the location, the proposed construction activities, the operations, the surface disturbance involved, and the rehabilitation of the surface after completion of said well so that an appraisal can be made of the environment affected by this well.

#### 1. Existing Roads:

- A. The Well Location and Acreage Dedication Plat for the proposed well has been staked by Dan R. Reddy, Engineer, Carlsbad, New Mexico and is attached.
- B. All roads to the location are shown in Exhibit "B". The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.
- C. Directions to location: From Loving, New Mexico, the well is located approximately 9 miles to the east and 1 ½ miles south of State Highway 128.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as operations continue on the lease.

# 2. <u>Proposed Access Road</u>:

A new access road of approximately 250' will be required as shown on Exhibit "B" and is illustrated in yellow. The road will be constructed from the existing north south road as follows:

## SURFACE USE PLAN NASH DRAW #48 Page 2

- A. The average grade will be less than 5%.
- B. No turnouts will be necessary.
- C. No culverts, cattleguards, gates, low-water crossings or fence cuts are necessary.
- D. Surfacing material will consist of native caliche. If required, road across pad will be surfaced with a minimum of 6" of caliche. Caliche will be obtained from the nearest BLM approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

#### 3. Location of Existing Wells:

All existing wells within a one mile radius of proposed well are shown on Exhibit "C". A list of the wells is shown on the Attachment to Exhibit "C".

# 4. Location of Existing and/or Proposed Facilities:

In the event the proposed well proves to be productive, Strata Production Company will furnish maps or plats showing On Well pad facilities and Off Well pad facilities (if necessary) by Sundry Notice before beginning the construction of the facilities.

# 5. Location and Type of Water Supply:

The well will be drilled with a combination of brine and fresh water mud systems as outlined in the Hole Prognosis. The water will be purchased from commercial water stations in the area and trucked to the location by transport over the existing and proposed access roads as shown on Exhibit "B". If a commercial fresh water source is nearby, fasline may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location.

#### 6. Source of Construction Materials:

All caliche required for construction of the drill pad and the proposed new access road (approximately 3000 cubic yards) will be obtained from a BLM approved caliche pit. All roads and pads will be constructed of 6" rolled and compacted caliche.

#### 7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit approximately 150' x 150' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water. Drilling fluids will be allowed to evaporate in the reserve pits until dry.
- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending upon rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) until transported via flowline or trucked to an approved disposal system or a separate disposal application will be submitted to BLM for approval. Produced oil will be collected in steel tanks until sold.
- D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations. Compliance with current laws and regulations pertaining to the disposal of human waste will be observed.

- E. Garbage and trash produced during drilling or completion operations will be disposed in a separate trash trailer on location. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by the operation.
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until dried. When the reserve pit is dry enough to breakout and fill, and as weather permits, the unused portion of the wellsite will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will remain in use. In the event of a dry hole, only a dry hole marker will remain.

#### 8. <u>Ancillary Facilities</u>:

No airstrip, campsite or other facility will be built as a result of the operations of the proposed well. No permanent living facilities are planned, however, a temporary foreman/toolpusher's trailer will be on location during drilling operations.

# 9. Well Site Layout:

- A. The drill pad layout with elevations, as staked by Dan R. Reddy, Engineer, is shown on Exhibit "D". Dimensions of the pad, pits and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Since the pad is fairly level, no major cuts will be required.
- B. The planned orientation of the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around and parking areas, and access road are shown on Exhibit "D".

C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

#### 10. Plan for Restoration of the Surface:

A. Upon completion of the proposed operations, should the well be abandoned, the pit area, after allowed to dry, will be broken out and leveled. The original top soil will be returned to the entire location, and leveled and contoured to the original topography as nearly as possible.

All trash, garbage and pit lining will be removed in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- B. The disturbed area will be re-vegetated by re-seeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock or wildlife from being entrapped. The fencing will remain in place until the pit area is cleaned and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of the proposed operations, should the well be productive, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from an area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drillsite will be used to re-contour the pit area and unused portions of the drill pad to the original natural level and re-seeded as per BLM specifications.

#### SURFACE USE PLAN NASH DRAW #48 Page 6

#### 11. Surface Ownership:

The wellsite and lease are located entirely on Federal surface.

#### 12. Other Information:

- A. The topography around the wellsite is rolling terrain with vegetation of sagebrush and native grass. The vegetation cover consists of prairie grasses and flowers. Wildlife in the area includes those typical of semi-arid desert land.
- B. The soils are clayey sand over caliche base.
- C. There is no live water in the immediate area.
- D. There are no residences and other structures in the area.
- E. The land in the area is used primarily for grazing purposes.
- F. An archaeological study has been conducted for the location and new access road. The report has been submitted separately.

#### 13. <u>Lessee's and Operator's Representative</u>:

MARK MURPHY
P. O. BOX 1030
ROSWELL, NEW MEXICO 88202-1030
PHONE NUMBER: (505) 622-1127 ext. 12

# SURFACE USE PLAN NASH DRAW #48 Page 7

#### 14. Certification:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site which currently exists; that the statements made in the plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Strata Production Company and its contractors and sub-contractors in conformity with the plan, and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

STRATA PRODUCTION COMPANY

Kelly M. Britt

PRÓDUCTION RECORDS

DATE: \_\_\_ January 27, 2006

# HOLE PROGNOSIS FORM 3160-3 APPLICATION FOR PERMIT TO DRILL STRATA PRODUCTION COMPANY NASH DRAW #48 WELL 2415' FSL & 1646' FWL SECTION 12-23S-29E EDDY COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Strata Production Company submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

#### 1. Geologic Name of Surface Formation:

Permian

#### 2. <u>Estimated Tops of Geologic Markers</u>:

Rustler	Surface	"F-2" Sand	5788'
Salado	260'	"H" Sand	6180'
Castile	1730'	"K" Sand	6650'
Bell Canyon	3110'	"L" Sand	6770'
Cherry Canyon	4220'	Bone Spring	6860'
Brushy Canyon	5190'	TD - TVD	6860'

#### 3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Surface 150' Fresh Water Delaware 3110' - 6860' Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 310' and circulating cement back to surface. Shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across the zone by inserting a cementing stage tool into the 5 1/2" production casing which will be run at TD.

#### 4. <u>Casing Program</u>:

Hole Siz	<u>e Interval</u>	OD Csg	Weight, Grade, Jt. Cond, Type
17 1/2" 12 1/2" 10 3/4"	0' - 310' 310' -3110' 3110' -7350'	13 3/8" 11 3/4" 8 5/8"	48#, H-40, ST&C, New 54#, J-55, LT&C, New 24# & 32#, J-55, LT&C, New & HD- 513
7 7/8"	7350' - TD	5 1/2"	17#, N-80, LT&C, New & HD-513

#### Cementing Program:

#### Surface Casing:

13 3/8" casing will be set at approximately 310' and cemented with approximately 425 sacks of Premium Plus cement with 2% CaCL and additives per sack. The amount may be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

#### Intermediate Casing:

11 3/4" casing will be set at approximately 3110' and cemented with approximately 750 sacks of 35/65 Poz "C" with 10# salt and additives per sack, and 200 sacks Class "C" with 15# salt and additives per sack. The amount may be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

#### 2<sup>nd</sup> Intermediate Casing:

8 5/8" casing will be set at approximately 7350' and cemented with 1000 sacks Cemcrete 39/61 with top of cement at surface.

#### **Production Casing:**

If appropriate, 5 1/2" casing will be set at Total Depth. Strata utilizes cement in sufficient quantities to circulate cement into the 8 5/8" intermediate casing. Cemented with 1000 sacks Cemcrete 39/61 with top of cement at + 5000'.

#### 5. <u>Minimum Specifications for Pressure Control</u>:

The blowout preventer equipment (BOP) shown on Exhibit "A" will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOPs will be nippled up on the 13 3/8" surface casing and used continuously until TD is reached. All BOPs and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 70% of rated working pressure (2100 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

# 6. Types and Characteristics of the Proposed Mud System:

0' to 310'	Fresh water with lime and gel with paper and fiber for seepage will be used for drilling purposes.
310' to 3110'	Saturated brine water purchased from commercial sources with paper and fiber for seepage will be utilized.
3110' to 7350'	3% KCL water with 20-50 PPM Nitrates, caustic for PH control and paper for seepage with starch and XCD for Vis and WL will be utilized. Anticipated mud properties are as follows: MW 8.5, WL 15, PH 10, Vis 28, CL 70,000.
7350' to TD	3% KCL water with 20-50 PPM Nitrates, caustic for PH control and paper for seepage with starch and XCD for Vis and WL will be utilized. Anticipated mud properties are as follows: MW 8.8, WL <6, PH 10, Vis 30, CL 70,000.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

#### 7. Auxiliary Well Control and Monitoring Equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

#### 8. <u>Testing, Logging and Coring Program</u>:

A two (2) man Mudlogging unit will be on location from the top of the Delaware formation to TD. Mudlogging unit will be employed from approximately 3110' (Top of Delaware) to 6860' TVD (Total Depth).

If indicated, DLL-MSFL, CNL-Density, Gamma Ray logs and Caliper logs will be run at TD. The Dual Laterolog will be run from TD back to the intermediate casing and the Compensated Neutron/Density Log will be run from TD back to surface. In some cases, Strata may elect to run rotary sidewall cores from selected intervals from approximately 3110' to 6860' dependent upon logging results.

#### 9. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The anticipated bottomhole pressure is 2600# PSI.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells.

Strata has drilled and completed twenty (20) wells in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide alarm on the drilling rig would be activated. All personnel have had Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blow out preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

#### 10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is April 1, 2006. Once commenced, the drilling operation should be completed in approximately 20 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities.

#### EXHIBIT "A"

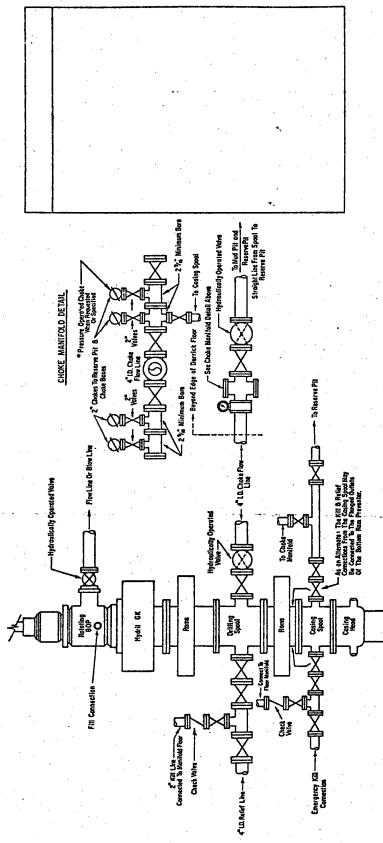
#### EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

- 1. Bell nipple
- 2. Hydril bag type preventer
- Ram type pressure operated blowout preventer with blind rams. 3.
- Flanged spool with one 3"and one 2"(minimum) outlet. 4.
- 5. 2"(minimum) flanged plug or gate valve.
- 2"x 2"x 2"(minimum) flanged. 6.
- 7. 3"gate valve.
- Ram type pressure operated blowout preventer with pipe rams. 8.
- Flanged type casing head with one side outlet. 9.
- 2" threaded (or flanged) plug or gate valve. 10. Flanged on 5000# WP, threaded on 3000# WP or less.
- 3" flanged spacer spool. 11.
- 3"x 2"x 2"x 2" flanged cross. 12.
- 2" flanged plug or gate valve. 13.
- 2" flanged adjustable choke. 14.
- 2" threaded flange. 15.
- 2" XXH nipple. 16.
- 17. 2" forged steel 90 Ell.
- Cameron (or equal) threaded pressure gauge. 18.
- Threaded flange. 19.
- 20. 2" flanged tee.
- 2" flanged plug or gate valve. 21.
- 2 1/2" pipe, 300' to pit, anchored. 2 1/2" SE valve. 22.
- 23.
- 2 1/2" line to steel pit or separator. 24.

#### NOTES:

- Items 3,4 and 8 may be replaced with double ram type preventer 1). with side outlets between the rams.
- The two valves next tho the stack on the fill and kill line to be closed unless drill string is being pulled.
- Kill line is for emergency use only. 3). This connection shall not be used for filling.
- 4). Replacement pipe rams and blind rams shall be on location at all times.
- 5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- 6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.



The blowout preventer assembly shall consist of one single type billnd ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventar; a rotating blowout preventer; valves; chakes and connections, as illustrated. If a toperad drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fif the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

3000# PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1)Multiple pumps, driven by a continuous source of power, capable of fluid charging the total occumulator volume from the nitrogen precharge pressure to its rated pressure within minutes. Also, the ownes are to be connected to the

nitragen pressure to is sold a clased system. (2) Accumulators with a precharge of nitragen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With ure-operated devices simultaneously within seconds, after closure, percent of the original. (3) When requested, on additional source of the charging pumps thut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within, the remaining accumulator fluid volume at least percent of the original. (3) When requeste

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

ower, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilistes.

The choke manifold, choke flow line, relief line, and chake lines are to be supported by metal stands and adequataly anchared. The choke flow line, relief line, and choke lines shall be constructed es straight as possible and without sharp bonds. Easy and safe access is to be maintained to the choke manifold. If documed nocessary, walkways and stainways shall be eracted in and eccess is to be maintained. All volves are to be selected for operation in the presence of ail, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stam extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

\* To include derrick floor mounted controls.

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# Attachment to Exhibit "C"

# STATUS OF WELLS WITHIN ONE MILE RADIUS

# NASH DRAW #48 Section 12-T23S-R29E Eddy County, New Mexico January 2006

	January 20	06	0
Section 12-T23S-R29E	Well#	Footage	Status/ <u>Formation</u>
Murchison Oil & Gas Inc.	Nash Unit #3	1980' FSL & 1980' FW	_
Strata Production Co.	Nash Unit #13	2315' FSL & 1746' FW	L
Strata Production Co.	Nash Unit #11	498' FSL & 2000' FWL	
Strata Production Co.	Nash Unit #19	2202' FSL & 2201' FEL	
Strata Production Co.	Nash Unit #12	918' FSL & 2153' FEL	
Strata Production Co.	Nash Unit #16	330' FSL & 990' FEL	
Strata Production Co.	Nash Unit #36	1460' FSL & 1585' FW	L
Murchison Oil & Gas Inc.	Nash Unit #52	1628' FSL & 2150' FW	L
Strata Production Co.	Nash Unit #33	10' FSL & 175' FWL	
Murchison Oil & Gas Inc.	Nash Unit #53	1663' FSL & 2185' FW	L
Strata Production Co.	Nash Unit #34	2403' FSL & 2102' FEL	v ristori
Section 13-T23S-R29E			
Strata Production Co.	Nash Unit #1	1980' FNL & 660' FEL	
Strata Production Co.	Nash Unit #4	990' FNL & 330' FWL	
Strata Production Co.	Nash Unit #9	860' FNL & 2210' FEL	
Strata Production Co.	Nash Unit #10	1750' FNL & 1850' FEL	-
Strata Production Co.	Nash Unit #14	660' FNL & 500' FEL	
Strata Production Co.	Nash Unit #15	10' FNL & 475' FWL	
Strata Production Co.	Nash Unit #21	1650' FNL & 1650' FW	L

Section 13-T23S-R29E (continued)

Strata Production Co.

Nash Unit #23

1650' FNL & 990' FWL

Strata Production Co.

Nash Unit #29

1980' FSL & 2310' FEL

Section 14-T23S-R29E

Strata Production Co.

Nash Unit #24

1750' FNL & 890' FEL

Section 18-T23S-R30E

Pre-Ongard Operator

Pre-Ongard Well #7

685' FNL & 1295' FWL

Strata Production Co.

Nash Unit #20

1230' FNL & 1330' FWL

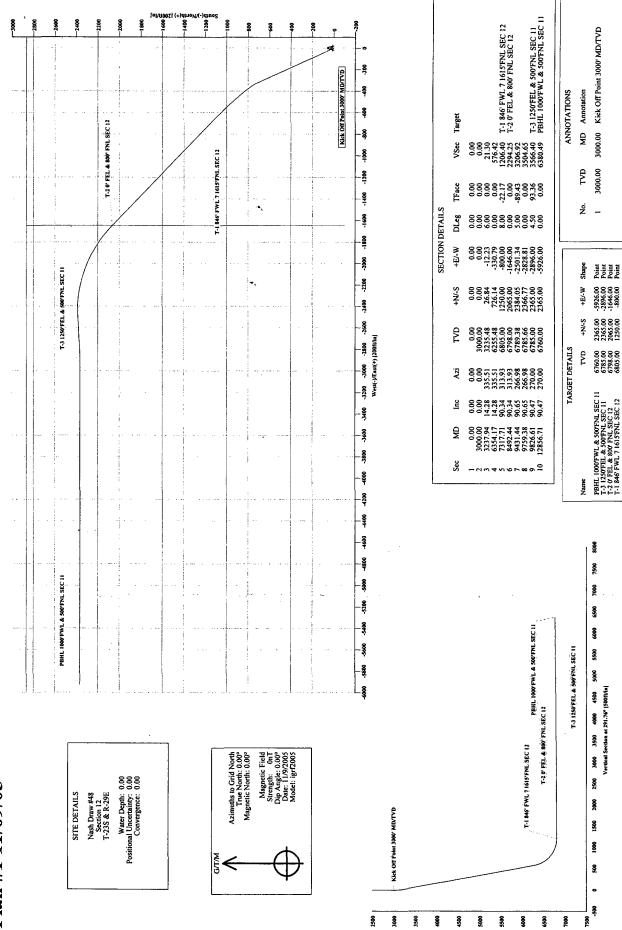
# Strata Petroleum

Nash Draw #48
Section 12, T23-S, R29-E
Eddy County, New Mexico
Plan #1 11/09/05

EXHIBIT "E"
Verticle & Horizontal Plan
NASH DRAW #48
Sec. 12, T23S-R29E

Eddy Co., NM

ENERGY SERVICES



Plus Plus at 11-09-05 (Numb Drew aut/Numb Chare ed.). Ormand Pr. Robert Seruge Days 21192000



Mosaic Potash Carlsbad Inc. PO Box 71 1361 Potash Mines Road Carlsbad, NM 88220 www.mosaicco.com Tel 505-887-2871 Fax 505-887-0589

January 5, 2006

STRATA

JAN 0 9 2006

Kelly M. Britt Production Records Strata Production Company 200 West First Street Roswell, NM 88203 PRODUCTION COMPANY

Dear Kelly:

We are in receipt of your letter dated 12/21/05 concerning an APD for a well in Section 12, T-23-S, R-29-E. Mosaic Potash Carlsbad Inc. does have a potash lease that includes the northern three quarters of this section.

Nash Draw #48 at 2415' FSL & 1646' FWL is about 500 feet from our LMR and just outside the enclave as drawn by the BLM. This location however is only 100 feet north and 120 feet west of a well drilled previously. Nash Draw #48 is a directionally drilled hole with its bottom hole location planned to be about 1.4 miles to the WNW. Mosaic wishes to encourage the use of directional drilling to minimize the impact of petroleum exploration on potash resources. Therefore, Mosaic does not object to this location for an oil test well no deeper than the base of the Delaware Formation.

As more information becomes available, our estimates of the extent of potash resources in any given area may change. Therefore, please consider this "no objection" to this location to be valid for one year only. If you are still considering this well location at a date later than one year from today, notify us again at that time so we can make the decision on information current at that time. Do not consider a "no objection offered" or an "objection offered" decision to be permanent.

Mosaic Potash submits this letter in lieu of the forms requested.

Sincerely,

Dan Morehouse

Mine Engineering Superintendent

cc:

Don Purvis David Waugh

#### **CONDITIONS OF APPROVAL - DRILLING**

Operator's Name:

**Strata Production Company** 

Well Name & No.

Nash Draw Unit #48

SH Location:

2415' FSL, 1646' FWL, Section 12, T. 23 S., R. 29 E., Eddy County, New Mexico 500' FNL, 1000'FWL, Section 11, T. 23 S., R. 29 E., Eddy County, New Mexico

Lease:

NM-0554221 (BHL)

#### I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:
  - A. Well spud
  - B. Cementing casing <u>13-3/8</u> inch <u>11-3/4</u> inch <u>8-5/8</u> inch <u>5-1/2</u> inch
  - C. BOP tests
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.

#### II. CASING:

- 1. The <u>13-3/8 inch</u> surface casing shall be set at <u>approximately 400 feet and cement circulated to the surface</u>. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>11-3/4</u> inch intermediate casing is <u>to be circulated to the surface</u>.
- 3. The minimum required fill of cement behind the <u>8-5/8</u> inch 2<sup>nd</sup> intermediate casing is <u>to be circulated to the surface</u>.
- 4. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>to be circulated to the surface</u>.
- 5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

#### **III. PRESSURE CONTROL:**

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>13-3/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

2/14/2006 acs