# New Mexico Oli Consederation number 2011, District I 1625 Nother personal drave by Modified Form No. 1625 Nother personal drave by Modified Form No. 1606-3160-2

BLM Roswell District Modified Form No.

NM060-3160-2

# UNITED STATES DEPARTMENT OF THE INTERIOR

5. LEASE DESIGNATION AND SERIAL NO.

	BUREAU OF LAND MANAGEMENT   NM-85940								
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 6. IF INDIAN, ALLOTTEE OR TRIBE NAME									
a. TYPE OF WORK b. TYPE OF WELL OIL WELL	DRILL X  GAS  WELL	DEEPEN OTHER	SINGLE ZONE X	PLUG BACK  MULTIPLE  ZONE		7. UNIT AGREEMENT  1. UNIT AGREEMENT  3. FARM OR LEASE, N  Urraca Fede	OND IAME	24 15 16 3 7 25 - 3 7 21 0 7 4	68 8
2. NAME OF OPERA		OTIER		Area Code & Phone No.		9 WFIL NO.	)		13/
STRATA PRODUCTION COMPANY (21712) 38. Area Code & Phone No. 505-622-1127 #3									
3. ADDRESS OF OPI			,			10. FIELD AND POOL,	100	· · ·	<b>₹</b> %
P. O. Bo		<u>oswell, New M</u>		1030		DiamondTail		re /	£2,0/
	ELL (Report location cle	early and in accordance with a	ny State requirements.*)			11. SEC., T., R., M., O	N	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7
At surface	4.6	2001 FOL 8 2001	<b>-1</b>			AND SURVEY OR	AREA		
At proposed prod. z		980' FSL & 660'	Ln.	ith		Section 11-	T23S-I	R32E	
14. DISTANCE IN MI	ILES AND DIRECTION	FROM NEAREST TOWN	OR POST OFFICE*			12. COUNTY OR PARI	SH	13. STATE	
34 miles e	ast of Carlsb	ad, NM				Lea		NM	
15. DISTANCE FROM LOCATION TO NI PROPERTY OR LI	EAREST		16. NO. OF ACRES IN	LEASE 1		OF ACRES ASSIGNED HIS WELL		<del></del>	
(Also to nearest drlg		5280'	400			40.00			
	PROPOSED LOCATION DRILLING, COMPI		19. PROPOSED DEPTH	20	0. ROTA	RY OR CABLE TOOLS			
	, ON THIS LEASE, FT.	5280'	9200'			Rotar	<u> </u>		
	now whether DF, RT, GR	, etc.)				22. APPROX. DATE WORK WILL START*			
3729' GR						February 01,2	006		
23.			CASING AND						
HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	S			OF CEMENT	
17 1/2"	13 3/8"	48#	H-40	8 RD STC	<u> </u>	595'		X, Circ	
11"	8 5/8"	32#	J-55	8 RD LTC	_			SX, Circ	
7 7/8"	5 1/2"	17#	N-80	8 RD LTC		9200'	600 S		
		pany proposes		•				ondTail	
Delaware fo	rmation. If p	productive, 5 1/2	2" casing will	l be set. I	lf no	n-productive,	the v	well will	
be plugged		oned in a ma						pecific	
programs as set out in Onshore Oil & Gas Order #1 are outlined in the following attachments:									
NMOCD Form C-102 Well Location and Acreage Dedication Plat Hole Prognosis									
		urface Use and	Operating Plai	n		######################################			
H2S Drilling Operations Plan									
Exhibit "A" Equipment Description GENERAL REQUIREMENTS A						AME			
EXHIDIT "B" Planned Access Hoads SPECHAL STIPULATIONS						4 50 6			
	EXHIBIT "O" One Mile Hadius Map ATTACHED								
		khibit "D" Drilling							*
		t or Below-Grad				_			
		atement Accept		omity for Opera	ations	5			
	Archaeological Report								

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

s to drill or deepen directionally, give pertinent data on subs	urface locations and measured and tra	ie vertical depths. Give blowout preventer pro	gram, if any.	
SIGNED KULFT WOR	itt mie	Production Records	DATE	10/12/2005
(This space for Pederal or State office use)				
PERMIT NO. Juna Uni	lleom	CTING Z	/7/200	06
APPROVED BY /S/ Joe G.	Lara tme	FIELD MANAGER	A / DATE	FEB 0 3 2006
CONDITIONS OF APPROVAL, IF ANY:		APP	ROVAL FO	OR 1 YEAR

\*See Instructions On Reverse Side

F3160-3.WK1

District 1 1625 N. Franch Dr. Hobbs, NM 88248 State of New Mexico

Energy, Minerals & Natural Resources Department

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

District II 1301 W. Grand Avenue, Artesia, NM 86210

District III 1000 Rio Brazos Rd., Aztec NM 87410

District IV 1220 S. St. Francis Dr., Souta Fe, NM 87505 OIL CONSERVATION DIVISION
1220 South St. Francis Dr.

Santa Fe, NM 87505

\_\_ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

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# HOLE PROGNOSIS FORM 3160-3 APPLICATION FOR PERMIT TO DRILL STRATA PRODUCTION COMPANY URRACA FEDERAL #3 1980' FSL & 660' FWL SECTION 11-23S-32E

SECTION 11-23S-32E LEA COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Deepen, or Plug Back, 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. Estimated Tops of Geologic Markers:

Rustler	1200'	Brushy Canyon	7040'
Base of Salt	3525'	Bone Spring	8785'
Lamar Lime	4900'	First BS Sand	8960'
Cherry Canyon	5970'	${f TD}$	9200'

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

Surface	150'	Fresh Water
Delaware	4900' - 8785'	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 595' and circulating cement back to surface. Any 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>:

<u> Hole Size</u>	<u>Interval</u>	OD csq	Weight, Grade, Jt. Cond, Type
7 (2 1/2 " 12 1/4 " 7 7/8 "	595' 4700' 9200'	13 3/8" 8 5/8" 5 1/2"	48#, H-40, ST&C, New 32#,24# J-55, LT&C,ST&C New 17#, N-80, LT&C, New
Peferred	to mide	eplon,	•

# Cementing Program:

Surface Casing:

13 3/8" casing will be set at approximately 595' and cemented with approximately 700 sacks of Premium Plus w/5# D-42, 1/4# D-29 & 2% CaCl. The amount could be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Intermediate Casing:

8 5/8" casing will be set at approximately 4700' and cemented with approximately 1850 sacks of 35/65 Poz "C", 15# sacks D-44, 1/4# D-29 & 2% D-46, 6% D-20, 200 sacks "C" w/15# D-44 & 2% CaCl. The amount could be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Production Casing:

If appropriate, 5 1/2" casing will be set at Total Depth and cemented with 600 sacks CemCrete w/39/61 (TOC at 1500'), D961/D124, 1% D153, .25 PPS D29, .05 GPSB D604AM, .03 GPSB M45, .15 GPSB D801. Strata utilizes cement in sufficient quantities to bring the cement into the 8 5/8" intermediate casing.

# 5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in 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 BOP's will be nippled up on the 13 3/8" surface casing and used continuously until TD is reached. All BOP's 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 **595'**200'

Native mud consisting of fresh water and native muds are used for drilling purposes.

595' to 4700'

Brine water purchased from commercial sources will be utilized.

4700' to 9200'

Brine and fresh water purchased from commercial sources will be utilized. Salt gel will be used to build viscosity.

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. Testing, Logging and Coring Program:

Two (2) man Mudlogging unit from top of Delaware to TD DLL-MSFL, CNL-Density, Gamma Ray, Caliper.

Mudlogging unit will be employed from approximately 4700' (Top of Delaware) to 9200' (Total Depth). 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 elects to run rotary sidewall cores from selected intervals from approximately 4700' to 9100' dependent upon logging results.

# 9. <u>Abnormal Conditions, Pressures, Temperatures and Potential Hazards</u>:

No abnormal pressures or temperatures are anticipated.

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 six (6) 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.

HOLE PROGNOSIS URRACA FEDERAL #3 Page 5

# 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 February 1, 2006. Once commenced, the drilling operation should be finished 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.

SURFACE USE PLAN
APPLICATION FOR PERMIT TO DRILL
STRATA PRODUCTION COMPANY
Urraca Federal #3
1980' FSL & 660' FWL
SECTION 11-23S-32E
LEA COUNTY, NEW MEXICO

Submitted with Form 3160-3, Application For Permit to Drill, Deepen, or Plug Back covering the above captioned well. The purpose of the plan is to describe the location, the proposed construction activities and operations plan, 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 the proposed well.

# 1. <u>Existing Roads</u>:

- A. The well site and elevation plat for the proposed well is attached. It was staked by Dan R. Reddy, Engineer, Carlsbad, New Mexico.
- 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: 10 miles east on Hwy 128, turn north/east on CR 797 (Mills Ranch Road). East 11 miles to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

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

Exhibit "B" shows approximately 100' of new access road to be constructed and is illustrated in yellow. The road will be constructed from the existing east/west road as follows:

- 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 approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

# 3. Location of Existing Wells:

Exhibit "C" shows all existing wells within a one mile radius of proposed well. A list of these 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 needed) by Sundry Notice before construction of these facilities starts.

# 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 shown in Exhibit "B". If a commercial fresh water source is nearby, fasline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

# 6. <u>Source of Construction Materials</u>:

All caliche required for construction of the drill pad and the proposed new access road (approximately 2500 cubic yards) will be obtained from an 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 (12 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 pits are dry.

- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be piped to the Forty Niner Ridge Unit #1 SWD well. 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. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- 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 of 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 it has dried. When the reserve pit is dry enough to breakout and fill and, weather permits, the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use. In the event of a dry hole, only a dry hole marker will remain.

# 8. Ancillary Facilities:

No airstrip, campsite or other facility will be built as a result of the operations of the proposed well.

# 9. Well Site Layout:

A. The drill pad layout, with elevations staked by Dan R, Reddy, Engineer, is shown in 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 almost level no major cuts will be required.

- B. Exhibit "D" shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turn-around and parking areas and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with a high quality plastic sheeting (12 mil thickness).

# 10. Plan for Restoration of the Surface:

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

All trash, garbage and pit lining will be buried or hauled away 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 revegetated by reseeding 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 up and leveled. No oil will be left on the surface of the fluid in the pit.
- Upon completion of the proposed operations, if the well D. is completed, the reserve pit area will be treated as outlined above within the same prescribed time. caliche from any 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. additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level and reseeded as specifications.

# 11. Surface Ownership:

The wellsite and lease is located entirely on Federal surface.

# 12. Other Information:

- A. The topography around the well site is rolling terrain with vegetation of sagebrush and native grass. The vegetation cover consists of prairie grasses and flowers. Wildlife in the area probably includes those typical of semi-arid desert land.
- B. The soils are clayey sand over caliche base.
- C. There are no permanent or 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.

# 13. Lessee's and Operator's Representative:

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

### 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.

STRAȚA PRODUCTION COMPANY

KELLY M. BRITT

PRODUCTION RECORDS

DATE: <u>October 12, 2005</u>

# STRATA PRODUCTION COMPANY

# H<sub>2</sub>S DRILLING OPERATIONS PLAN

# HYDROGEN SULFIDE TRAINING

- A. All contractors and subcontractors employed by Strata Production Company will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on the well.
  - 1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
  - 2. Safety precautions.
  - 3. Operations of safety equipment and life support systems.
- B. In addition, contractor supervisory personnel will be trained or prepared in the following areas:
  - 1. The effect of H<sub>2</sub>S on metal components in the system. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
  - Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
  - 3. The contents and requirements of the contingency plan when such plan is required.
- C. All personnel will be required to carry documentation of the above training on their person.

# II. H<sub>2</sub>S EQUIPMENT AND SYSTEMS

# A. SAFETY EQUIPMENT

The following safety equipment will be on location.

- 1. Wind direction indicators as seen in attached diagram.
- 2. Automatic H<sub>2</sub>S detection alarm equipment both audio and visual.
- 3. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- 4. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached Diagram.

# B. WELL CONTROL SYSTEMS

1. Blowout Prevention Equipment

Equipment includes but is not limited to:

- a. Pipe rams to accommodate all pipe sizes.
- b. Blind rams.
- c. Choke manifold.
- d. Closing unit.

# 2. Communication

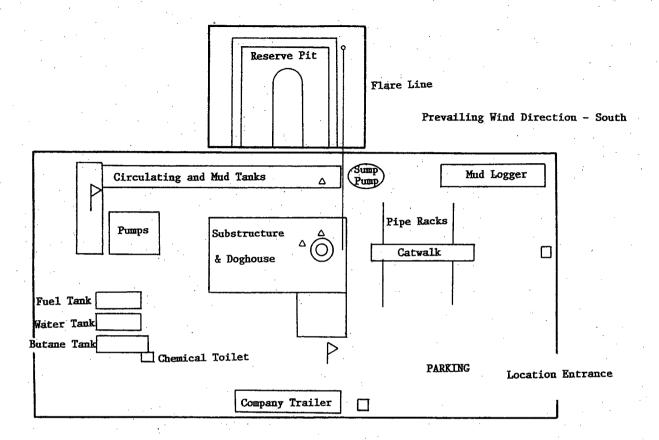
a. The rig contractor will be required to have two-way communication capability. Strata Production Company will have either land-line or mobile telephone capabilities.

# 3. Mud Program

- a. The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices and the use of H<sub>2</sub>S scavengers, when appropriate, will minimize hazards when penetrating H<sub>2</sub>S bearing zones.
- 4. Drill Stem Test intervals are as follows:
  - a. None planned

# III. WELLSITE DIAGRAM

- A. A complete wellsite diagram including the following information is attached.
  - 1. Rig orientation
  - 2. Terrain
  - 3. Briefing areas
  - 4. Ingress and egress
  - 5. Pits and flare lines
  - 6. Caution and danger signs
  - 7. Wind indicators and prevailing wind direction



Δ ALARM ON RIG FLOOR WITH SENSORS AT THE FLOOR, BELL NIPPLE& SHAKER

wind direction indicators

SAFE BRIEFING AREAS WITH CAUTION SIGNS & PROTECTIVE BREATHING EQUIPMENT

# EXHIBIT "A"

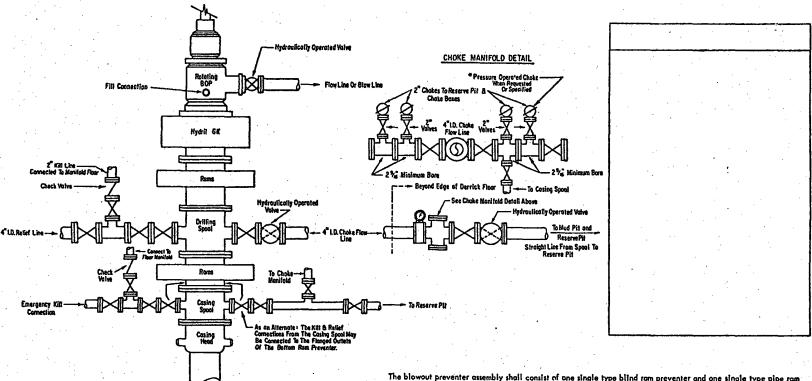
# EQUIPMENT DESCRIPTION

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

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

### NOTES:

- 1). Items 3,4 and 8 may be replaced with double ram type preventer with side outlets <u>between</u> the rams.
- 2). The two valves next tho the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3). Kill line is for emergency use only. 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.



3000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

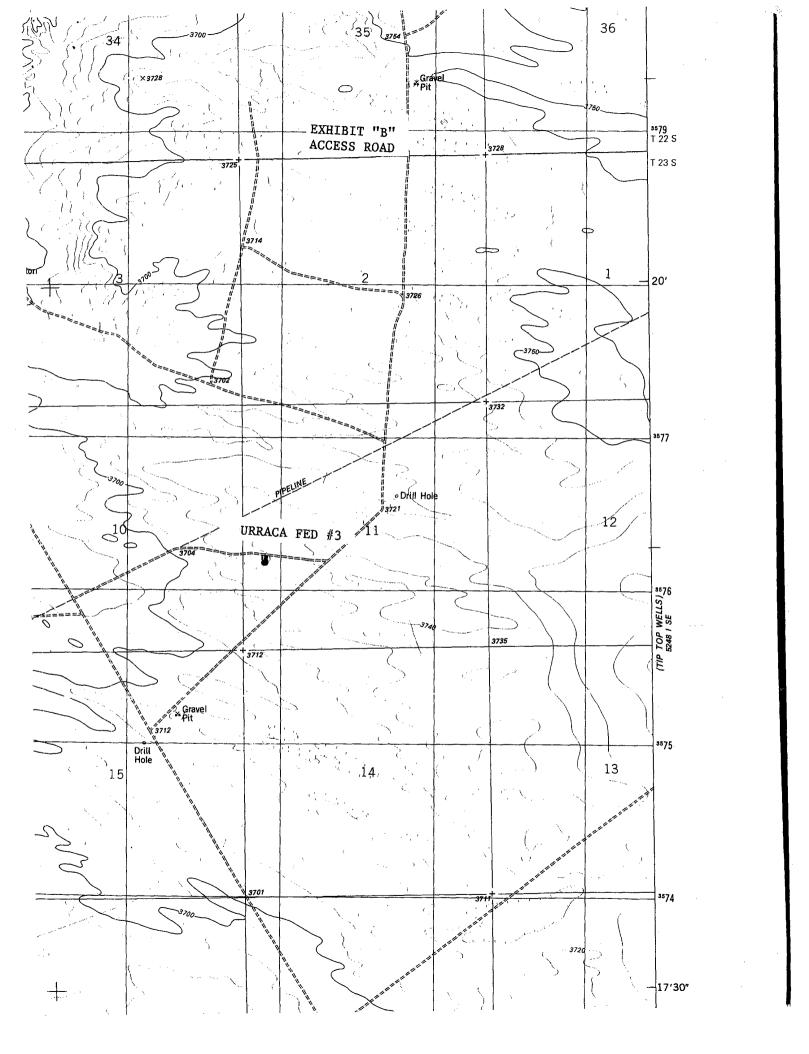
The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a toperad drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit 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 1.D. choke flow line and 4-inch 1.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

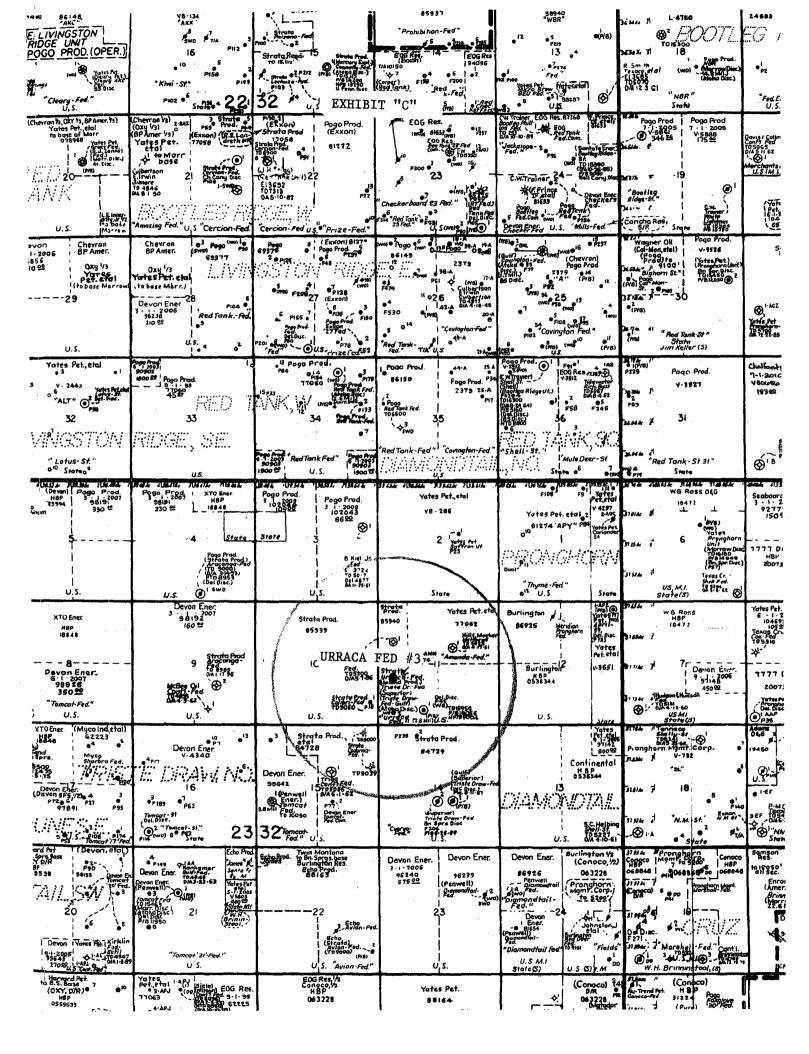
Minimum operating equipment for the preventers and hydroulically operated valves shall be as follows: (1)Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within \_\_\_\_\_ minutes.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

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 preventers. 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.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be greated in and around the choke manifold. All valves are to be selected for operation in the presence of oil, 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 stem 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.



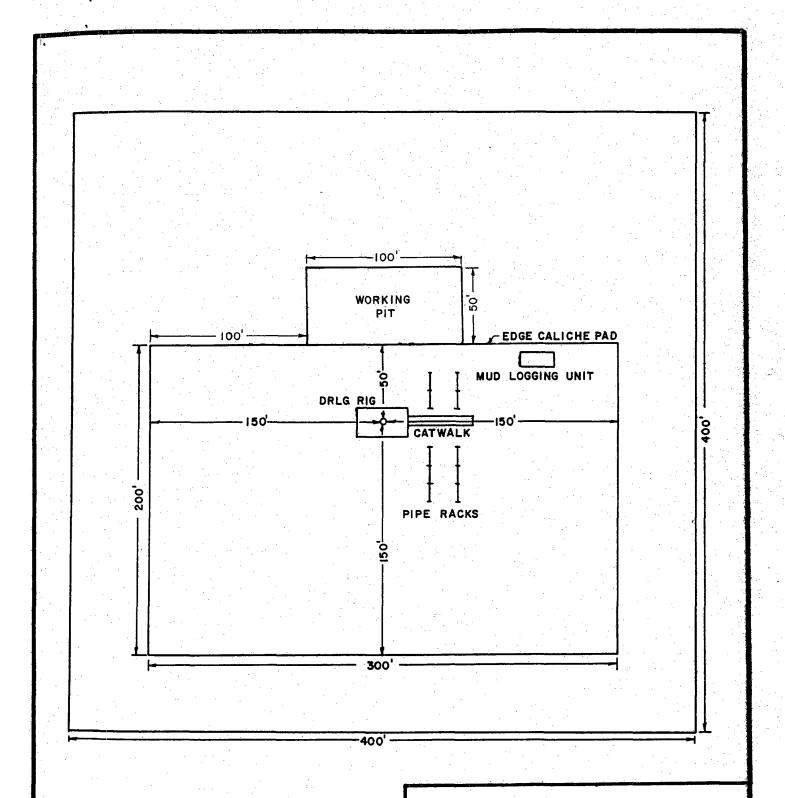


# Attachment to Exhibit "C"

# STATUS OF WELLS WITHIN ONE MILE RADIUS

# URRACA FEDERAL #3 Section 11-T23S-R32E Lea County, New Mexico October 2005

Section 11-T23S-R32E	Well #	<u>Footage</u>	Status/ <u>Formation</u>
Pre-Ongard Operator	Pre-Ongard Well #1	1980' FNL & 1980' FEL	
Strata Production Co.	Urraca Fed #1	660' FSL & 1980' FWL	T/A
Pre-Ongard Operator	Pre-Ongard Well #1	1680' FNL & 660' FWL	
Pre-Ongard Operator	Pre-Ongard Well #2	1850' FSL & 660' FWL	
Strata Production Co.	Urraca Fed #2	990' FSL & 660' FWL	Р
Yates Petroleum Corp.	Amanda Amn Fed #2	990' FNL & 1650' FWL	
Yates Petroleum Corp.	Amanda Amn Fed #1	2310' FNL & 1650' FWL	-
Section 15-T23S-R32E			
Strata Production Co.	Codorniz Fed #1	330' FNL & 660' FEL	
Strata Production Co.	Codorniz Fed #2	1850' FNL & 330' FEL	
Pre-Ongard Operator	Pre-Ongard Well #1	1980' FNL & 1980' FEL	
Section 14-T23S-R32E			
Strata Production Co.	Cuervo Fed #2	460' FNL & 1650' FWL	Р
Section 10-T23S-R32E			
Pre-Ongard Operator	Pre-Ongard Well #1	660' FNL & 330' FEL	
Strata Production Co.	Colibri Fed #1	990' FSL & 330' FEL	Р



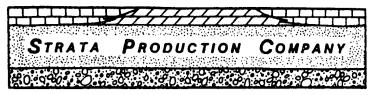
# STRATA PRODUCTION COMPANY

DRILLING RIG LAYOUT PLAN

URRACA FEDERAL #3 1980' FSL & 660' FWL Section 11-T23S-R32E

EXHIBIT \_D

POST OFFICE DRAWER 1030 ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127 FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700 ROSWELL, NEW MEXICO 88203

# STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

# TO WHOM IT MAY CONCERN:

The undersigned, on behalf of Strata Production Company, accepts all applicable terms, conditions, stipulations and restrictions concerning the operations conducted on the leased land or portion thereof as described below:

Urraca Federal #3 Federal Lease Number NM-85940 Township 23 South, Range 32 East

Section 11: W/2

Lea County, New Mexico

Formation: Diamondtail Delaware

Bond: Statewide

Bond Number: QCB-233 NM 1538 1420

October 12, 2005

Date

Kelly M. Britt

Production Records

1. (For BLM Use) BLM Report No.	2. (For BLM Use) Reviewer's Initial	) ls/Date			3. NMCRIS Nu	umber: 93922	
· · · · · · · · · · · · · · · · · · ·	Accepted ( )	Rejected ( )					
4. Type of Report:	Negative (X)		Positive (	)			
<ol> <li>Title of Report: A Class III Cultural Resource Survey for the Urraca Federal No.</li> <li>Well Pad and Access Road</li> </ol>					6. Fieldwork Date(s): July 21, 2005		
Author(s): Justin Rein				7. Report Date: July 27, 2005			
8. Consultant Name/Address: Boo	oné Archaeological (	Services, LLC	<del></del>	• (	Cultural Regoun	ce Permit No.: 190-2920-05-G	
Direct Charge: Danny Boone			1	J	Juliuiai 11050aii	PO Latitutings in manage -	
Field Personnel Names: Justin Rei	in		1	٠			
Address: 2030 North Canal Carlsbad, New Mexico 88220				10. Consultant Report No.: BAS-07-05-10			
Phone (505) 885-1352							
11. Customer Name: Strata Produ Responsible Individual: Kelly Britt			12. Cust	stomer Project No.:			
Address: Post Office Drawer 1030 Roswell, NM 88202-1030							
Phone: (505) 822-1127	<del></del>	<del></del>			T		
13. Land Status	BLM	State	Private		Other	Total	
a. Area Surveyed (acres)	10.60					10.60	
b. Area of Effect (acres)	4.84					4.84	
14. Block Length <u>600 ft</u> Width <u>600 ft</u> Linear Length <u>1,020 ft</u> Width <u>100 ft</u>							
15. Location (Map[s] Attached):	· · · · · · · · · · · · · · · · · · ·				<del></del>		
a. State: New Mexico							
b. County: Lea County						•	
c. BLM Office: Carlsbad Field Office	<b>&gt;e</b>						
d. Nearest City or Town: Carisbad	J, New Mexico						
e. Legal Description: T 23 S, R 32		SW1/4					
f. Well Pad Footages: The Urraca			om the south	line :	and 660 feet fron	n the west line of Section 11	
g. USGS 7.5' Map Name(s), Date(						it allo trode into or occasion ;	

16. Project Data:

a. Records Search: Date(s) of BLM File Review: July 19, 2005 Name of Reviewer(s): Justin Rein Date(s) of ARMS Data Review: July 18, 2005 Name of Reviewer(s): Justin Rein

Findings (see Field Office requirements to determine area to be reviewed during records search): No previously recorded sites were found within 0.25 miles of the project area. An expanded search revealed one site, LA 107300, within one mile. The site will not be affected by the current undertaking.

- b. Description of Undertaking: On July 21, 2005, Justin Rein, with Boone Archaeological Services, LLC conducted a pedestrian cultural resource survey for the proposed Urraca Federal No. 3 well pad and associated access road. Kelly Britt, with Strata Production Company, requested the survey and provided plats. The project is located in Township 23 South, Range 32 East, Section 11 (Figure 1). The well is centered 1,980 feet from the south line and 660 feet from the west line of Section 11. The proposed well is centered over an abandoned well disturbance, though no well stem or identification of the previous well was observed. No previous survey was found for either the well location or the road. The proposed road follows an existing two-track road. It begins at the northeast corner of the proposed pad and continues 1,020 feet east to an existing lease road. The well will impact an area 400 ft by 400 ft yet a 600 ft by 600 ft block was surveyed to ensure the protection of cultural resources. A 100 ft wide corridor was surveyed along the access road centerline. In all, 10.60 acres were surveyed entirely on Federal property owned and administered by the Bureau of Land Management Carlsbad Field Office (BLM-CFO).
- c. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located approximately 34 miles east of Carlsbad, New Mexico, west of Antelope Ridge. The elevation averages 3,735 feet above mean sea level. Overall, the terrain trends downhill to the west at a slope of less than one percent. Local soils are of the Pyote-Maljamar-Kermit association as defined by the Soil Conservation Service of the U.S. Department of Agriculture. The soils consist of sandy soils that have been wind-worked into occasional parabolic dunes up to 1.5 m to 2 m. Local vegetation is typical of Chihuahuan Deservation and consists of mesquite, shin oak, snakeweed, sage, yucca, prickly pear cacti, and various low forbes. Due to the vegetative ground cover, visibility averaged 85 percent at the time of survey. Aside from the disturbance from the original well location and two-track road, several other wells are located in the surrounding area. Additionally, pipelines, lease roads, and power lines were observed nearby. The area is otherwise susceptible to natural aeolean and alluvial processes.

Climatic data was obtained for the nearby city of Carlsbad, New Mexico from the Western Regional Climate Center (WRCG) online database. From 1914 to 2004, Carlsbad received an average annual precipitation of 12.65 inches. During the same time, Carlsbad had an average high temperature of 78.3 degrees Fahrenheit and an average low temperature of 47.3 degrees Fahrenheit. January was the coldest month averaging 58.5 degrees Fahrenheit, while July was the warmest on average at 95.8 degrees Fahrenheit.

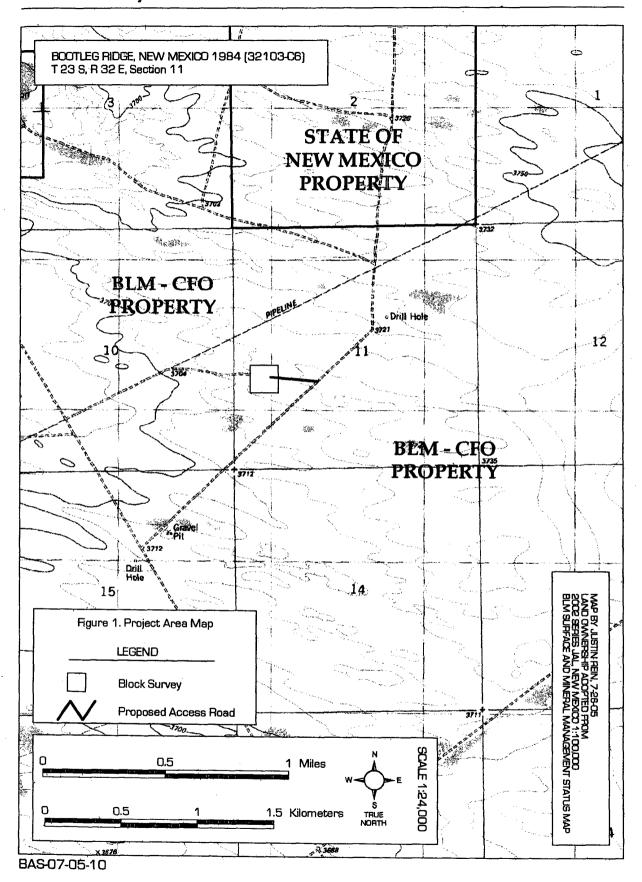
- d. Field Methods (transect intervals; crew size; time in field; etc.): A crew of one spent 2.5 hours surveying the project area. A 15 m transect interval was used.
- e. Artifacts Collected?: None
- 17. Cultural Resource Findings: No cultural materials were encountered.
  - a. Location/Identification of Each Resource: N/A
  - b. Evaluation of Significance of Each Resource: N/A
- 18. Management Summary (Recommendations): No cultural materials were encountered during the survey for the proposed Urraca Federal No. 3 well pad and associated access road. As such, archaeological clearance is recommended for the project as currently staked. If any cultural materials are encountered during construction, work at that location should cease and archaeologists with the BLM-CFO should be notified immediately.

tertify the information provided above is correct and accurate and meets all applicable BLM standards.

Responsible Archaeologist

Signature

Date



# SPECIAL DRILLING STIPULATIONS

# THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Strata Production Company Well Name					
Location: 1980 F.S.L. &	5., R. 32 E. State: New Mexico				
The Special stipulations check marked below are applicable to drill is conditioned upon compliance with such stipulations in a be familiar with the General Requirements, a copy of which is EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIO TITLE 43 CRF 3165.3 AND 3165.4.	the above described well and approval of this application to addition to the General Requirements. The permittee should available from a Bureau of Land Management office.				
This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.					
I. SPECIAL ENVIRONMENT REQUIREMENTS					
(X ) Lesser Prairie Chicken (stips attached) ( ) Floo ( ) San Simon Swale (stips attached) ( ) Other	d plain (stips attached) er				
II. ON LEASE - SURFACE REQUIREMENTS PRIOR	TO DRILLING				
(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.					
(X) Roads and the drill pad for this well must be surfaced wit	h 6 inches of compacted caliche.				
( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximatelyinches in depth. Approximatelycubic yards of topsoil material will be stockpiled for reclamation.					
( ) Other:					
III. WELL COMPLETION REQUIREMENTS					
( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.					
(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture. See attached seed mixture.					
( ) A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus cryptandrus) 1.0	(x) B. Seed Mixture 2 (Sandy Sites) Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0				
( ) C. Seed Mixture 3 (Shallow Sites) Side oats Grama (Boute curtipendula) 1.0	( ) D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobollud airoides) 1.0 Four-Wing Saltbush (Atriplex canescens) 5.0				
( ) OTHER					

# RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

# OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

# **CULTURAL**

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

# TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

# BLM SERIAL #: NM85940 COMPANY REFERENCE: Strata Production Company WELL # & NAME: Urraca Federal #3

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

<u>Species</u>	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

# PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the lands described below: All of section 11, T. 23 S., R. 32 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Bureau of Land Management Carlsbad Field Office

SENM-S-22 December 1997

# CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Strata Production Company Urraca Federal No. 03 Well Name & No:

1980' FSL & 660' FWL, Sec.11, T. 23 S. R. 32 E. Location: Surface:

Lease: NMNM 85940 Lea County, New Mexico

.....

# I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 13 % inch; 8 % inch; 5 ½ inch.
- C. BOP Tests
- 2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this wellbore. However, the operator has a written plan that all rig personnel are trained and will use caution to watch for the signs of H2S. Mud additives and an alarm system is on location to be incorporated if H2S is suspected. Area formations that may contain H2S are the Delaware (est.4900 Ft) and the Bone Springs.
- 3. 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.
- 4. 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.
- 5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

or 25' Into the rustler or use the Lea Co. COA Caspy attached 1. The 13 % inch shall be set at 1200 Feet with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature arrange.

- 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 8 1/2 inch Intermediate casing is to circulate to surface.
- 3. The minimum required fill of cement behind the 5 ½ inch Production casing is to tie back to the 8 % inch shoe by at least 200 ft.

# **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 13 % 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. <u>Minimum working pressure</u> of the blowout preventer and related equipment (BOPE) shall be <u>3 M</u> psi. A variance to test the surface BOPE to 1000 psig is approved. Prior to drilling below the 8 % inch shoe the BOPE shall be tested to 3 M on the rams and 2100 psi on the annular.

# III. Pressure Control (continued):

- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.
- -The test 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 safe workman-like manner. Hard line connections shall be required.
- -Both low pressure and high pressure testing of BOPE is required.

GGourley 10/20/05

# ALTERN. IVE CONDITIONS OF APPROVAL - DRILLING

# Drilling Fluids. Casing and Cementing Requirements for Most of Lea County:

# Casing and Cementing

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

# **Drilling Fluid**

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation., fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

BLM Serial #: NM85940
Company Reference: Strata Production Company

Well # & Name: Urraca Federal #3

# STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

# GENERAL REQUIREMENTS

- A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
- C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all

damages to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

# ROAD WIDTH AND GRADE

4 4

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

# 2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

$\overline{ imes}$ Ditching will be required on both sides of the roadway as shown on th	ıe
attached map or as staked in the field.	

Flat-blading is authorized on segment(s) delineated on the attached map.

# 3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

∐4	00	foot	inter	rvals.

<u> </u>	foot	interval	s.
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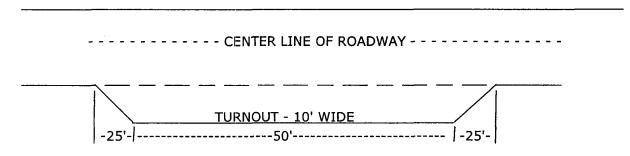
- B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).
- C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval = 
$$\frac{400'}{\text{road slope in }\%}$$
 + 100'

Example: 4% slope: spacing interval = 
$$\underline{400}$$
 + 100 = 200 feet

# 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

# SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

### CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

# MAINTENANCE

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The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

### 8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

# 9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

# 10. SPECIAL STIPULATIONS:

See reclamation stipulations attached.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144 June 1, 2004

# Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes No Solve Tank Registration or Closure

Type of action: Registration of a pit or below-grade tank \( \) Closure of a pit or below-grade tank \( \)						
Operator: Strata Production Company Telephon	ne:505-622-1127 e-mail address: kbritt@stratanm.com					
Address: P. O. Box 1030 Roswell, NM 88202-1030						
Facility or well name: Urraca Federal A API#:3	30 - 025-3768 U/L or Qtr/Qtr L Sec 11 T 23S R 32F	E				
	N32 19 02.6" Longitude W103 39 NAD: 1927 1983					
Surface Owner: Federal State Private Indian	06.2"					
Pit	Below-grade tank					
Type: Drilling Production Disposal	Volume: bbl Type of fluid:					
Workover ☐ Emergency ☐	Construction material:					
Lined Unlined	Double-walled, with leak detection? Yes  If not, explain why not.					
Liner type: Synthetic A Thickness 12mil Clay						
Pit Volume 10715bbl						
	Less than 50 feet (20 points)					
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet (10 points)					
high water elevation of ground water.) 440	100 feet or more (0 points)					
Wellhead protection area: (Less than 200 feet from a private domestic	Yes (20 points)					
water source, or less than 1000 feet from all other water sources.)	No 0 points)					
	Less than 200 feet (20 points)					
Distance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet (10 points)					
irrigation canals, ditches, and perennial and ephemeral watercourses.)	(1000 feet or more)					
	Ranking Score (Total Points)					
If this is a pit closure: (1) Attach a diagram of the facility showing the pit'	's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box	x if				
your are burying in place) onsite 🔲 offsite 🔲 If offsite, name of facility (3) Attach a general description of remedial action taken including						
remediation start date and end date. (4) Groundwater encountered: No 🔲 Yes 🔲 If yes, show depth below ground surfaceft. and attach sample results.						
(5) Attach soil sample results and a diagram of sample locations and excava-	ations.					
Additional Comments:						
		****				
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD-approved plan .						
Date: 10/12/05						
Printed Name/Title Kelly M. Britt - Production Signature Kully M/Rutt						
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.						
Approval:	2 2 2	7				
Printed Name/Title CHELS WILLIAMS - DIST. Suf	Vi Signature Chris Elsellane Date: 2/7/20	in				