Form 3160-3 (April 2004)

PLEASE EXPEDITE LEASE EXPIRES 12/01/2007

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

_	If Indian	Allotes	or Trine Name
	NM-10	0340	
٥.	Deage Se	CIAL INC.	

OMB No. 1004-0137 Expires March 31, 2007

APPLICATION	FOR PERMIT	TO DRILL OR REENT	ER

			j	
la. Type of work: X DRILL REEN	X DRILL REENTER NOV 13 2007			greement, Name and No.
ib. Type of Well: XXOil Well Gas Well Other	X Single Zone	OCD-ARTESIA		9,0,0
2. Name of Operator			9. API Well No.	
	IS 432-683-3272)			-35925
Sa Address P. O. BOX 3759 MIDALND, TEXAS 79702	3b. Phone No. (include area 432–683–3272	: code)	10. Field and Pool, or NORTH BRUSHY	r Exploratory  Z DRAW-DELAWARE
Location of Well (Report location clearly and in accordance with the	city State requirements.*)		11. Sec., T. R. M. or 1	Blk. and Survey or Area
At surface 2310' FWL & 330' FSL SECTIO		NOV 13 20	07 <sub>SECTION</sub>	T25S-R29E
At proposed prod. zone SAME Carlsbad	Controlled Water Basi	OCD-ARTE	3IA	
Distance in miles and direction from nearest town or post office*			12. County or Parisa	13. State
Approximately 12 miles Southeast of M	alaga New Mexico		EDDY CO.	HEW MEXICO
Distance from proposed*	16. No. of acres in lease	17. Spacing	Unit dedicated to this	well
property or lease line, ft. (Also to nearest drig, unit line, if any)	320		40	
Distance from proposed location*	19. Proposed Depth	20. BLM/BI	A Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft. NA	3500		3-000466	
Elevations (Show whether DF, KDB, RT, GL, etc.) 3075' GL	22 Approximate date work WHEN APPROVE	1	23. Estimated duration 15 DAY	n S TO DRILL
	24. Attachments			
following, completed in accordance with the requirements of Onshor	re Oil and Gas Order No.1, sh	all be attached to this	form:	
Well plat certified by a registered surveyor.  A Drilling Plan.  Surface Use Plan (if the location is on National Forest System UPO shall be filed with the appropriate Forest Service Office).	Lands, the 5. Operator 6. Such oth	bove). certification	unless covered by an e	existing bond on file (see
Signature	Name (Printed/Typed)		I	Date
Joet Gance	Z Joe T. Janica			10/04/07
ACENT				
eved by (Signature)	Name (Printed Typed)	nes A. Ames	Ī	Date NOV <u>8 2007</u>
FIELD MANAGER	Office	SBAD FIELI	OFFICE	
tation approval does not warrant or certilest operations thereon. tions of approval, if any, are attached.  If earthen pits a association with	are used is the drilling of this		lease which would entr	itle the applicant to
well, an OCD pi	it permit must be	and willfully to make on.	to any department or a APPROVAL	SUBJECT TO
			OFNEDAL	OCULTA ENTENIS

"ucti SEE ATTACHED FOR CONDITIONS OF APPROVAL GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS **ATTACHED** 

District I 1625 N. French Dr., Hobbs NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

District III

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

Form C-102 Revised June 10, 2003 Submit to Appropriate District Office

Santa Fe. NM 87505

State Lease - 4 Copies

Fee Lease - 3 Copies

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

☐ AMENDED REPORT

30.	1API Numbe	3592			l Code	ACREAGE D	EDICATION USHY DRAW-D	<sup>3</sup> Pool Name	
36843 Federal 24								*Well Number	
70GRI 24974		Atl	antic Ope	rating,	•	rator Name			*Rievation 3075
					10Surface	e Location			
L or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	24	25 S	29 E		330	South	2310	West	Eddy
			11Bott	om Hol	e Location	If Different F	rom Surface		
L or lot no.	Section	Township	Range	lot Idn	Peet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s <sup>13</sup> Joint o	r Infill 4	Consolidation C	ode <sup>15</sup> 0:	rder No.				

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNITL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				<sup>17</sup> OPERATOR CERTIFICATION
				I hereby certify that the information contained herein is
	•			true and complete to the best of my knowledge and
				Spature T. Janua
			I	Joe T. Janica
				Printed Name
				Agent joejanica@valornet.com Title and E-mail Address
				10/04/07
				Date
				18GY ID TO GODDING A MICH
				18SURVEYOR CERTIFICATION
				I hereby certify that the well location shown on this plat
	v			was piotied 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.
				40 4 9007
				10-1-2007  Date of Survey  Signature and Seel of Professionard Survey
				Signature and Seal of Professional Survey
				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	ĺ			( ( ( 10324 ) ) ( )
	Cadacal OA No. 4			76 (10324) WAY AND STANKING TO
	Federal 24 No. 1 Elev. 3075' <sub>I</sub>			TO324 NO. TO TO THE PROPERTY OF THE PROPERTY O
0.710	2164. 3073	EXHIBI	т "А"	Mahal Tropessioner
2310'	0,0			1/ lune X Essyon
	330			Certificate Number

15 \_\_\_ Miles \_\_\_SE \_\_ of \_\_\_\_ Loving \_\_\_\_, New Mexico. File No. A-3618.dwg

ATLANTIC OPERATING. INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

1. Drill 17½" hole to 40' and set 40' of 14" conductor pipe and cement to surface with Redi-mix.

- 2. Drill 12:" hole to 600'. Run and set 600' of 8 5/8" 24# J-55 ST&C casing. Cement with 225 Sx. of Class [["C" cement + 4% Gel, + 5# LCM/Sx. + .125# Celo Flakes/Sx.+ 2% CaCl. Yield 1.75. tail in with 125 Sx. of Class "C" cement + 2% CaCl, Yield 1.34. Circulate cement.
- 3. Drill 7 7/8" hole to 3500'. Run and set 3500' of  $5\frac{1}{2}$ " 15.5# J-55 ST&C casing. Cement with 460 Sx. of 50/50 Class "C" POZ cement  $\div$  .15% FL-52,  $\div$  3% NaCl,  $\div$  5# LCM/Sx. Yield 2.39, tail in with 200 Sx. of 50/50 Class "C" POZ cement  $\div$  .3% CD-32,  $\div$  5% NaCl,  $\div$  5# LCM/Sx. Yield 1.3, Circulate cement to surface.

8:5/8"	casing	Collapse SF	INternal yield SF	Body SF	Joint SF
		4.6	9.9	26.5	18.6
5111	11	2.3	2.8	4.6	4.9

ATLANTIC OPERATING. INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6, the following information on the above will is provided for your information.

- 1. LOCATION: 2310' FWL & 330' FSL SECTION 24 T25S-R29E EDDY CO. NM
- 2. ELEVATION ABOVE SEA LEVEL: 3075' GL
- 3. GEOLOGIC NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits.
- 4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
- 5. PROPOSED DRILLING DEPTH: 3500'

## 6. ESTIMATED TOPS OF GELOOGICAL MARKERS:

Lamar Limestone 3240'
Ramsey Sand 3275'

## 7. POSSIBLE MINERAL BEARING FORMATION:

Ramsey Sand

Oil

## 8. CASING PROGRAM:

· Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade	
26"	0-40	20"	NA	NA	NA	Conductor Ne	w
12½11	0-600'	8 5/8"	24#	8-R	ST&C	J-55 New	
7 7/8"	0-3500'	5½"	15.5#	8-R	ST&C	J-55 New	
8 5/8"	Collapse 4	.6 Internal yield	d 9.9 Join	t 18.6	Body 26.5	į	
5 ½ 11	17 2.	3 " "	2.8	4.9	" 4.6	<b>;</b> (	

ATLANTIC OPERATING. INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

## 9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 14" conductor pipe and cement to surface with Redi-mix.
3 5/8"	Surface	Set 600' of 8 5/8" $24\#$ J-55 ST&C casing. cement with 225 Sx. of Class "C" cement + $4\%$ Gel, + $5\#$ LCM-1/Sx. + $1/8\#$ Celo Flakes/Sx, + $2\%$ CaCl, yield 1.75, tail in with 125 Sx. of Class "C" cement + $2\%$ CaCl yield 1.34, circulate cement to surface.
52"	Production	Set 3500' of $5\frac{1}{2}$ " 15.5# J-55 ST&C casing. Cement with 460 Sx. of 50/50 POZ Class "C" cement $\pm$ .15% FL-52 $\pm$ 3% NaCl , $\pm$ 5# LCM-1/Sx. yield 2.39, tail in with 200 Sx. of 50/50 POZ Class "C" cement $\pm$ .3% CD-32, $\pm$ 5% NaCl, $\pm$ 5# LCM-1/Sx. Yield 1.3, circulate cement to surface.

PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 3000 PSI working presure B.O.P. consisting of bottom blind rams, upper pipe rams. the B.O.P. will be nippled up on the 8 5/8" casing and tested with rig pumps to API specifications. The B.O.P. will be worked at least once in each 24 hour period and the blind rams will be worked when the drill pipe is out of the hole on trips. Full opening stabbing stabbing valve an upper kelly cock will be available on the rig floor. Exhibit "E-1" shows a 3" choke manifold with two adjustiable chokes and a hydraucally operated closing unit. No abnormal temperatures or any abnormal pressures are expected while drilling this well. Offset well drilled with no problems.

## 11. PROPOSED MED CERCULATING SYSTEM:

DERTH	MO WI.	VISC.	FLUID LOSS	TYPE STSTEM
40-600 <b>'</b>	8.4-8.7	29-34	NС	Fresh water add paper to control seepage
600-3500'	9.8-10.0	29–38	) NC*	Cut Brine to brine water add paper to control seepag use high viscosity sweeps to clean hole. If water los control is required while drilling through the pay
	Vater loss control			add strach or go to a Dris-
	order to log well, From formation dam	-	formation	pac system.

Sufficient mud materials will be kept on location at all times in order to combat loss circulation, or unexpected kicks. In order to run DST's, open hole logs, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

ATLANTIC OPERATING. INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

## 12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, MSFL, CNL, FDC, Gamma Ray, caliper from TD back to 8 5/8" casing shoe. Run Gamma Ray, Neutron fron the 8 5/8" casing shoe back to surface.
- B. Mud logger will be rigged up on the hole at 3000' and remain on the hole to TD.
- C. No cores or DST's are planned at this time.

## 13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of  $\rm H^2S$  in this area. If  $\rm H^2S$  is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 1500 PSI, and Estimated BHT 140°.

## 14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 15 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

## 15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Ramsey Sand formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

See COA's Pit Nesthwest

## American Drilling Rig #4

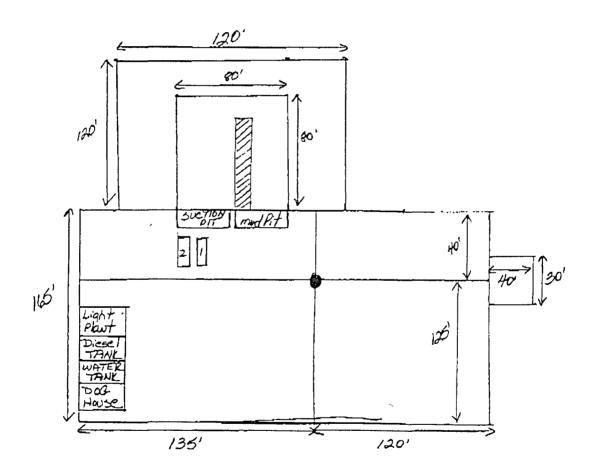


EXHIBIT "D"
RIG LAY OUT PLAT

ATLANTIC OPERATING, INC. FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

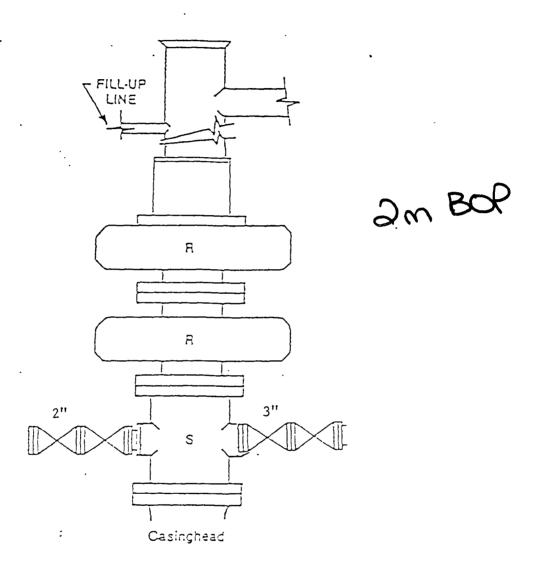


FIGURE K1-1. Recommended IADC Class 2 BOP stack, 3000 psi WP. Either SRd (left) or SA (right) arrangement is acceptable and drilling spool is optional.

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

ATLANTIC OPERATING, INC. FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

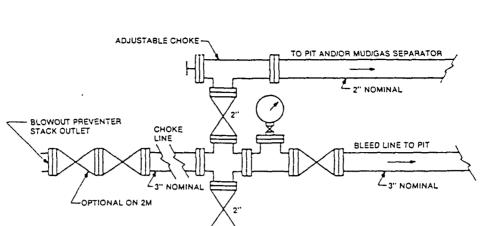


FIGURE K4-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

ADJUSTABLE CHOKE

TO PIT

Z " NOMINAL

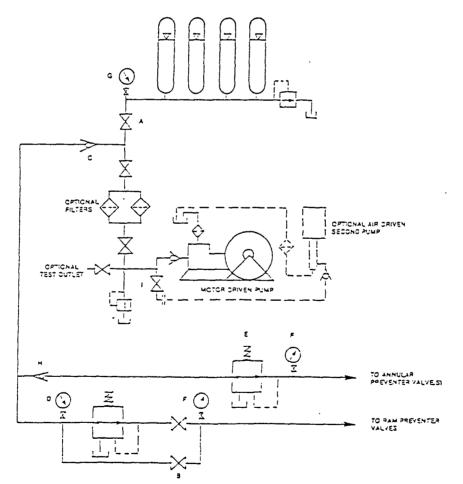


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

ATLANTIC OPERATING, INC. FEDERAL "24" # 1
UNIT "N" SECTION 24

T25S-R29E

EDDY CO. NM

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 1. All Company and Contract personnel admitted on location must be trained by a qualified  ${\rm H}_2{\rm S}$  safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazzards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H2S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
- 2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
  - C. There should be a windsock at entrance to location.
- 4. Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
  - A. See exhibit "E"
- 6. Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If location is near any dwelling a closed D.S.T. will be performed.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

- 8. Drilling contractor supervisor will be required to be familiar with the effects  $H_2S$  has on tubular goods and other mechanical equipment.
- 9. If  $H_2S$  is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with  $H_2S$  scavengers if necessary.

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ATLANTIC OPERATING, INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

## 1. EXISTING AND PROPOSED ROADS:

- A. Exhibit "B" is a reporduction of a County General Hi-way map showing existing roads. Exhibit "C" is a reproduction of a USGS topographic map showing existing roads and and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. All new roads will be constructed to BLM specifications.
- B. Exhibit "A" shows the proposed well site as staked.
- C. Directions to location: From Loving New Mexico take U. S. Hi-way 285 South for 17± miles, turn Left (East) on CR-725 go 4.1miles bear Left (Northeast) follow Elpaso pipeline road 4.8 miles and location is approximately 1000' North of road
- D. Exhibit "C" shows location and proposed road.
- 2. PLANNED ACCESS ROADS: Approximately 1000' of new road will be constructed.
  - A. The access roads will be crowned and sitched to a 14' wide travel surface, within a 30' R-O-W.
  - B. Gradient of all roads will be less than 5%.
  - C. Turn-outs will be constructed where necessary.
  - D. If require new access roads will be surface with a minimum of 4-6" of caliche. this material will be obtained from a local source.
  - E. Center line for new roads will be flagged, road construction will be done as field conditions require.
  - F. Culverts will be placed in the access road as drainage conditions require. Roads will be constructed to use low water crossings for drainage as required by the topographic conditions.

## 3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS: EXHIBIT "A-1"

A. Water wells - None known

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A-1"

E. Abandoned wells - As shown on Exhibit "A-1"

ATLANTIC OPERATING, INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

## 5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

## 6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

## 7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill:
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quaters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthed drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

## 8. ANCILLARY FACILITIES:

A. No camps or air strips will be constructed on location.

ATLANTIC OPERATING, INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

## 9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 12 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

#### 10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

ATLANTIC OPERATING, INC.
FEDERAL "24" # 1
UNIT "N" SECTION 24
T25S-R29E EDDY CO. NM

## 11. OTHER GENERAL INFORMATION:

- A. Topography near the location consists of fairly level grassy plain, with low dunal hummocks. The soils are red/tan sands of shallow to moderate depths. The vegetationconsists of mesquite, cholla, little leaf sumac, native grasses, and typical desertschrub.
- B. The surface is owned by The U. S. Department of Interior and is administered by The Bureau of Land Management. The surface is used to graze livestock, and for the production of oil and gas.
- C. An archaeological survey will be conducted and the report will be filed with the Bureau of Land Management Carlsbad Field Office in Carlsbad New Mexico.
- D. No domestic dwellings are located within 2 miles of location.
- E. Tank battery and production facilities will be constructed on location.

## CERTIFICATION

I HEREBY CERTIFY THAT I OR PERSONS UNDER MY SUPERVISION HAVE INSPECTED THE PROPOSED DRILL SITE AND THE ACCESS ROAD ROUTES, THAT I AM FAMILIAR WITH THE CONDITIONS THAT CURRENTLY EXIST, AND THAT THE STATEMENTS MADE IN THIS PLAN ARE TO THE BEST OF MY KNOWLEDGE ARE TRUE AND CORRECT, AND THAT THE WORK ASSOCIATED WITH THE OPERATIONS PROPOSED HEREIN WILL BE PERFORMED BY ATLANTIC OPERATING, INC. ITS CONTRACTORS OR ITS SUB-CONTRACTORS IS IN CONFORMANCE WITH THIS PLAN AND THE TERMS AND THE CONDITIONS UNDER WHICH IT IS APPROVED. THIS STATEMENT IS SUBJECT TO THE PROVISIONS OF U.S.C. 1001 FOR THE FILING OF A FALSE STATEMENT.

## **OPERATORS REPRESENTATIVES**

BEFORE CONSTRUCTION

JOE T. JANICA
TIERRA EXPLORATION, INC.

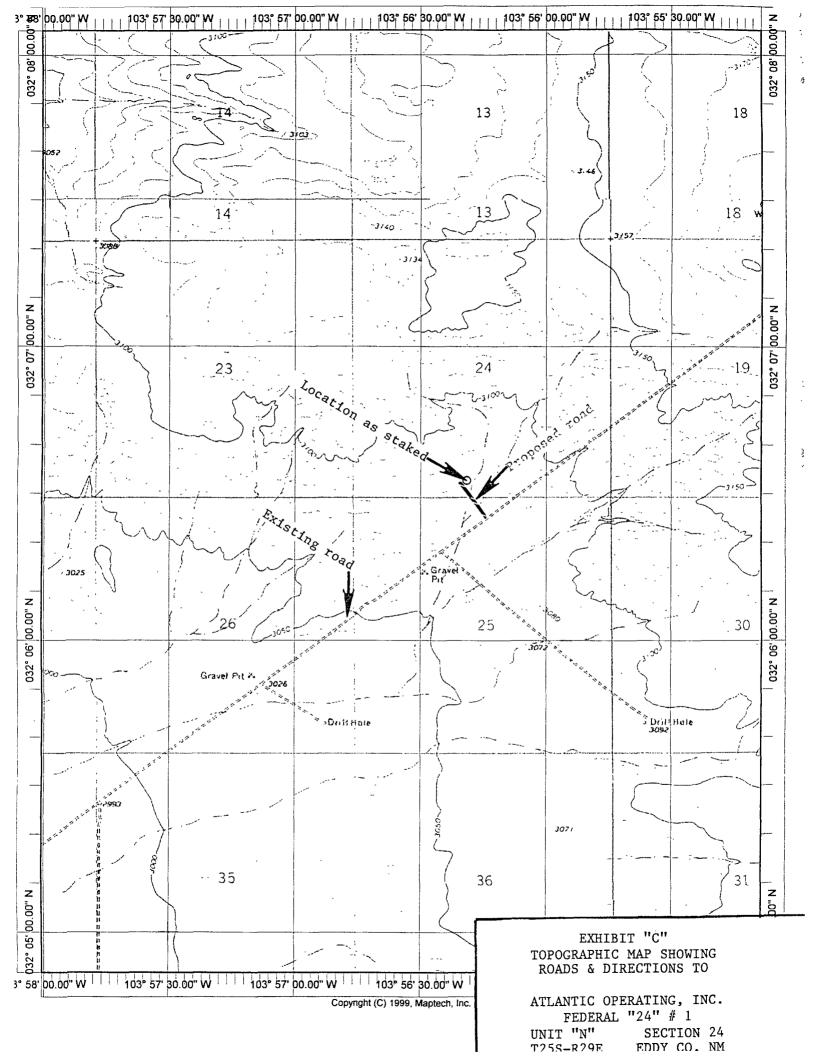
P. O. BOX 2188 HOBBS, NEW MEXICO 88241 OFFICEPH. 505-391-8503 CELL PH 505-390-1598 DURING AND AFTER CONSTRUCTION

ATLANTIC OPERATING,INC. LISA EVANS P. O. BOX 3759 MIDLAND, TEXAS 79702 OFFICE PH 432-683-3272

NAME: JOE T. JANICA COLT COMMERCE

DATE: 10/04/07

TITLE: AGENT



## VI. DRILLING

## A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

## **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

- 1. Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please submit measurements to the BLM.
- 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.

### B. CASING

- 1. The 8-5/8 inch surface casing shall be set a minimum of 25 feet into the Rustler Anhydrite and above the Salt at approximately 600 feet and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial action will be done prior to drilling out that string.

# Medium Cave/Karst. Possible lost circulation in the Delaware Mountain Group. Possible water flows in the Salado and Delaware Mountain Group.

- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
- 3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

## C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) psi. Schematic in APD is 2M BOP according to Onshore Order 2.
- 3. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 110507

## VII. PRODUCTION (POST DRILLING)

## A. WELL STRUCTURES & FACILITIES

## **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

## **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

## **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2

## VIII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

## A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

## B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows: