ACTORS BIGGS

Form 3160-5 (August 1999)

Type of Well

2. Name of Operator

Gas Well Gas Well Other

SUITE 1300 MIDLAND, TEXAS 79701

Location of Well (Footage, Sec., T., R., M., or Survey Description)

COG OPERATING, LLC 3a. Address 550 WEST TEXAS AVE

PLEASE EXPEDITE

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000

BUREAU OF LAND MANAGEMENT Lease Serial No. NM-92180

3b. Phone No. (include area code)

432-685-4342

	SI	JND	RY I	ITON	CES	and r	EPO	RTS	ON /	WELLS	
Dο	not i	use	this	form	for p	roposa	is to	drill	or to	re-enter	an
aba	andor	ned i	well.	Use	Form	3160-3	(APD) for	such	proposa	is.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA/Agreement, Name and/or No.
	8. Well Name and No.
	GOLD RUSH "29" FED. # 2
i	9. API Well No.
	10. Field and Pool, or Exploratory Area
_	· · · · · · · · · · · · · · · · · · ·

NASH DRAW-BRUSHY CANYON

11. County or Parish, State

2045' FSL & 705'	FWL SECTION 29 T2	3S-R30E EDDY CO	• 4111	County or Parish, State Y CO. NEW MEXICO	-
12. CHECK AF	PPROPRIATE BOX(ES)	TO INDICATE NATU	RE OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TY	PE OF ACTION		
	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture Treat New Construction Plug and Abandon Plug Back	Production (Start/Resur Reclamation Recomplete Temporarily Abandon Water Disposal	Well Integrity Other MOVE	

- Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)
- 1. COG OPERATING, LLC. requests the approval to move the location of their GOLD RUSH "29" FEDERAL # 2. FROM: 2045' FSL & 405' FWL SEC, 29 T23S-R30E EDDY CO. NM TO: 2045' FSL & 705' FWL SEC. 29 T23S-R30E EDDY CO. NM
- 2. The reason for this move is to avoid Archaeology.

14. I hereby certify that the foregoing is true and correct	
Name (Printed/Typed)	
Joe T. Janica	ille Agent
Signature of Canada I	nate 02/24/05
THIS SPACE FOR FEDERAL	OR STATE OFFICE USE
Approved by /s/ Linda S. C. Rundell	TILSTATE DIRECTOR Date APR 1 9 2005
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject le which would entitle the applicant to conduct operations thereon.	Office NM STATE OFFICE

State of New Mexico

DISTRICT I 1625 N. PRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

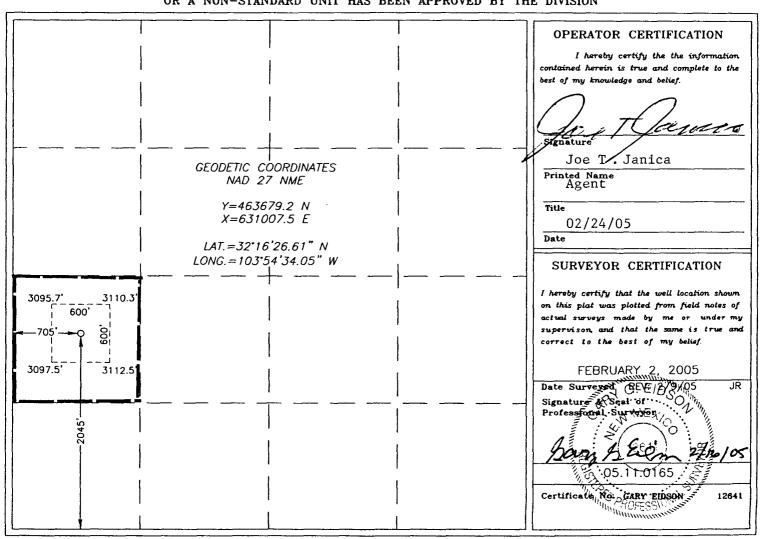
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. PRANCIS DR., SANTA PE, NM 8	WELL LOCATION AND	ACREAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code 47545	Pool Name NASH DRAW-BRUSHY CANYON	
Property Code	•	perty Name H 29 FEDERAL	Well Number
OGRID No. 229137		rator Name CRATING, LLC	Elevation 3104'

Surface Location North/South line Feet from the UL or lot No. Section Range Lot Idn Peet from the East/West line Township County L 29 23-S 30-E 2045 SOUTH 705 **WEST EDDY** Bottom Hole Location If Different From Surface UL or lot No. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County Dedicated Acres Joint or Infill Consolidation Code Order No.

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



<u>District I</u> 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 <u>District IV</u> 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

Form C-144

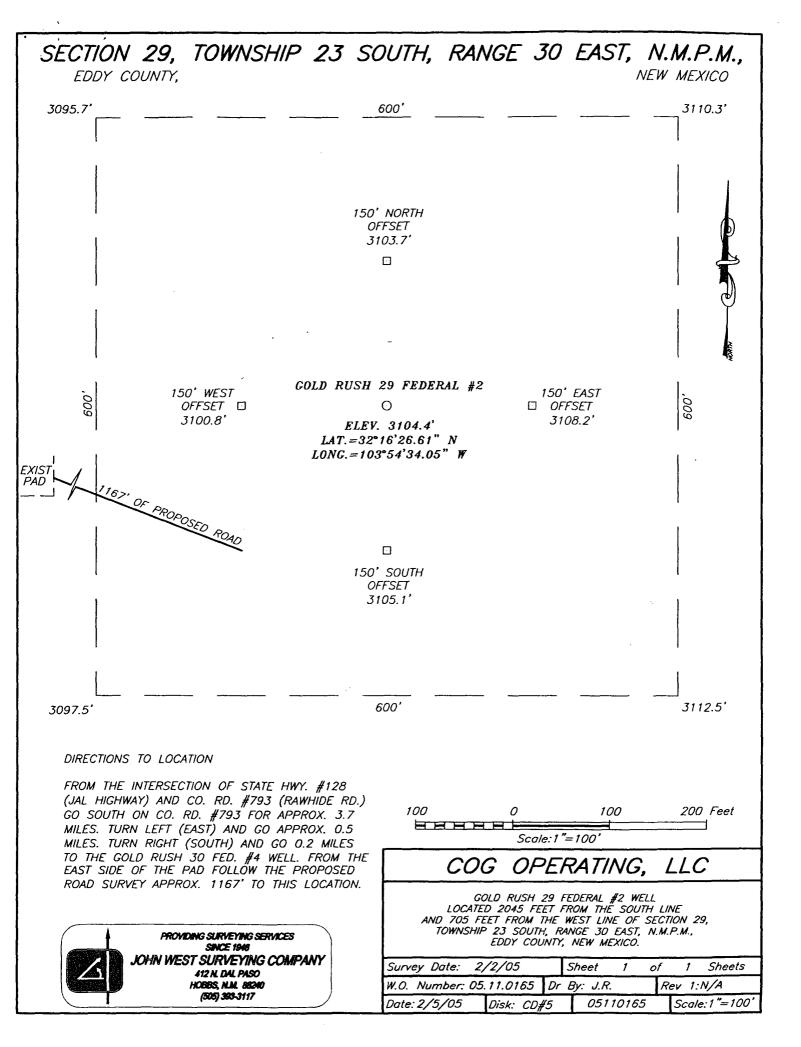
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.

For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

	or below-grade tank \(\overline{\omega}\) Closure of a pit or below-	
Operator: COG Operating LLC Telepho	one: 432-687-7443 e-mail address:	enelson@conchoresources.com
Address: 550 W. Texas, Suite 1300 Midland, TX 79701		
Facility or well name: Gold Rush 29 Federal #2 API #: 3t	0.015-34081 U/L or Otr/Otr L	Sec29T23SR30E
County: Eddy Latitude 32°16' 26		
Surface Owner: Federal ⊠ State ☐ Private ☐ Indian ☐		- - -
Pit -	Below-grade tank	
	Volume:bbl Type of fluid:	
Workover ☐ Emergency ☐	Construction material:	
Lined 🛮 Unlined 🗌	Double-walled, with leak detection? Yes If i	not, explain why not.
Liner type: Synthetic ☑ Thickness 12 mil Clay		RECEIVEL
Pit Volume30,000bbl		
Death to record water (vertical dictance from bottom of nit to seesonal	Less than 50 feet	(20 points) APR 0 8 2005
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.)	100 feet or more	(0 points)
	Yes	(20 points)
Wellhead protection area: (Less than 200 feet from a private domestic	No	(0 points)
water source, or less than 1000 feet from all other water sources.)		
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
	Ranking Score (Total Points)	O
If this is a pit closure: (1) Attach a diagram of the facility showing the pit'	's relationship to other equipment and tanks. (2) Ind	licate disposal location: (check the onsite box if
your are burying in place) onsite offsite foffsite, name of facility		·
remediation start date and end date. (4) Groundwater encountered: No 🗌		_
(5) Attach soil sample results and a diagram of sample locations and excava		and attach outspic receis.
Additional Comments:	nons.	
Additional Confinence.		
I hereby certify that the information above is true and complete to the best		
has been/will be constructed or closed according to NMOCD guideline	es ⊠, a general permit ∐, or an (attached) altern	native OCD-approved plan □.
Date: 4/7/05	/ /	
Printed Name/TitleErick Nelson / Sr. Engineer Signal	ature and W. We	
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve to regulations.		
Approval: Printed Name/Title	Signature	APR 15 2005



APPLICATION TO DRILL

COG OPERATING, LLC.
GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

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

- 1. Location of well: 2045' FSL & 405' FWL SECTION 29 T23S-R30E EDDY CO. NM
- 2. Ground Elevation above Sea Level: 3098' GR
- 3. Geological age of surface formation: Quaternary Deposits:
- 4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
- 5. Proposed drilling depth: 7450'

6. Estimated tops of geological markers:

Lamar	3290'	Brushy Canyon	6350!
Bell Canyon	4280 '	Bone Spring	7080'
Cherry Canyon	5780 '	Avalon Sand	7190'

7. Possible mineral bearing formations:

Brushy Canyon Oil
Bone Spring Oil
Avalon Sand Oil

8. Casing Program:

Hole Size	Interval	OD of Casing	- Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-650' 2 <i>5</i> 0	-35013 3/8"	54.5	8-R	ST&C	J-55
12½"	0-3100'	8 5/8"	32	8-R	ST&C	J-55
7 7/8"	0-7450'	5½"	15.5	8-R	LT&C	J_55

APPLICATION TO DRILL

COG OPERATING, LLC.
GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20''	Conductor	Set 40' of 20" conductor pipe and cement to surface Redi-mix.
13 3/8"	Surface	Set 650' of 13 3/8" 54.5# J-55 ST&C casing. Cement with 500 Sx. of Halco Light + additives, tail in with 250 Sx. of Class "C" + 2% CaCl, + $\frac{1}{2}$ # Flocele/Sx. Circulate cement.
8 5/8"	Intermediate	Set 3100' of 8 5/8" $32\#$ J-55 ST&C casing. CEment with 925 Sx. of Halco Light + additives, tail in with 250 Sx. of Class "C" cement + 2% CaCl, + $\frac{1}{2}\#$ Flocele/Sx. circulate cement to surface.
5½"	Production	Set 7450' of 5½" 15.5# J-55 LT&C Casing. Cement with 700 Sx. of Halco Light cement + additives, tail in with300 Sx. of Class "H" Modified + additives, circulate cement to surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working perssure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-650'	8.4-8.7	29-34	NC .	Fresh water use paper to control seepage.
650-3100'	10.0-10.2	29–38	NC	Brine water add paper to control seepage & High viscosity sweeps to clean hole.
3100-6900'	8.4-8.7	29–38	NC	Fresh water use Gel for for high viscosity sweeps to clean hole.
6900-7450'	8.4-8.7	34-40	10 cc or less	Same as above add a Polyto reduce water loss and Gel for viscosity use high viscosity sweeps to clean hole.

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

APPLICATION TO DRILL

COG OPERATING, LLC.

GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Induction, CNL, LDT, Gamma Ray and CAliper from TD back to 3100'.
- B. Run Gamma Ray, CNL from 3100' back to surface.
- C. Mud logger will be placed on hole at 3100' and remain on hole to TD.
- D. No DST's or cores are planed 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 3800 PSI, and Estimated BHT 150°

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 22 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 <u>BRUSHY CANYON</u> formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an oil well.

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - 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. H₂S Detection and Alarm Systems
 - A. H₂S 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" & "E-1"
- 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 the location is near to a dwelling a closed DST will be performed.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H2S 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.

COG OPERATING, LLC.

GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

- 1. EXISTING AND PROPOSED ROADS: Area maps: Exhibit "B" is a reproduction of a County General Hi-way map showing access roads to the location. Exhibit "C" is a reproductio of a USGS Topographic map showing existing roads in close proximity to the location and the proposed access roads. All existing roads will be maintained in a condition equal to or better than their current conditions. All new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the location of the proposed well site as staked.
 - B. From Hobbs, New Mexico take U.S. Hi-way 62-180 toward Carlsbad New Mexic go 40± miles to WIPP Road, turn Left go 13 miles to CR-802, turn Right go 4.6 miles to State Hi-way 128 turn Right go 6 miles to Rawhide Road, turn Left go 4 miles, turn Left go .4 miles, turn Right go 1 mile, turn Left go .4 miles, turn Southeast follow road .45 miles, turn Southwest go to well # 2, turn Northwest and follow road to location.
 - C. Lay flowlines and construct powerlines along road as shown on Exhibits "C" and "F" $\,$
- 2. PLANNED ACCESS ROADS: Approximately 800' of new road will be constructed.
 - A. The access road will be crowned and ditched to a 12' wide traveled surface with a 40' Right-Of-Way.
 - B. Gradient on all roads will be less than 5% if possible.
 - C. Turn-outs will be constructed where necessary.
 - D. If needed roads will be surfaced to the BLM requirements with material obtained from a local source.
 - E. Center line of new road will be flagged.
 - F. The new road will be constructed to utilize low water crossings where drainage currently exists, and culverts will be installed where necessary.

3. EXHIBIT "A-1" SHOWS THE BELOW LISTED TYPE WELLS WITHIN A 1 MILE RADIUS:

A. Water wells

- None known

B. Disposal wells

- One known approximately 1700' North.

C. Drilling wells

- None known

D. Producing wells

- As shown on Exhibit "A-1"

E. Abandoned wells

- As shown on exhibit "A-1"

COG OPERATING, LLC.

GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E 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. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "C".

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.

COG OPERATING, LLC.
GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encontered during pit construction indicate that a plastic liner is required to contain lateral migration.
- D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
- E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completionphases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E 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 furture erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

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

COG OPERATING, LLC.

GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

11. OTHER INFORMATION:

- A. Topography consists of low lying sand dunes with drainage toward the West into Remuda Basin. Vegetation consists of Acacia, Sage, Devil Claw, Cresote, Mesquite, Narrow leaf Yucca, and assorted native grasses.
- B. Surface is owned by the U.S. Department of Interior and is administered by the Bureau of Land Management. The surface is leased to ranchers for grazing of live stock.
- C. An archaeological survey will be conducted and the results will be filed with The Bureau of Land Management Carlsbad Field office in Carlsbad NM.
- D. There are no comestic dwellings located within one mile of the location.

12. OPERATORS REPRESENTIVE:

Before construction:

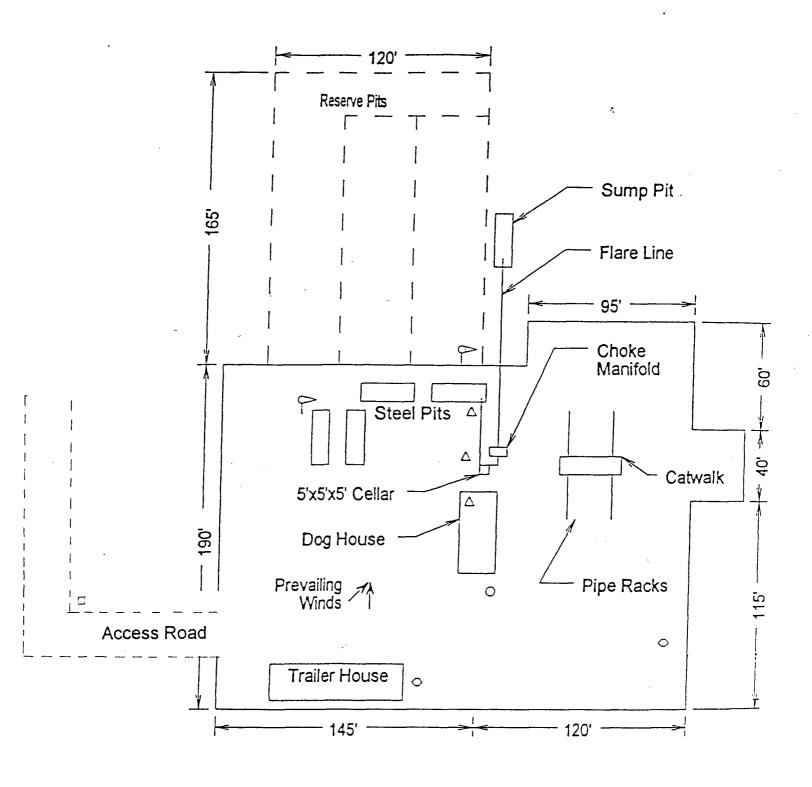
TIERRA EXPLORATION, INC. P.O. BOX 2188 HOBBS, NEW MEXICO 88241 JOE T. JANICA OFFICE PHONE 505-391-8503

During and after construction:

COG OPERATING, LLC. 550 WEST TEXAS AVE SUITE 1300 MIDLAND, TEXAS 79701 OFFICE GREG WILKES 432-685-4341

13. CERTIFICATION: I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access route, that I am familiar with the conditions which currently exist, 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 COG OPERATING, LLC. it's contractors/subcontractors is in the conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

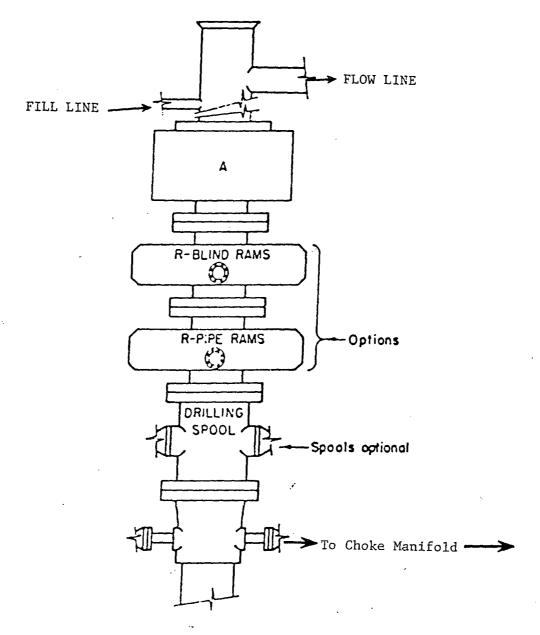
NAME	.Joe T. J	Tanica /	vet.	Jases	<u>i</u> a
DATE	:			_	
TITLE	Agent			- -	



- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors
 (alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

COG OPERATING, LLC.
GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM

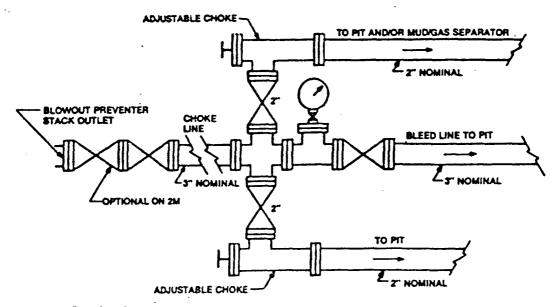


ARRANGEMENT SRRA

900 Series 3000 PSI WP

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

COG OPERATING, LLC.
GOLD RUSH "29" FEDERAL # 2
UNIT "L" SECTION 29
T23S-R30E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

