OCD-HOBBS

SUBMIT IN TRIPLICATE*

(Other Instructions on reverse side)

Ats-07-137 Form approved. Budget Bureau No. 1004-0136

UNITED STATES DEPARTMENT OF THE INTERIOR I

Expires: December 31, 1991 5. LEASE DESIGNATION AND SERIAL NO.

•	BUREAU OF I	NMLC-029509B		
APPL	ICATION FOR PER	RMIT TO I	DRILL OR DEEPEN	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1a. TYPE OF WORK DRI b. TYPE OF WELL	LL 🛛	DEEPEN		7. UNIT AGREEMENT NAME
OIL X	Gas OTHER	PLE 8. FARM OR LEASE NAME, WELL NO. (302508)		
2. NAME OF OPERATOR COG Operating L	LC (229,	127		JC Federal #9
3. ADDRESS AND TELEPHONE NO				30-025-3826/
	e 1300 Midland, TX 7970	01./	(432) 685-4372	10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WEL	L (Report location clearly and			Maljamar Paddock 44500
At surface	1/165	0 FNL & 16	50 FEL UL-G	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zoo	<i>V</i>			6 - Sec 22 T17S R32E
14. DISTANCE IN MILES A	ND DIRECTION FROM NEAREST			12. COUNTY OR PARISH 13. STATE
DISTANCE EDOM BROD		th of Maljan		Lea NM 189 10117
15. DISTANCE FROM PROP LOCATION TO NEARES PROPERTY OR LEASE (Also to nearest dr	LINE, FT. g. unit line, if any)	330	16. NO. OF ACRES IN LEASE 520	17. NO OF ACRES IN LEASE SO 18 9 10 17 72 73 20 40 20. ROTARY OR CABLE TOOM ROTARY 21. APPROX. DATE WORK WILL 22. APPROX. DATE WORK WILL 22. APPROX. DATE WORK WILL 23. APPROX. DATE WORK WILL 24. APPROX. DATE WORK WILL 25. APPROX. DATE WORK WILL 26. APPROX. DATE WORK WILL 27. APPROX. DATE WORK WILL 28. APPROX. DATE WORK WILL 29. APPROX. DATE WORK WILL 20. APPROX. DATE WORK WILL
18. DISTANCE FROM PROP TO NEAREST WELL, DI OR APPLIED FOR, ON TE	RILLING, COMPLETED	660	19. PROPOSED DEPTH 7000	Rotary Rotary Rotary
21. ELEVATIONS (Show v		BOND # MB0002	S ROSWELL CONTR	OLLED WATER BASEN/4/2006
23.	PF	OPOSED CASI	NG AND CEMENTING PROGRA	M CO
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER F	OOT SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	H-40,13 3/8	48	650	Circ
12 1/4	J-55, 8 5/8	24	2100	Circ
7 7/8	J-55, 5 1/2	17	7000	Suff to Circ
productive, 5 1/2" c	asing will be cemented. l	f non-produ s per Onsho	ctive, the well will be plugg re Oil and Gas Order #1 ar	lock formation for oil and gas. If ged and abandoned in a manner consistent ge outlined in the following attachments:
Exhibit #1- Well	Location Plat	4. Certi	<u>fication</u>	7. Responsibility Statement
Exhibit #2- Vicir	nity Map tion Verification Map	Exhi	ogen Sulfide Drilling Oper bit #7- H2S Warning Sign bit #8- H2S Safety Equipm	······································
3. Surface Use & O Exhibit #4- One Exhibit #5- Prod Exhibit #6- Loca	perating Plan Mile Radius Map uction Facilities Layout tion Layout	Exhi Exhi Exhi		GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED
deepen directionally, give perti	DE PROPUSED PROGRAM: If pr nent data on subsurface locations a	oposal is to deepe id measured and t	n, give data on present productive zon rue vertical depths. Give blowout preve	e and proposed new productive zone. If proposal is to drill or nter program, if any.

24. **Production Clerk** 12/5/2006 SIGNED (This space for Federal or State office use) APPROVAL DATE approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Is James Stovall

APPROVED BY

DATE

*See Instructions On Reverse Side APPROVAL FOR 1 YEAR

TITLE

State of New Mexico

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

Energy, Minerals and Natural Resources Department

DISTRICT II 1801 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

Form C-102

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 1220 s. st. francis dr., santa fr., nm 87505	WELL LOCATION AND ACRE	REAGE DEDICATION PLAT			
API Number	Pool Code	Pool Name			
	44500	Maljamar Paddock	ζ.		
Property Code	Property Nan	Property Name			
302508	JC FEDER	RAL	9		
OGRID No.	Operator Na	me	Elevation		
229137	COG OPERATING L	LC	4007'		

Surface Location

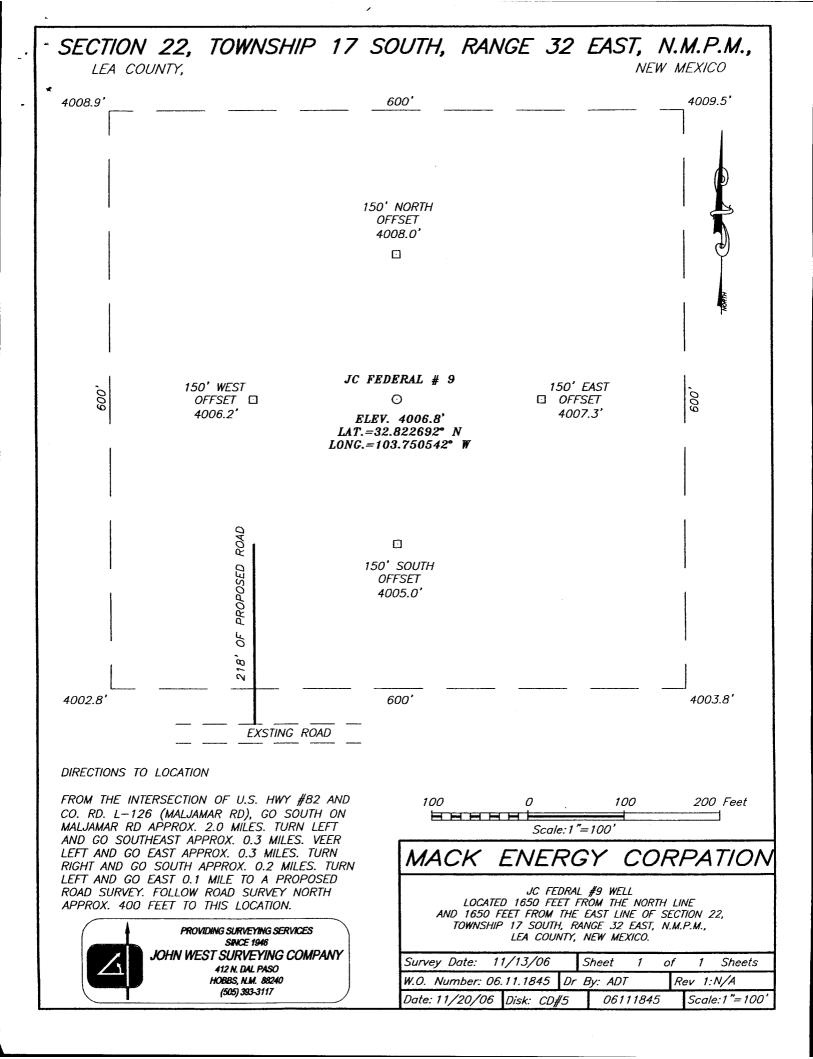
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	22	17-S	32-E		1650	NORTH	1650	EAST	LEA

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 of	r Infill Co	nsolidation (Code Ore	der No.				<u> </u>

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

4008.9'	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
GEODETIC COORDINATES NAD 27 NME Y=663499.8 N X=679031.9 E	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
LAT.=32.822692* N LONG.=103.750542* W	NOVEMBER 13 2006 Date Surveyed ADT Signature & Seal of Professional Surveyor ANA A LOND 11/27/06 O6.11.1845 Certificate No. GARY EIDSON 12641



Attached to Form 3160-3 COG Operating LLC JC Federal #9 1650 FNL & 1650 FEL SW/4 NE/4, Sec 22 T17S R32E Lea County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Grayburg	3450'
San Andres	3850'
Glorietta	5366'

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

Water Sand	150'	Fresh Water
Grayburg	3450'	Oil/Gas
Glorietta	5366'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 650' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 8 5/8" casing to 2100' 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 them by cementing 5 1/2" production casing, which will be run at TD.

4. Casing Program:

Hole Size	e Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 ½"	0-650'	13 3/8"	48#, H-40, ST&C, New, R-3
12 ¼"	0-2100'	8 5/8"	32#, J-55, ST&C, New, R-3
7 7/8 "	0-TD	5 1/2"	17#, J-55, LT&C, New, R-3

Drilling Program Page 1

Attached to Form 3160-3 COG Operating LLC JC Federal #9 1650 FNL & 1650 FEL SW/4 NE/4, Sec 22 T17S R32E Lea County, NM

5. Cement Program:

- 13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl2.
- 8 5/8 Intermiate Casing: Circulate to Surface with Class C W/2% CaCl2.
- 5 1/2" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to circulate to surface.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ramtype (The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ramtype (2000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nippled up on the 13 3/8" surface casing and tested to 2000# by a 3rd party. The BOP will then be nippled up on the 8 5/8" intermediate casing and tested by a 3rd party to 2000 psi and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. 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. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.clude a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTHTYPE	WEIG	HT	VISCOSITY	WATERLOSS	
0-650'	Fresh Water	8.5	28	N.C.	
650-2100'	Brine	10	30	N.C.	
2100'-TD	Cut Brine	9.1	29	N.C.	

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

Page 2

8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.

Drilling Program

Attached to Form 3160-3 COG Operating LLC JC Federal #9 1650 FNL & 1650 FEL SW/4 NE/4, Sec 22 T17S R32E Lea County, NM

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 9 5/8 casing shoe.
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined after the 7" production casing has been cemented and TD has been reached based on drill shows and log evaluation.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and estimated maximum bottom hole pressure is 2300 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

11. 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 January 4, 2007. Once commenced, the drilling operation should be finished in approximately 20 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

Drilling Program Page 3

COG Operating LLC

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards an characteristics of hydrogen sulfide (H2S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. The concentrations of H2S of wells in this area from surface to TD are low enough that a contingency plan is not required.

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

H2S Plan Page 12

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

EXHIBIT #7

WARNING

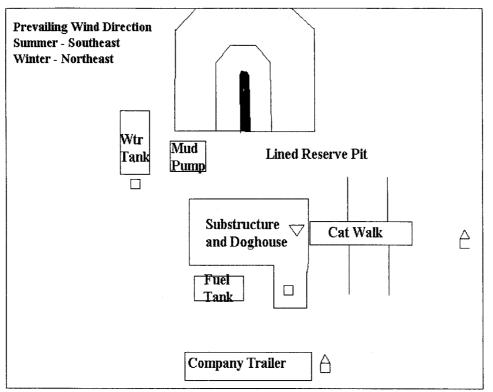
YOU ARE ENTERING AN H2S

AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE

MACK ENERGY CORPORATION 1-505-748-1288

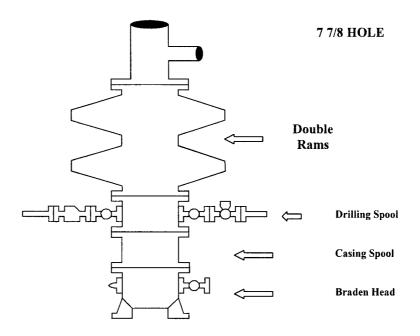
DRILLING LOCATION H2S SAFTY EQUIPMENT Exhibit # 8



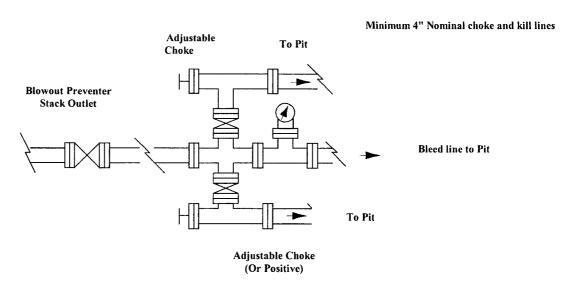
- H2S Monitors with alarms at the bell nipple
- Wind Direction Indicators
- Safe Briefing areas with caution signs and breathing equipment min 150 feet from

COG Operating LLC

Exhibit #9 BOPE Schematic



Choke Manifold Requirement (2000 psi WP) No Annular Required



CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

JC Federal # 9

Operator's Name:

COG Operating LLC

Location:

1650' FNL, 1650' FEL, SEC22, T17S, R32E, Lea County, NM

Lease:

LC-029509B

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; 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: 13.375 inch 8.625 inch 5.5 inch

C. BOP tests

- 2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.
- 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.
- 6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

- 1. The 13.375 inch surface casing shall be set @ APPROXIMATELY 650 FEET, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>8 5/8</u> inch salt protection casing is <u>CIRCULATE</u> <u>CEMENT TO THE SURFACE</u>. This casing should be set below the salt in the Basal Anhydrite or the Lamar Limestone @ approximately 2320 feet.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>cement shall</u> <u>CIRCULATE TO THE SURFACE.</u>
- 5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13.375 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the _____ to the reduced pressure of ____psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. MUD

1. Fresh water based mud will be used down to the depth of 811' or the Rustler Anhydrite; which ever is reached first..

Engineers can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 12/29/06

District I
1625 N. French Dr., Hobbs, NM 88240
District 11
1301 W. Grand Avenue, Artesia, NM 88210
District III
1 000 Rio Brazos Road, Aztec, NM 8741 0
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 NNIOCD District Office.
For downstream facilities, submit to Santa Fe office

Fonn C-144

June 1, 2004

Pit or Below-Grade Tank Re.gistration or Closure Is pit or below-grade tank covered by a "general plan"? Yes \(\subseteq No \otimes \)

Type of action: Registration of a pit	or below-grade tank 🔀 Closure of a pit or below-gr	ade tank
Operator: COG Operating LLC Telephor Address: 550 W. Texas, Suite 1300 Midland, TX 79701	e-mail address: DK	uykendall@conchoresources.com
Address: 550 W. Texas, Suite 1300 Midland, TX 79701		
Facility or well name: JC Federal #9 API #-	U/L or Qtr/Qtr G	See <u>22 </u>
County: Lea Latitude	Longitude	NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal 🔀 State 🗌 Private 🔲 Indian 🗍		
Pit	Below-grade tan	
Type. Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	_
Lined Unlined	Double-walled, with leak detection? Yes If no	ot, explain why not.
Liner type: Synthetic Marchaess 12 mil Clay		, ,
Pit Volume 3000 bbl		
	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	
high water elevation of ground water.) $\approx 80^{\circ}$, and the second	(10 points) / O
70 00	I 00 feet or more	(0 points) Points
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than I 000 feet from all other water sources.)	No	(0 points)
water source, or less than 1 000 feet from an other water sources.)		0 Points
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 I 000 feet	(I 0 points)
	1000 feet or more	(0 points) 0 Points
	Ranking Score (Total Points)	Points /D
If this is a nit closure (1) Attach a diagram of the facility showing the nit		/
If this is a pit closure: (1) Attach a diagram of the facility showing the pit		
your are burying in place) onsite offsite If offsite, 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	(3) Attach a general	description ofremedial action taken including
remediation start date and end date. (4) Groundwater encountered: No []	Yes I If yes, show depth below ground surface	ft. and attach sample results?
(5) Attach soil sample results and a diagram of sample locations and excava-	tions.	/on of
Additional Comments:		(A) (a)
		0
		Devisions Statement
		1007
		/27
		*
I hereby certify that the information above is true and complete to the best	ofmy knowledge and baliof. I further contifue that the	
has been/will be constructed or closed according to NMOCD guideline	$S \boxtimes$, a general permit \square , or an (attached) alternative	ative OCD-approved plan
		para see approve para L
Date: 1/9/07		\mathcal{D}
Printed Name/Title Jerry W. Sherrell/Production Clerk	Signature Very W. M	enell
Your certification and NMOCD approval ofthis application/closure does notherwise endanger public health or the environment. Nor does it relieve the regulations.	ot relieve the operator of liability should the contents ne operator of its responsibility for compliance with an	ofthe pit or tank contaminate ground water or ny other federal, state, or local laws and/or
Approval: Printed Name/Title CHRIS WILLIAMS DIST. D	um Signature Chris William	in Date: 1/25/67