### N.M. Oil Cons. DIV-136t. 2 1201 W. Grand Avenue Atlesia, NM 86210

Form 3160-3 (August 1999)	FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000								
	ITED STATES NT OF THE IN	TERIOR		;	5. Lease Serial No.				
	LAND MANAG				LC-056302 (b)				
APPLICATION FOR P	6. If Indian, Allottee or Tribe Name								
1a. Type of Work: 😡 DRILL	Work: ☑ DRILL ☐ REENTER								
	'	NORTH SQUARE LAKE 8. Lease Name and Well No.							
1b. Type of Well: 🖸 Oil Well 🔲 Gas Well	Other	☐ Si	ngle Zone 🔲 Multi	ple Zone	NORTH SQUARE LAKE				
2. Name of Operator CBS OPERATING CORPORAS	T CNI				9. API Well No.	77017			
3a. Address P.O.BOX 2236		2h Dhone M	o. (include area code)			32912			
MIDLAND, TX 79702	ļ		685-0878		10. Field and Pool, or Explorate SQUARE LAKE GE				
4. Location of Well (Report location clearly and i	n accordance with a				11. Sec., T., R., M., or Blk. and				
At surface 210' FNL & 1310		-	,						
At proposed prod. zone Same					Sec. 33, T16	S, R31E			
14. Distance in miles and direction from nearest town	n or post office*			~~~~~	12. County or Parish	13. State			
7.0 miles NE of Loco F	Hills, NM		· · · · · · · · · · · · · · · · · · ·		EDDY	NM			
15. Distance from proposed* location to nearest			Acres in lease	17. Spacin	g Unit dedicated to this well				
property or lease line, ft. (Also to nearest drig. unit line, if any)	L <b>0'</b>	in Un	x 6125 ac it	40	40 acres				
18. Distance from proposed location*			20. BLM/BIA Bond No. on file						
to nearest well, drilling, completed, applied for, on this lease, ft.		3500'		NM 1	M B000024				
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3995 'GL		22. Approximate date work will start*			23. Estimated duration				
3333 GT		24. Atta	chments		Drill & Complet	e 30 days			
The following, completed in accordance with the requ	irements of Onshor		PA CORPORTED	M Contro	iled Water Basin				
	mements of Onshor	on and das							
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>	•		<ol> <li>Bond to cover the state of the sta</li></ol>	he operation	ns unless covered by an existing	bond on file (see			
3. A Surface Use Plan (if the location is on Nation SUPO shall be filed with the appropriate Forest S	nal Forest System I ervice Office).	Lands, the	<ol><li>Operator certific</li></ol>	specific info	ormation and/or plans as may b	be required by the			
25. Signature	7115	Name	(Printed/Typed)		Date				
Title Signature Singo-		; M	. A. SIRGO,	III	DEC.	10, 2002			
AGENT FOR CBS OPERATION	NG CORP								
Approved by (Signature) LESLIE A. T	HEISS		(Printed/Typed)	A. TH	EISS Date JU	L 0 8 2003			
Title  ** FIELD MANAGE	: D	Offic	CARLSRA	D CIE	· · · · · · · · · · · · · · · · · · ·				
Application approval does not warrant or certify the th	e applicant holds le	gal or equitab	le title to those rights in	the subject l	ease which would entitle the app	licant to conduct			
operations thereon.  Sonditions of approval, if any, are attached.	15678970		APPRO\	/AL FO	OR 1 YEAR				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Sectors any false, fictitious or fraudulent statements or	ction 1212, make it representations as to	any matter w	ny person knowingly an ithin its jurisdiction.	d willfully t	o make to any department or age	ency of the United			
		\$ 5			***				
(Instructions on reverse)	RECEIVED - ARTESIA	<b>5</b>	APPROV	AL SUB	JECT TO	पुरस्कात्र सामग्रीहरूला अञ्चल <del>विद्वारिता है विश</del>			
/88/22/	ARTECL	5	GENERA	L REOL	HPEALENTE AND				
/E	TOIA		A. PAIVE		LATIONS				
No.		9	ATTACH	ED					

DISTRICT I , P.O. Box 1980, Hobbs, NM 88241-1880

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

#### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number			Pool Code		Pool Name				
			5	7570	s	SQUARE LAKE GB-SA				
Property (	Code				Property Nam	e	Well Number			
30768	3		NSLU					194		
OGRID No. 216852			Operator Name CBS OPERATING CORP			Elevatio 3995				
					Surface Loca	ation				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Α	33	16 S	31 E		210	NORTH	1310	EAST	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 o	r Infill Co	nsolidation (	Code Ord	ler No.	<u></u>		<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

 OK A NON-STANI	DARD UNIT HAS BEE	N AFFROVED BI IN	E DIVISION
3994.8' 3998.6'		1310'	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  M. A. SIRGO, III  Printed Name  AGENT  Title  DECEMBER 10, 2002  Date  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 supervison, and that the same is true and correct to the best of my bakef.  MARCH 1, 2000  Date Surveyed

Form 3160-5 (August 1999)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DPERRICE'S CURE

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

Lease Serial No.

SUNDR Do not use th abandoned we	6. If Indian, Allottee or Tribe Name						
SUBMIT IN TR	7. If Unit or	CA/Agreement, Name	and/or No.				
Type of Well	NORTH S	SQUARE LAKE (	TINL				
Oil Well Gas Well	8. Well Nam	ie and No.					
2. Name of Operator	NORTH S	SQUARE LAKE I	JNIT				
CBS OPERATING			·		9. API Well	No.	
3a. Address P. O. BOX		1	No. (include <b>a</b> rea		10 Field and	Pool, or Exploratory A	
MIDLAND T. 4. Location of Well (Footage, Sec.			<u>685-0878</u>	3		E LAKE GB-	
	, ., .,,	7		İ	11. County or		
					EDDY,	NEW MEXIC	0
12. CHECK AP	PPROPRIATE BOX(ES) TO	O INDICAT	E NATURE C	OF NOTICE, RE	EPORT, OR	OTHER DATA	
TYPE OF SUBMISSION			TYPE C	OF ACTION			
	Acidize	Deepen		Production (Start/	Resume)	Water Shut-Off	
Notice of Intent	Alter Casing	Fracture 7	Treat 🔲	Reclamation	. [	Well Integrity	
Subsequent Report	Casing Repair	New Con		•		Other Maste	
Final Abandonment Notice	Change Plans	Plug and		Temporarily Aba	ndon	<u>Drilling</u>	<u>Plan</u>
Final Abandonnient Notice	Convert to Injection	Plug Baci	<u>ا</u>	Water Disposal			
Attached for yo North Square La drilling operat Any unique data individual well sheet.	ke Unit. CBS O ions subject to to specific we 3160-3 applica	peratin this M ll loca tions o NOTE: D vary depen	g Corporaster Drations with the period of sure anding on general sections of Approximations of the Approxima	ration willing Pi ill be pre	ll cond lan. esented informa	uct all un in each	it
14. I hereby certify that the foregoin		setting dep	otn.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7 200
Name (Printed/Typed) M. A. SIRGO,	ī\t 1 \		Title AGE	ENT		4 OCD RECE	2003 EIVED
Signature /	1 Jugo D		Date DEC	CEMBER 10	, 2002	CT.	TESIA
	THIS SPACE F	OR FEDERA	L OR STATI	E OFFICE USE			G+87
Approved by aleijes	C. Swobod	N		<b>TROLEU</b> M E	HGWEEF Date	DEE	
Conditions of approval, if any, are certify that the applicant holds leg which would entitle the applicant to	al or equitable title to those right	e does not war ts in the subjec	t lease Office				
7. 2. 5.			4 4 4 1				Cata Main 1

# CBS OPERATING CORPORATION DECEMBER 2002 MASTER DRILLING PROGRAM NORTH SQUARE LAKE UNIT EDDY COUNTY, NEW MEXICO

The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil & Gas Order No. 1.

1) This Master Drilling Plan is submitted to cover new wells drilled within the North Square Lake Unit boundary as defined below:

County – Eddy

<u>T-16S R30-E</u> E/2 Section 25 N/2 Section 36 T-16S R31-E

S/2 Section 19 S/2 Section 20

NW/4 NW/4 Section 27

S/2 Section 27

SW/4 NE/4 Section 27

SW/4 Section 27

W/2 SE/4 Section 27

SE/4 SE/4 Section 27

All Section 28

All Section 29

All Section 30

All Section 31

All Section 32

All Section 33

All Section 34

#### 2) SURFACE FORMATION: Current

#### 3) ESTIMATED TOPS OF GEOLOGIC MARKERS:

Top of Salt	525'	Queen	2200'
Base of Salt	1360'	Grayburg	2852'
Yates	1570'	San Andres	3208'
Seven Rivers	1590'		

## MASTER DRILLING PLAN PAGE 2

#### 4) ESTIMATED DEPTHS TO WATER OIL OR GAS FORMATION:

Water – Possible groundwater from 0' to 75'

Oil - 2100' to TD

Gas - None anticipated

No other intervals are expected to give up oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 8-5/8" casing at 400' 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 inserting a float shoe joint into the 5-1/2" production casing which will be run at TD.

#### 5) CASING PROGRAM:

<b>HOLE SIZE</b>	<b>INTERVAL</b>	<b>OD CASING</b>	<b>WEIGHT</b>	<u>GRADE</u>	<u>JT.</u>	<b>TYPE</b>
12-1/4"	0-400'	8-5/8"	24#	J-55	LTC	R-3
7-7/8"	0-TD	5-1/2"	15.5#	J-55	LTC	R-3

All strings of casing will be satisfactorily tested to 1000 psi.

#### **CEMENT PROGRAM:**

8-5/8" Surface Casing: Cemented to surface with 330 sx of Class C w/2% Calcium Chloride

5-1/2" Production Casing: Cemented with 830 sx Class C. Will attempt to circulate to surface.

#### 6) PRESSURE CONTROL EQUIPMENT:

Install a 3000# 10" Shaffer double hydraulic BOP on the 8-5/8" casing prior to drilling into the Queen. Due to depleted nature of the reservoir, it is requested that a waiver be granted to test pressure control equipment to 1000 psi, using rig pump instead of the normal 2000 psi test. Exhibit D is a diagrammatic sketch of the BOP equipment.

#### 7) <u>CIRCULATING MEDIUM</u>:

Drill with fresh water from surface to setting depth of surface casing. Drill remainder of hole with brine water, using additives to control water loss, viscosity and mud weight.

### MASTER DRILLING PLAN PAGE 3

#### 8) **AUXILIARY EQUIPMENT**:

Equipment will include a gas detector, pit level monitor and a full-opening safety valve.

#### 9) TESTING, LOGGING AND CORING PROGRAM:

Samples:

Samples will be caught at 10' intervals from below the

surface casing to total depth.

**DST and Cores**:

None anticipated

Logging:

Density-Neutron Log, Gamma Ray-Neutron Log

#### 10) ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE:

No abnormal pressure or temperatures anticipated. Precautions will be taken to monitor possible traces of hydrogen sulfide gas in the Grayburg. See H2S plan attachment.

#### 11) ANTICIPATED STARTING DATE:

Drilling will commence upon Federal and State approval. Drilling and completion will require about 30 days.

#### CBS OPERATING CORP.

#### **ATTACHMENT**

#### HYDROGEN SULFIDE DRILLING OPERATIONS 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 and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of person 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 tubulars are to be used, personnel will 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 the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probably 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. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

#### 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 with electronic igniter or continuous pilot.
- B. Choke manifold with a minimum of one remote choke.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head, and flare gun with flares.

#### 2. Protective Equipment for Essential Personnel:

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

#### 3. H2S Detection and Monitoring Equipment:

- A. Two 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.
- B. One portable SO2 monitor positioned near flare line.

#### 4. Visual Warning Systems:

- A. Wind direction indicators as shown on well site diagram.
- B. Caution/Danger signs 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 the surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
- B. A mud-gas separator and an H2S gas buster will be utilized.

#### 6. Metallurgy:

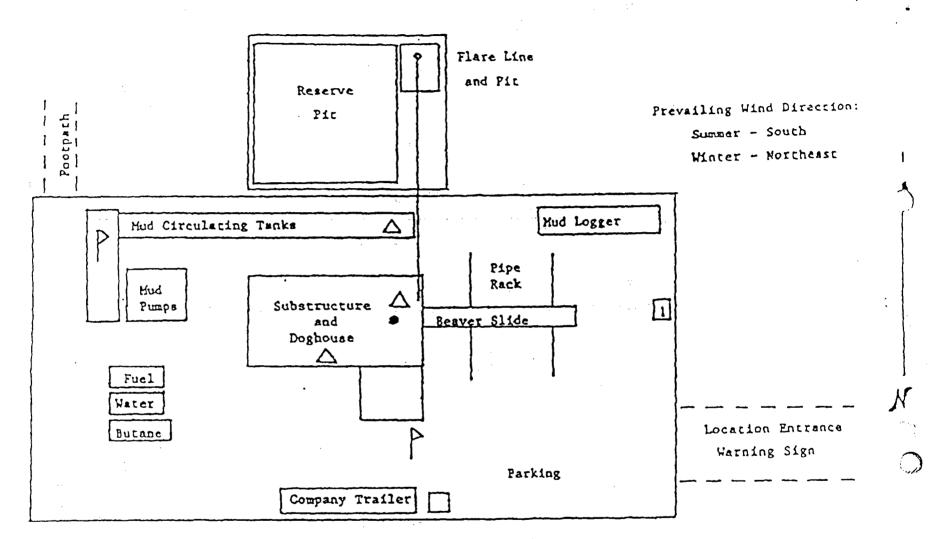
- A. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

#### 7. Communication:

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



- Wind Direction Indicacors

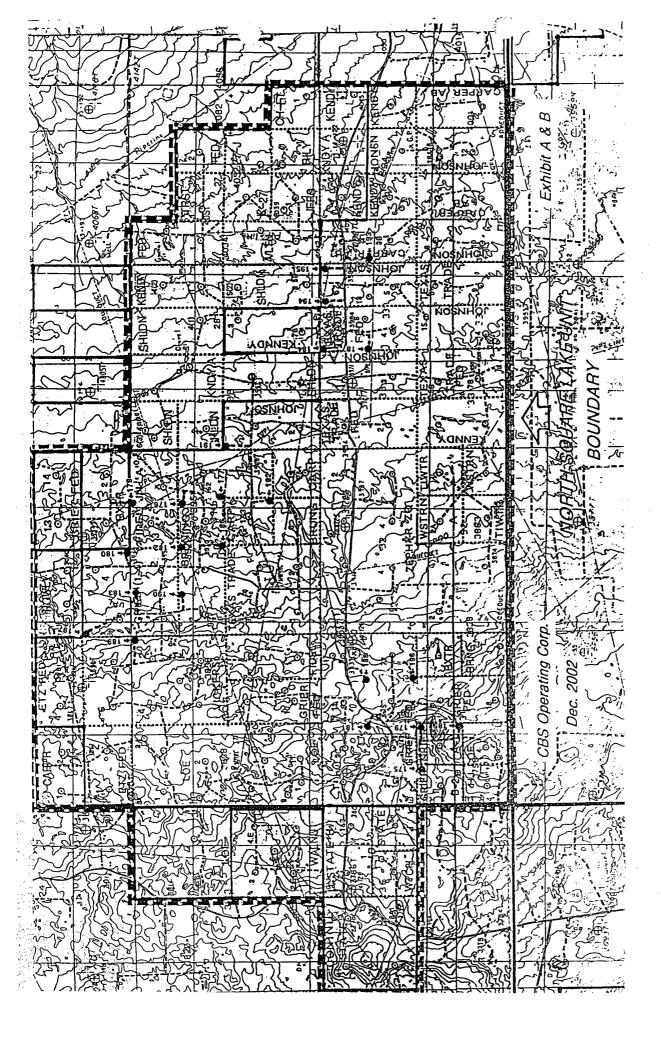
— Safe Briefing areas with caution signs and protective breathing equipment Min. 150 feet from wellhead. I designates primary area

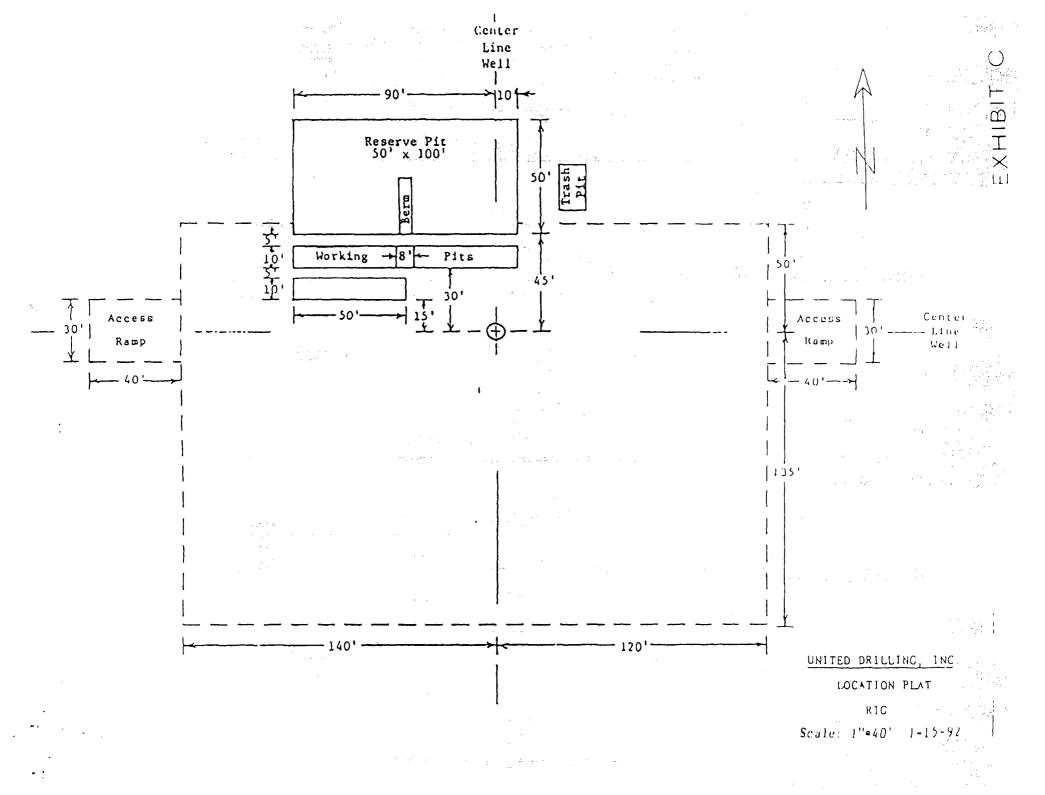
# WARNING

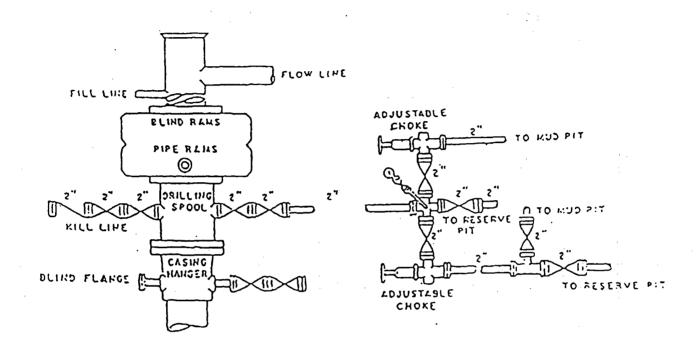
# YOU ARE ENTERING AN H<sub>2</sub>S AREA AUTHORIZED PERSONNEL ONLY

- 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 CBS OPERATING BEFORE ENTERING

CBS Operating Corp. 1–915–685–0878







#### BOP DINGRAM

3000# Working Pressure Rams Operated Daily

# Attachment to Exhibit D NOTES REGARDING THE BLOWOUT PREVENTERS

- 1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
- 2. Wear ring to be properly installed in head.
- 3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
- 4. All fittings to be flanged.
- 5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.
- 6. All choke and fill lines to be securely anchored, especially ends of choke lines.
- 7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 8. Kelly cock on kelly.
- 9. Extension wrenches and hand wheels to be properly installed.
- 10. Blow out preventer control to be located as close to driller's position as feasible.
- 11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

#### CBS OPERATING CORP.

#### P. O. BOX 2236, MIDLAND, TX 79702 432/685-0878 FAX 685-1945

July 28, 2003

VIA FAX 505/748-9720

NM OIL CONSERVATION DIVISION Energy, Minerals & Natural Resource Dept. 1301 W. Grand Ave. Artesia, New Mexico 88210

Attention: Mr. Bryan Arrant

Re: Hydrogen Sulfide Contingency Plan North Square Lake Unit Eddy County, NM

Dear Mr. Arrant:

Reference is made to that certain Master Drilling Plan filed by CBS Operating Corp. for the North Square Lake Unit. This plan was approved by the BLM on December 23, 2002.

This Master Drilling Plan contains a Hydrogen Sulfide Drilling Operations Plan. CBS currently feels that this plan is comprehensive with regard to H2S safety and that expected H2S levels in the field do not warrant an additional contingency plan at this time.

Sincerely.

M. A. Sirgo, III

MAS/pr