N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue Form 3160-3 (August 1999) Artesia, NM 88210 FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000 /UNITED STATES Lease Serial No. KATMENT OF THE INTERIOR beer 77 bureau of Land Management LC-065885 If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. 1a. Type of Work: ☑ DRILL □ REENTER NORTH SOUARE LAKE UNIT 8. Lease Name and Well No. 1b. Type of Well: Oil Well Gas Well Other ☐ Single Zone ☐ Multiple Zone NORTH SQUARE LAKE UNIT 179 Name of Operator 9. API Well No. CBS OPERATING CORPORATION 30 -015 -3a. Address P.O.BOX 2236 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory MIDLAND, TX 79702 915/685-0878 SQUARE LAKE GB-SA 11. Sec., T., R., M., or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.*) 2440' FSL & 2340' FWL Unit K Sec. 31, T16S, R31E At proposed prod. zone same 14. Distance in miles and direction from nearest town or post office* 5.6 air miles NE of Loco Hills 12. County or Parish 13. State **EDDY** NM 17. Spacing Unit dedicated to this well 15. Distance from proposed 16. No. of Acres in lease location to nearest 200 Approx 6125 ac property or lease line, ft. 40 acres (Also to nearest drig. unit line, if any) in Unit 18. Distance from proposed location* to nearest well, drilling, completed, 20. BLM/BIA Bond No. on file 19. Proposed Depth 900' +-3500' NM B000024 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3806' GR January 1, 2003 Drill & Complete 30 days 24. Attachments **Receivel Controlled Water Basin** The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. 25. Signatur Name (Printed/Typed) Date M. A. SIRGO, III DEC. 10, 2002 Title

FIELD MANAGER

AGENT FOR CBS OPERATING CORP

LESLIE A. THEISS

LESLIE A. THEISS Date JUL 0 8 2003

Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct

operations thereon. Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

Approved by (Signature)

Title

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

r)

DISTRICT IV

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

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 Code Pool Name			
	57570	SQUARE LAKE GB-SA			
Property Code	Pro	Property Name			
30768		NSLU			
OGRID No.		rator Name	Elevation		
216852	CBS OPE	RATING CORP.	3806'		

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	31	16 S	31 E		2440	SOUTH	2340	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 o	r Infill Co	nsolidation (Code Ore	ier 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

GEOGRAPHIC COORDINATES SPC NME NAD 1927 Y = 683159.1 X = 630391.1 LAT 32'52'38.51"N LONG 103'54'31.02'W	3803.6' 3799.0'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Bignature 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 belief.
2440'		11 =

Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR

TES
E INTERIOR
NAGEMENT

PORTS ON WELLS

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

Do not use the abandoned we	CORPORATION 2236 X 79702	ORTS ON Wood of the control of the c	e-enter an roposals.	code)	7. If Unit or NORTH 8. Well Nar NORTH 9. API Well 10. Field and SQUAF	Allottee or Tribe N CA/Agreement, N SQUARE LAK me and No. SQUARE LAK	Name ame and/or No. E UNIT E UNIT ory Area B-SA
12. CHECK AP	PROPRIATE BOX(ES) T	O INDICATE	NATURE O	F NOTICE, RE	PORT, OR	OTHER DATA	4
TYPE OF SUBMISSION			ТҮРЕ О	F ACTION			
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture T New Cons Plug and A Plug Back	truction Abandon	Production (Start/ Reclamation Recomplete Temporarily Abar Water Disposal	- 1	Water Shut-Of Well Integrity Other Mas Drilli	
Attach the Bond under which it following completion of the invitesting has been completed. Fi determined that the site is ready Attached for you north Square Ladrilling operat	olved operations. If the operational Abandonment Notices shall for final inspection.) ur review and a ke Unit. CBS (ions subject to	on results in a mu be filed only after approval Operating o this Ma	is a Ma Corporaster Dr	ster Dri	la new intervanation, have be	een completed, and co	the operator has the operator has
Any unique data individual well sheet.	to specific we 3160-3 applica	ell locat ations of	tions wing the pe	ll be pre	esented informa	l in each ition dat	a
		vary deper	iding on ge of Approv	face casing eology. Che val for surfac	may ck ce casing	000 RV 1020	21222329
14. I hereby certify that the foregoin Name (Printed/Typed) M. A. SIRGO,	1/11	D	Title AGE	NT		1314151 0CO	JUL 2003 ECEIVED ARTESIA
Signature V	Jug D			EMBER 10,	2002		
	THIS SPACE	FOR FEDERA		OFFICE USE			Ogre 3
Approved by Alexa Conditions of approval, if any, are certify that the applicant holds legs which would entitle the applicant to	al or equitable title to those rigl	ice does not warr hts in the subject	ant or	roleu m e	NGINEEL Dat	n Dec	·

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

T-16S R30-E 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:

HOLE SIZE	INTERVAL	OD CASING	WEIGHT	<u>GRADE</u>	<u>JT.</u>	TYPE
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) CIRCULATING MEDIUM:

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:

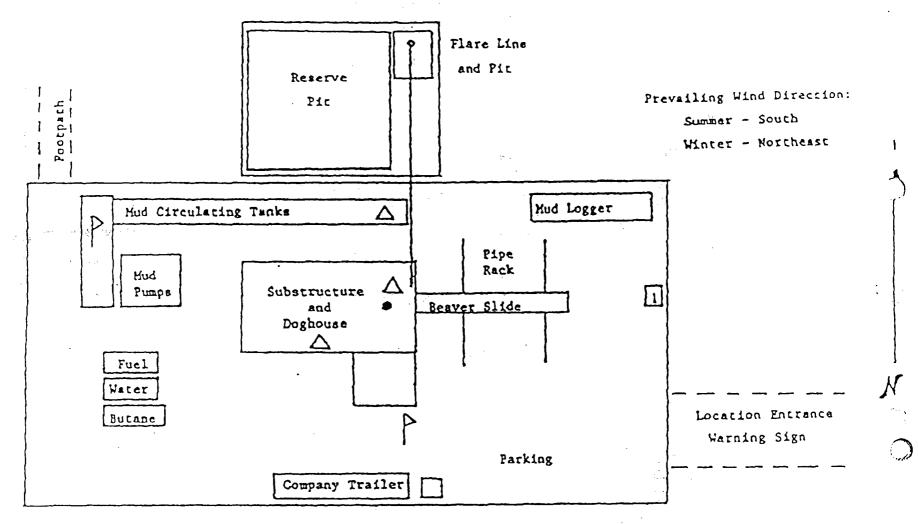
- A. All drill strings, casings, tubing, wellhead, blowout preventors, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

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.



A - H2S Monicors with alarms at the bell nipple and shale shaker

- Wind Direction Indicacors

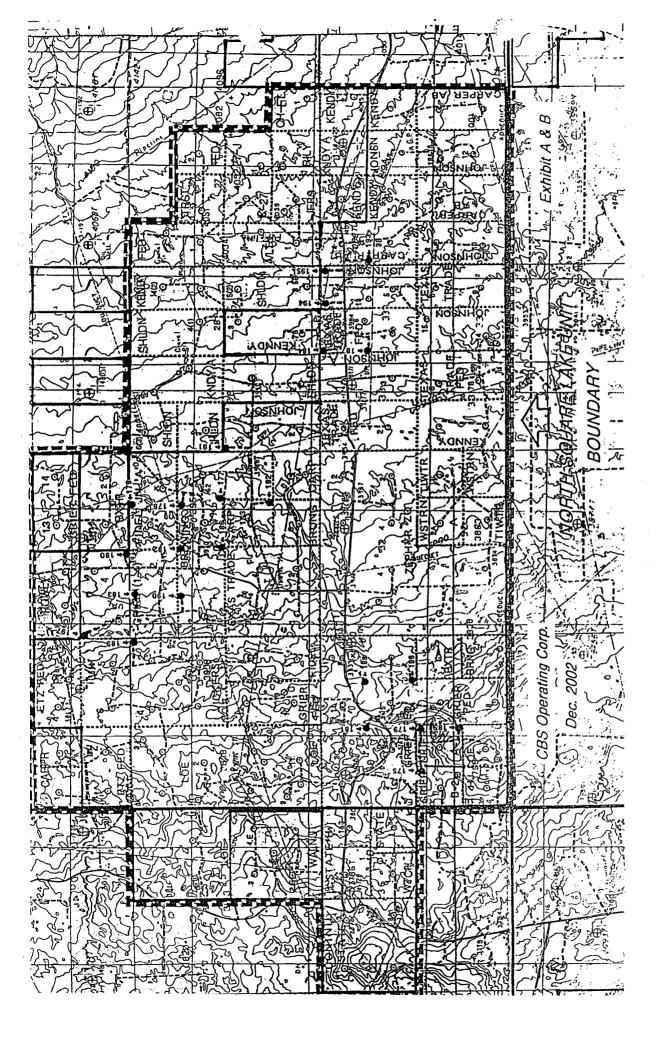
— Safe Briefing areas with caution signs and protective breathing equipment Min. 150 feel from wellhead. I designates primary area

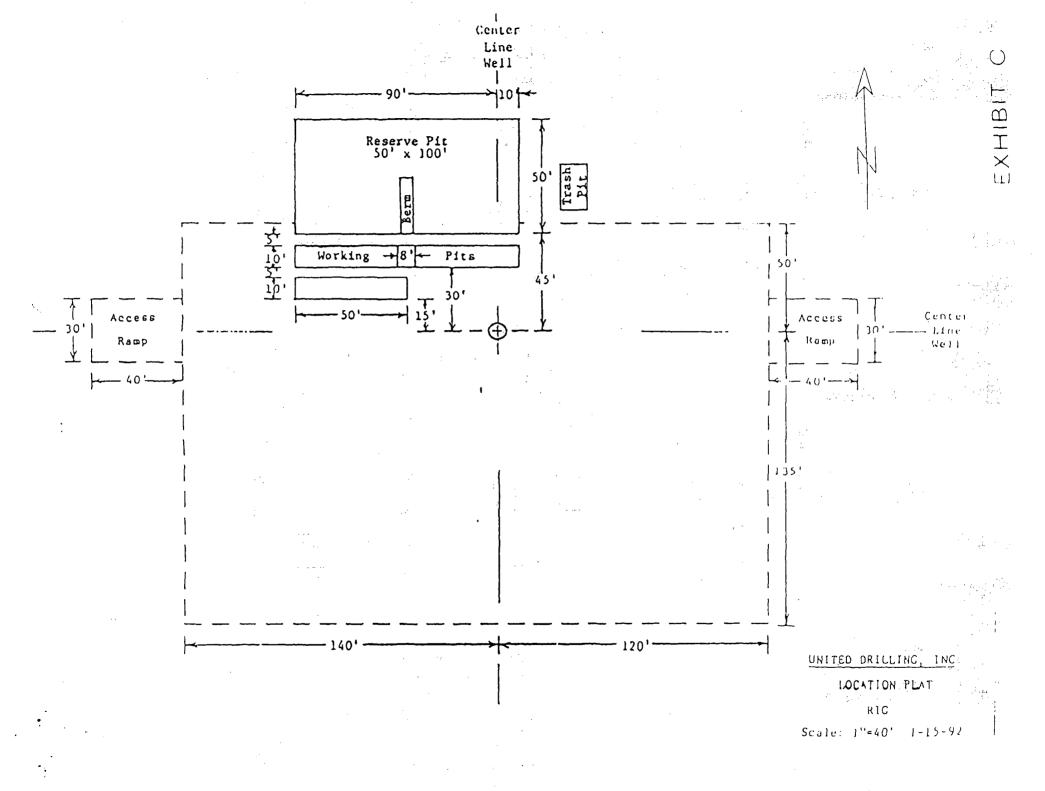
WARNING

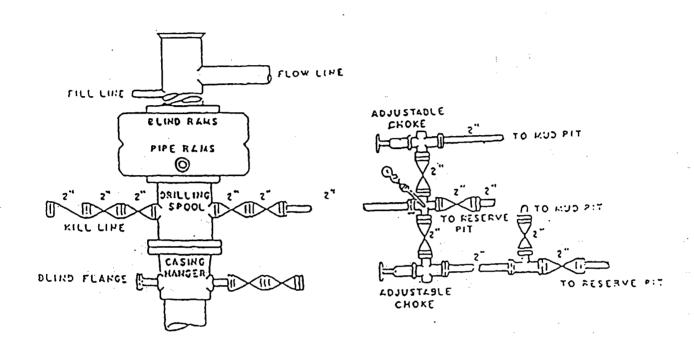
YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

- 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