In Reply Refer To: MS 5231 January 12, 1994

CNG Producing Company
Attention: Ms. Nelda T. Decker
1450 Poydras Street
New Orleans, Louisiana 70112-6000

Gentlemen:

Reference is made to the following plan received December 29, 1993:

Type Plan - Initial Plan of Exploration
Lease - OCS-G 14119
Block - 473
Area - Brazos
Activities Proposed - Wells A through D

In accordance with 30 CFR 250.33, this plan is hereby deemed submitted and is now being considered for approval.

Your control number is N-4676 and should be referenced in your communication and correspondence concerning this plan.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: Lease OCS-G 14119 POD File (MS 5032)
MS 5034 w/public info. copy of the plan
and accomp. info.

DTrocquet:cic:12/29/93:POECOM

RECEIVED

NOTED-SCHEXNAILDRE

N-4476

CNG Producing
Company

December 28, 1993

Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123

Attention: Mr. Daniel Bourgeois
Regional Supervisor
Office of Field Operations

Reference: PLAN OF EXPLORATION, OCS-G-14119 LEASE
BRAZOS BLOCK 473 AREA, OFFSHORE, TEXAS

Gentlemen:

Enclosed are copies of the Plan of Exploration to cover exploratory operations on OCS-G-14119 Lease, Brazos Block 473 Area, Offshore, Texas.

The following copies of this Plan are being submitted:

Proprietary Copies	5 Copies
Public Info Copies	4 Copies

Should you have any questions concerning this plan, please contact me at (504) 593-7453.

Very truly yours,

CNG PRODUCING COMPANY

Nelda T. Decker

Nelda T. Decker
Regulatory Specialist

Enclosures

cc: POE File
Exploration
Y. Abadie
M. Fein
D. Allen

CNG Producing
Company

PUBLIC INFORMATION

PLAN OF EXPLORATION

BRAZOS BLOCK 473

OCS-G-14119 LEASE

OFFSHORE, TEXAS

CNG PRODUCING COMPANY

BY: David E. Rechenthin
David E. Rechenthin,
Manager, Operations Services

DATE: 12-28-93

OCS-G-14119 LEASE
BRAZOS BLOCK 473
PLAN OF EXPLORATION

I N D E X

OCS-G-14119 LEASE
BRAZOS BLOCK 473
PLAN OF EXPLORATION

CNG Producing Company's operations outlined under this Plan of Exploration are covered under our $3,000,000 AreaWide Bond (Original Outer Continental Minerals Lessee's and Operator's Bond Number 4246946, executed on March 2, 1988, in the amount of $300,000 and Increased Rider to Bond No. 5246946, executed on November 18, 1993, increasing bond amount from $300,000 to $3,000,000, provided in accordance with 30 CFR 256.61). Acknowledgment of receipt of the above issued by Minerals Management Service in letter dated November 30, 1993.

I. DESCRIPTION AND SCHEDULE

A. Description of Proposed Activity

CNG Producing Company, as operator of Brazos Block 473, OCS-G-14119 Lease, proposes to drill four (4) exploratory wells to explore for oil and gas reserves.

B. Time Frame To Complete Each Phase

Well No.	Commence Drilling	T&A or P&A	Total Days
A	January 20, 1994	February 10, 1994	21
B	February 10, 1994	March 3, 1994	21
C	October 10, 1994	November 1, 1994	21
D	November 1, 1994	December 12, 1994	42

C. Total estimated time to complete proposal will be approximately 105 days from January 20, 1994 through December, 1994.

It should be stressed that the above time table is an estimate and is subject to change due to unforeseen and unavoidable circumstances and delays.

If any of the above wells prove to be productive, said well or wells will be temporarily abandoned and CNG Producing Company would request approval to install well protector platform. A Development Operations Coordination Document will be prepared and submitted to the Minerals Management Service to cover the installation of a platform for development drilling and subsequent production of the lease.

II. LOCATIONS

A. Table of Well Locations

Well #	Surface
A	2750' FNL & 3250' FWL OF BRAZOS BLOCK 473
B	7450' FNL & 1250' FWL OF BRAZOS BLOCK 473
C	5400' FNL & 3450' FWL OF BRAZOS BLOCK 473 L
D	2750' FNL & 3250' FWL OF BRAZOS BLOCK 473

1. Water depth for the above locations is approximately 82'.

2. Location plat reflecting the above locations has been prepared and is attached to this plan.

B. Bathymetry map, showing surface locations is attached.

C. Onshore Support Base Facility

1. The onshore support base for Brazos Block 473 will be operated from Grasso's dock located in Port Aransas, Texas. Brazos Block 473 is located approximately 80 miles east northeast of Port Aransas, Texas.

2. CNG Producing Company would utilize a satelite base at Grasso's facilities in Port Aransas consisting of an office, dispatchers, dock facilities and dock services, manned 24 hours a day.

3. Description of Support Vessels and Frequency of Travel.

   a. Helicopters, crew boats, supply boats, and utility boats will be utilized to transport personnel and supplies to proposed locations in Brazos Block 473 Area.

b. It is anticipated the following will be utilized for transporting operations:

- Crewboat - 105' in size with 1500 HP capacity. Estimate 3 round trips per week.

- Supply Boat - 180' in size with 3000 HP. Estimate 3 round trips per week.

- Bell 206 D Helicopter - Estimate 14 round trips per week.

- Bell 412 Helicopter making 2 round trips per week.

c. The route utilized by each mode of transportation will normally be in a straight line from shore base in Intracoastal City, Louisiana to Brazos Block 473.

A map showing the lease relative to the shoreline depicting proposed transportation routes is attached.

B. A copy of high-resolution survey data from the two lines closest to the proposed well locations will be sent under separate cover to the geophysical section evaluating well locations.

C. Structure map showing surface location and bottom hole location of each well is attached.

D. Hydrogen Sulfide Classification - CNG Producing Company has not conducted any prior drilling on this lease. In order to assess the lease for encountering the possibility of hydrogen sulfide while operating on this lease, we are furnishing a listing of wells which have been drilled from leases surrounding Brazos Block 473, which includes a summary of geological sections which will be penetrated on wells proposed to be drilled from Brazos Block 473. As the information on these wells from surrounding leases indicates the absence of hydrogen sulfide, CNG Producing Company anticipates the zones which we will penetrate during our proposed operations on Brazos Block 473 will be absent of hydrogen sulfide. We request the Minerals Management to review the information and provide CNG Producing Company with a determination that our operations may be classified as "zones where the absence of Hydrogen Sulfide has been confirmed".

BLOCK	LEASE	OPERATOR	WELL NO.	TOTAL DEPTH
BRAZOS 451	G-3935	ARCO	1(A1)	12,000'
"	"	"	2	8,484'
"	"	"	A2	9,608'
"	"	"	A2ST	8,800'
"	"	"	A3	8,923'
"	"	"	A4	9,747'
"	"	"	A5	9,513'
BRAZOS 452	G-4712	EXXON	1	9,425'
BRAZOS 453	G-4713	EXXON	1	9,602'
"	"	"	2	7,800'
"	"	"	3(A1)	9,646'
"	"	"	A3	7,940'
"	"	"	A4	8,339'
BRAZOS 472	NO WELLS			
BRAZOS 473	NO WELLS			
BRAZOS 474	G-8113	MOBIL	1	10,800'
BRAZOS 474	G-12455	UNION PACIFIC	1	9,843'
BRAZOS 474	G-12455	APACHE	2	8,300'
BRAZOS 494	G-6071	SUPERIOR	1(A1)	13,900'
BRAZOS 494	G-6071	SUPERIOR	2	15,050'
BRAZOS 495	NO WELLS			
BRAZOS 496	NO WELLS			

Should the Minerals Management classify our operations differently, CNG shall comply with applicable requirements setforth in 30 CFR 250.67 while operating in OCS-G-14119 Lease, Brazos Block 473.

E. Chemosynthetic Analysis (For water depth >400 m or 1312 ft.)
Not Applicable for operations on this lease.

IV. OIL SPILL INFORMATION

A. Regional Plan

CNG Producing Company filed with the Minerals Management Service, GOM Regional Office, an Oil Spill Contingency Plan which was approved on March 23, 1993. This plan is available upon request.

B. Base of Operations

CNG Producing Company will operate a land support base in Port Aransas, Texas. Personnel will be on duty at all times. CNG will have both telephone and radio communications with all field headquarters and rigs operating from this respective base. Should additional communication equipment be needed, Clean Gulf and Associates has a radio system that can be connected to CNG Producing Company's existing equipment.

C. Deployment Time

Should an oil spill occur while operating on OCS-G-14119 Lease, Brazos Block 473, action will be initiated by CNG Producing Company's Oil Spill Response Team and The Clean Gulf Associates. Clean Gulf Associates maintains facilities and equipment at Intracoastal City, Venice, Grand Isle, Cameron, Louisiana and Galveston, Port Aransas, and Texas City, Texas. A description of oil spill response equipment and materials is listed in Clean Gulf Associates manual, Volume I, Section III.

CNG would utilize the Port Aransas, Texas facility to initially respond to an oil spill occurring in Brazos Block 473.

The estimation of the individual times for procurement of the equipment, equipment transportation vessel, and the personnel to load and operate the equipment; equipment load-out; travel to the deployment site; and equipment deployment is as follows:

Procurement of Equipment:

- Commence Activity — Notice of Spill
- Complete Activity — Equipment assembled at Port Aransas
- Estimated Time — 1 hour

Procurement of Equipment Transportation Vessel and Personnel to Load and Operate the Equipment:

- Commence Activity — Notice of Spill
- Complete Activity — Vessel and personnel assembled at Port Aransas
- Estimated Time — 2 hours

Equipment Loadout:

- Commence Activity — Arrival of equipment & transportation vessel at Port Aransas
- Complete Activity — Departure of vessel to Brazos Block 473
- Estimated Time — 3 hours

Travel Deployment from Port Aransas, TX to Brazos Block 473

- Commence Activity — Departure of vessel/equipment to Brazos Block 473
- Complete Activity — Arrival at Brazos Block 473
- Estimated Time — 8 hours

Equipment Deployment - Brazos Block 473

- Commence Activity — Arrival of vessel at site
- Complete Activity — Initiate equipment operations
- Estimated Time — 1 hour

Brazos Block 473 Area is located approximately 80 miles east northeast of Port Aransas,Texas. The total estimated response time in the event of an oil spill in Brazos Block 473 is 12 hours.

D. Oil Spill Trajectory Analysis

Should an emergency spill occur on Brazos Block 473 the possibility of a spill reaching land is as follows:

1% chance of reaching Calhoun, Texas within 10 days

38% chance of reaching Matagorda, Texas within 10 days

9% chance of reaching Brazoria, Texas within 10 days

The source of the above trajectory simulations is as follows:

Environmental Impact Statement
Gulf of Mexico Sales 142 and 143
for the Central and Western Planning Areas
dated November, 1993 - Page IV-118 (Table IV-20)

* MMS Oil Spill Launch Areas in the Western Gulf of Mexico Map (09/10/91)

Biologically sensitive areas which would be affected and require special protection in the event of a spill occurring on Brazos Block 493 are identified in the Clean Gulf Associates Manual:

Volume II - Section V - Biologically Sensitive Areas Identification

Texas Map No. 2 - Pages V-31.0a - V-42.0b

Protection Response Modes - Pages V-43.0 - V-52.0a

CNG would protect these sensitive areas by implementing the appropriate response modes outlined in the Clean Gulf Associates Manual - Volume II, Section VI - Biologically Sensitive Area Protection Modes (Pages VI - 1.0a - VI-23.0.

V. WASTE AND POLLUTANTS

A. Drilling Mud and Cuttings

1. Quantity of Discharges For Well Locations A, B, C, and D.

Well Locations "A", "B", "C"

	VOLUME CUTTINGS (BBLS)	VOLUME MUD (BBLS)
	214	1071
	476	2380
	793	3170
	739	1478
TOTAL	2222	8099

Well Location "D"

	CUTTINGS (BBLS)	MUD (BBLS)
	215	1075
	665	3324
	1595	6381
	803	2410
	154	307
	3432	13,498
FOUR WELL TOTAL	10,098	37,795

	TOTAL DAYS	BBLS
DECK DRAINAGE	105	11500
WASH WATER	105	5250
SANITARY WASTE	105	5250
FOOD SOLIDS	105	105

2. Discharge Rate

Discharge rate of mud and cuttings will vary according to rates of penetration. In the upper hole rates of discharge there could be up to 4000 bbls per day and up to 400 bbls per hour. The lower part of the hole may have discharge rates of 20 bbls per day and 1 bbls per hour while drilling.

3. Composition of Discharges

Cuttings are composed of native solids, shales, clays and sands.

Muds are composed primarily of Bentonite clay, barite, caustic soda, Lignote, Lignosulfonate salts, native solids, and polymers in water.

4. Basis For Determination of Quantity and Rate of Discharges

Assumed 1.25 x hole volume drilled for washout to estimate cuttings

5 x cuttings for mud discharge
4 x cuttings for mud discharge
3 x cuttings for mud discharge
2 x cuttings for mud discharge

5. Plans for Treatment, Storage, Transportation, and Disposal

Oil spots added to mud for stuck pipe will be isolated, containerized in U. S. Coast Guard approved tanks and brought to an approved disposal site on shore. Uncontaminated muds will be discharged.

B. Deck Drainage

1. Quantity of Discharges:

Rain - 105 day estimate 5250 bbls
Wash Water - 105 day estimate 5250 bbls

2. Discharge Rate

Rain - 0-500 bbls/day
Washwater - 40-60 bbls/day

3. Composition

Deck drainage will consist of primarily of water, soaps and deck soils.

4. Basis for Determination of Quantity and Discharge Rate

Rain Estimate - Wash water volumes used on other rigs.

5. Plans for Treatment Storage Transportation

Deck drainage with oil will be routed to a sump prior to discharge.

C. Sanitary and Domestic Waste

1. Quantity of Discharge

Sanitary waste and domestic wash water
105 days - 5250 bbls
Food Solids - 105 days - 105 bbls

2. Discharge Rate

Sanitary waste and domestic wash water 50 bbls/day
Food solids 1 bbl/day

3. Composition of Discharges

Sanitary waste and domestic wash water is composed of sanitary waste and shower and sink water.
Food solids consist of leftover food scraps.

4. Basis For Determination of Quantity and Rate of Discharge

Sanitary waste and domestic washwater from Red Fox Unit treatment capacity .5 to 1.2 bbls/man/day. Assume 50 men 1 bbl/day. Food solids is estimated at 1 bbl/day.

5. Plans for Treatment Storage Transportation and Disposal

Sanitary waste and domestic washwater will be processed through U. S. Coast Guard approved sanitary waste treatment unit prior to discharge.

Food solids will be segregated from metals, paper and plastic prior to discharge. Food solids will be comminuted in accordance with 33 CFR

D. General Trash and Used Engine Oil

1. Quantity of Discharges - Not Applicable

2. Discharge Rate - Not Applicable

3. Composition of Discharges - Not Applicable

4. Basis for Determination of Quantity of Discharge - Not Applicable

5. Plans for Treatment Storage Transportation and Disposal

General trash is compacted containerized and brought to shore for disposal at a municipal facility.

Used engine oil is containerized in a U. S. Coast Guard approved container, brought to shore and picked up by an oil reclaimer.

VI. OTHER INFORMATION

A. Discussion of Any Operational Lease Stipulations

OCS-G-14119 Lease, Brazos Block 473 was awarded to CNG Producing Company in OCS Lease Sale 143 with an effective date of January 1, 1994.

Lease Stipulation 1 - Protection of Archaeological Resources and provide for the protection of Cultural Resources.

In the event of the possibility of existing cultural resources on lease premises, CNG Producing Company shall comply with the procedures outlined in Stipulation 1 for the protection of these resources.

B. Air Emissions Data and Schematic of Facility Showing Locations and Evaluations of Sources.

1. Emissions From Support Boats at Rig Site

Assumptions

Distance From Shore	80 Miles
Days on Location	105
M.D.	27,950'
No. of Wells to Drill	4

CREW BOAT	LBS/DAY	TONS/JOB	TONS/YEAR
CO	54.11	2.84	9.87
SO2	16.63	0.87	3.03
NOX	250.00	13.13	45.63
VHC	20.00	1.05	3.65
TSP	17.86	0.94	3.26

SUPPLY BOAT	LBS/DAY	TONS/JOB	TONS/YEAR
CO	28.06	1.47	5.12
SO2	8.62	0.45	1.57
NOX	129.63	6.81	23.66
VHC	10.37	0.54	1.89
TSP	9.26	0.49	1.69

FIELD BOAT	LBS/DAY	TONS/JOB	TONS/YEAR
CO	13.36	0.70	2.44
SO2	4.10	0.22	0.75
NOX	61.73	3.24	11.27
VHC	4.94	0.26	0.90
TSP	4.41	0.23	0.80

TOTAL	LBS/DAY	TONS/JOB	TONS/YEAR
CO	95.52	5.01	17.43
SO2	29.35	1.54	5.36
NOX	441.36	23.17	80.55
VHC	35.31	1.85	6.44
TSP	31.53	1.66	5.75

SMALL HELICOPTER	LBS/DAY	TONS/JOB	TONS/YEAR
CO	11.40	0.60	2.08
SO2	0.36	0.02	0.07
NOX	1.14	0.06	0.21
VHC	1.04	0.05	0.19
TSP	0.50	0.03	0.09

LARGE HELICOPTER	LBS/DAY	TONS/JOB	TONS/YEAR
CO	22.80	0.17	4.16
SO2	0.72	0.01	0.13
NOX	2.28	0.02	0.42
VHC	2.08	0.02	0.38
TSP	0.50	0.00	0.09

AIR EMISSIONS (continued):

DRILLING RIG	LBS/DAY	TONS/JOB	TONS/YEAR
CO	513.02	26.93	93.63
SO2	157.63	8.28	28.77
NOX	2370.37	124.44	432.59
VHC	189.63	9.96	34.61
TSP	169.31	8.89	30.90

EXEMPTION LEVELS	TONS/YEAR
CARBON MONOXIDE	63125.62
OTHERS	2664

ONSHORE SUMMARY	TONS/JOB				
	CO	SO2	NOX	VHC	TSP
CREW BOAT	2.84	0.87	13.13	1.05	0.94
SUPPLY BOAT	1.47	0.45	6.81	0.54	0.49
SMALL HELICOPTER	0.60	0.02	0.06	0.05	0.03
LARGE HELICOPTER	0.17	0.01	0.02	0.02	0.00
TOTAL	5.08	1.35	20.01	1.66	1.45

OFFSHORE SUMMARY	TONS/JOB				
	CO	SO2	NOX	VHC	TSP
CREW BOAT	2.84	0.87	13.13	1.05	0.94
SUPPLY BOAT	1.47	0.45	6.81	0.54	0.49
SMALL HELICOPTER	0.60	0.02	0.06	0.05	0.03
LARGE HELICOPTER	0.17	0.01	0.02	0.02	0.00
FIELD BOAT	0.70	0.22	3.24	0.26	0.23
DRILLING RIG	26.93	8.28	124.44	9.96	8.89
TOTAL	32.72	9.84	147.69	11.88	10.57
TOTAL TONS PER YEAR	133.84	39.65	594.22	47.98	42.61

EXEMPTION LEVELS	CO	SO2	NOX	VHC	TSP
TONS PER YEAR	63126	2664	2664	2664	2664
TONS PER JOB	18159	766	766	766	766

	ASSUMTIONS
CREW BOAT	3 - 1800 HP ENGINES 1.5 HOURS PER DAY AT RIG
SUPPLY BOAT	2 - 2100 HP ENGINES 1.0 HOURS PER DAY AT RIG
FIELD BOAT	2 - 1000 HP ENGINES 1.0 HOURS PER DAY AT RIG
SMALL HELICOPTER	2 TRIPS PER DAY, SEVEN DAYS A WEEK
LARGE HELICOPTER	2 TRIPS PER DAY, ONCE A WEEK
DRILLING RIG	3200 HP OF TOTAL ENGINE USE

C. Description of Drilling Rig and Discussion of Safety and Pollution-Prevention Features.

1. Drilling Rig:

CNG Producing Company plans to utilize a jack-up rig similar to the "Chiles Independence ".

2. Pollution Prevention Features:

This unit is equipped to comply with current MMS regulations in including:

- drip tray around engines

- guttered heliport with drains

- waste drain system that empties into oil/water separation unit

- required blowout preventer equipment to accommodate well down hole and surface pressure regimes, inclusive of choke manifold, diverter system, TIW valves and inside BOP's

3. Safety Equipment

The drilling unit is equipped to meet current safety requirements of the country of operation, including the following:

2 - self-propelled 44-man capacity water craft survival type lifeboats each equipped with radio, compass, various tools, first aid kit, food rations, water and toilet

4 - inflatable life rafts, 20-man capacity - Davit launched

100 life preservers

First Aid Supplies As Follows:

2 - personnel stretchers
1 - special personnel stretcher for transportation of injured personnel

Apparatus for resuscitation include: 27 fire stations with hydrants and 1-1/2" x 50' hose; 20 - portable carbon dioxide extinguishers; 1 - 150 bl. ansul dry chemical fixed unit; 1 - 50 bl. CO^2 wheel type unit; 1 - 100 gal. foam unit with 2 hose reels (for helicopters); 1 - Halon system for engine room and H^2S monitoring system with 10 sensors.

D. No new or unusual technologies will be used for the drilling operations proposed under this plan which will affect coastal waters.

EXEMPTION FROM PUBLIC DISCLOSURE

CNG Producing Company, as operator of Brazos Block 473 Area, believes that the following data contained and submitted with this plan is exempt from disclosure under the Freedom of Information Act and should, therefore, not be made available to the public or provided to any affected state or to the executive of any local government:

PROPOSED BOTTOM HOLE LOCATIONS

Page 2
Attachment 1

GEOLOGICAL/GEOPHYSICAL
Page 3 and 4

CASING SETTING DEPTHS

Pages 8

STRUCTURE MAPS

Attachments 4, 5, and 6

Inquiries for this Plan of Exploration should be directed to the following authorized representative for CNG Producing Company:

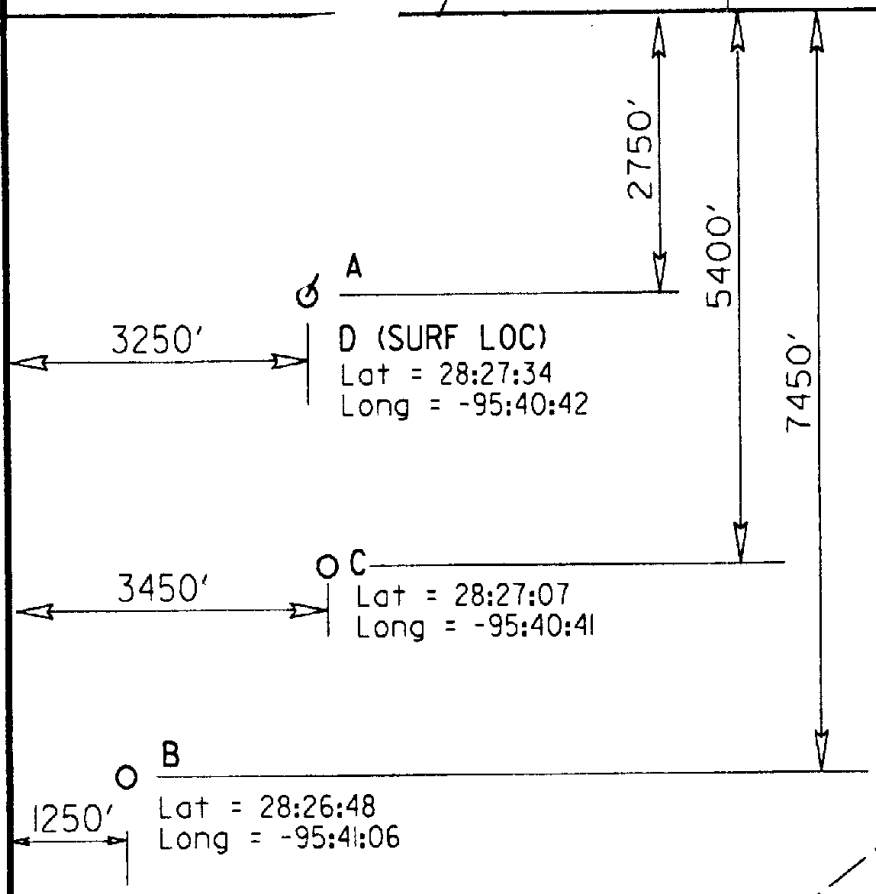
Nelda T. Decker,
Regulatory Specialist
CNG Tower - 1450 Poydras Street
New Orleans, Louisiana 70112 - 6000

Telephone: (504) 593-7453

ATTACHMENTS

ATTACHMENT NO. 1

473



CNG PROD
G14119
12-31-1998

ARCO
G13299
PRT
9/1996

495

REVISIONS	NEW ORLEANS, LOUISIANA
	BRAZOS AREA BLOCK 473
Ref File(s)	LOCATION MAP
	12/14/93
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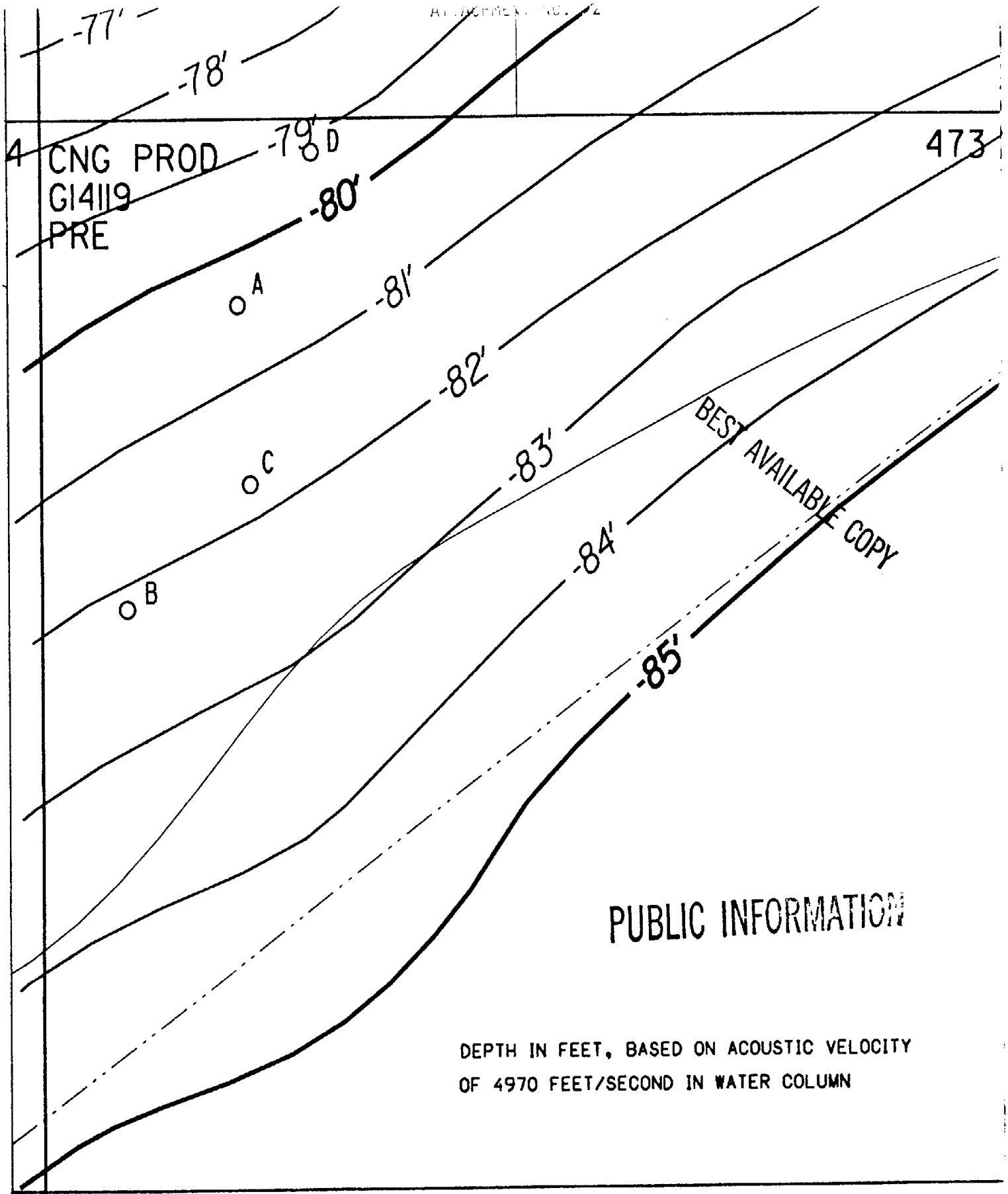

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9/1996

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REVISIONS

Ref. File(s)

NEW ORLEANS, LOUISIANA

BRAZOS AREA
BLOCK 473

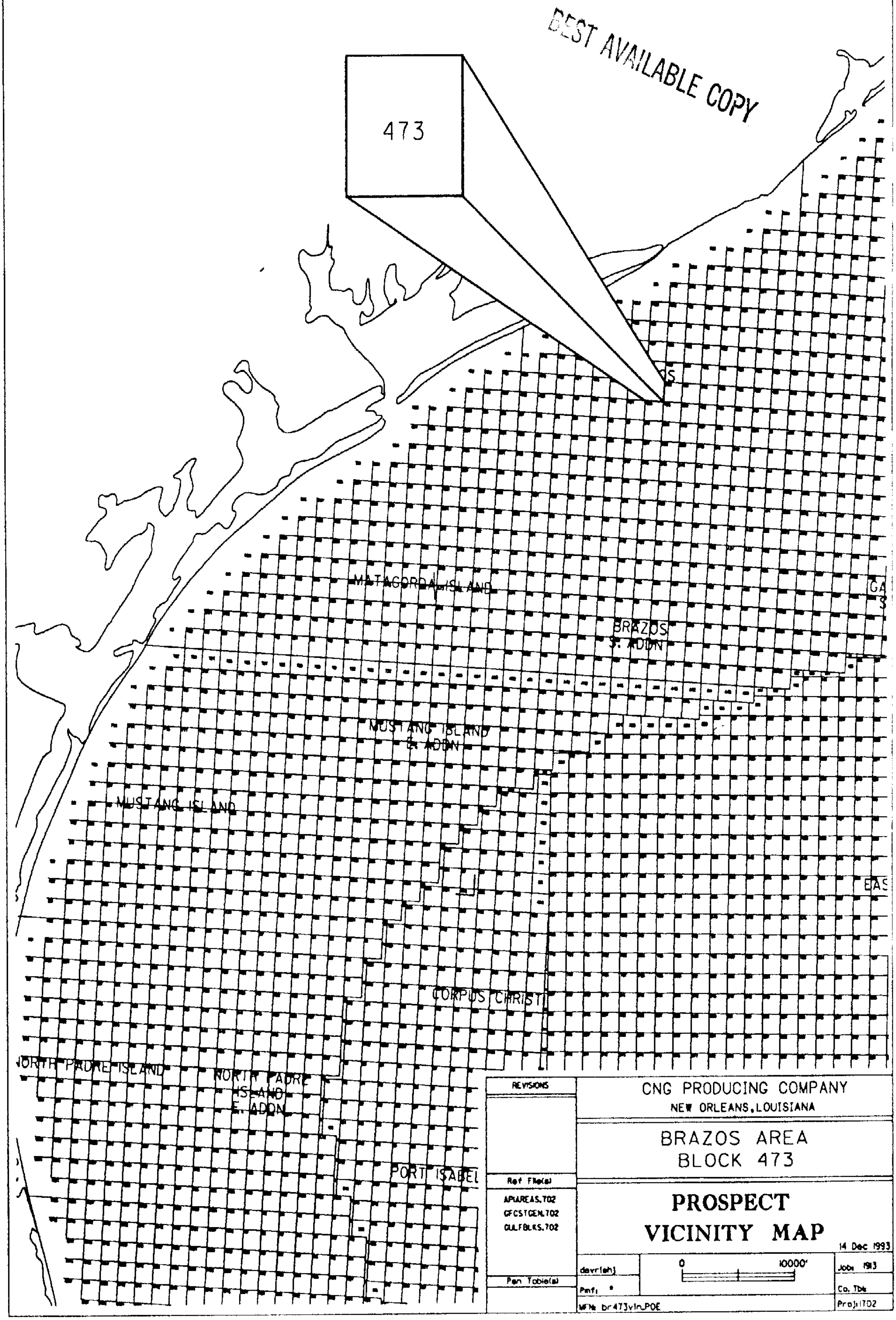
BATHYMETRY MAP

C.I. = 1'

12/13/

0 2000'

ATTACHMENT NO. 3


473
MATAGORDA ISLAND
BRAZOS
S. ADDN
MUSTANG ISLAND
E. ADDN
MUSTANG ISLAND
CORPUS CHRISTI
NORTH PADRE ISLAND
NORTH PADRE
ISLAND
E. ADDN
PORT ISABEL
REVISIONS
CNG PRODUCING COMPANY
NEW ORLEANS, LOUISIANA
BRAZOS AREA
BLOCK 473
Ref File(s)
APIAREAS.T02
CFCSTGEN.T02
GULFBLKS.T02
Pen Table(s)
PROSPECT
VICINITY MAP
14 Dec 1993
0
10000'
Job: 1913
Co. Tbl:
Proj: T02
MFN: br473vln_POE

ATTACHMENT NO. 7

SCHEMATIC FOR EMISSION ELEVATIONS