In Reply Refer To: RP-2-1

Conoco Inc.
Attention: Mr. D. L. Ivers
Post Office Box 51266
Lafayette, Louisiana 70505

Gentlemen:

Reference is made to your Supplemental Plan of Exploration received March 4, 1985, for Lease OCS-G 6356, Block 178, Garden Banks Area. This plan includes the activities proposed for Well No. 2.

In accordance with 30 CFR 250.34, revised December 13, 1979, and our letter dated January 29, 1979, this plan has been determined to be complete as of March 5, 1985, and is now being considered for approval.

Your plan control number is S-1573 and should be referenced in your communication and correspondence concerning this plan.

Sincerely yours,

(Orig. Sgd.) D. W. Solanas

D. W. Solanas
Regional Supervisor
Rules and Production

bcc: Lease OCS-G 6356 (OPS-3-2) (FILE ROOM)
OPS-3-4 w/Public Info. Copy of the plan (PUBLIC RECORDS ROOM)
DO-3

ADGobert:gtj:3/5/85:Disk 3b

SUPPLEMENTAL PLAN OF EXPLORATION
GARDEN BANKS BLOCK 178, OCS-G6356

This supplemental plan of exploration provides for the drilling of one (1) well, no. 2, on OCS-G6356, Garden Banks Block 178. Individual well information as follows:

Well No.	Proposed Surface Location	Proposed Bottom Hole Location	PTD	Anticipated Spud Date	Days to Drill
2	7620' FSL & 6080' FWL			March 7, 1985	90

The fabrication and installation of platforms, producing facilities, and pipelines is contingent upon the success or failure of this well.

This exploratory well will be drilled by the Semisubmersible drilling rig Penrod 73. Drip pans are installed under all equipment which could be a source of pollution. No waste products which contain oil will be disposed of into Gulf of Mexico waters. Domestic wastes will be treated by onboard sanitation treatment facilities. These waters plus formation and drill waters will be disposed of at the site in accordance with applicable Federal Regulations.

Garden Banks Block 178 is located approximately 122 miles from its closest point onshore (Southeast of Galveston, Texas). Operations will be served by Conoco's shore bases which are located in Cameron and Morgan City, Louisiana. These shore bases serve the following purposes: 1) loading point for tools, equipment and machinery to be delivered to our offshore locations; 2) crew change and transportation base; and 3) temporary storage for materials and equipment. The bases are equipped with the necessary loading docks and cranes for convenient and safe operations. Full time dispatchers are employed at Cameron in order to maintain 24 hour contact with offshore personnel.

Safety in drilling operations will be accomplished through: 1) adequately designed casing programs; 2) the use of blowout preventers and associated well equipment of adequate pressure rating to contain anticipated pressures; 3) the use of sufficient mud volumes to insure control of the well; 4) the use of mud monitoring equipment; and 5) the use of supervisory personnel properly trained in pressure control. Fire drills, abandon ship drills, the installation and use of required navigational aids and lifesaving equipment, and all other shipboard safety requirements will be conducted pursuant to Coast Guard regulations.

Conoco Inc. is a member of Clean Gulf Associates (CGA). CGA is a cooperative designed to own and maintain a large inventory of oil spill clean-up equipment. This equipment and the necessary marine supervisors for use in an advisory capacity are available to member companies during spill events. Major equipment items available through CGA are fast response open sea and bay skimmers, high volume open sea skimmer systems, shallow water skimmer systems, and an inventory of known resources available for emergency oil spill clean-up and control. Our updated Accidental Discharge Contingency Plan was approved by the MMS on March 8, 1984.

As per the Air Quality Regulations 30 CFR 250.57 (Federal Register March 7, 1980). Attachment I is a list of projected emissions during the proposed operations. Emissions from each facility were estimated from EPA AP-42 and all calculations were based on worst possible cases. Actual emissions are expected to be considerably below those estimated. Attachment II is a schematic of the drilling operations and indicates the height of emissions above sea level.

The period of time the facility will be polluting is based on the time schedule as shown above. Drilling operations are expected to last 90 days. During this time emissions are based on the following factors:

Rig:	12,280 HP (Four EMD Model 16-645E9B diesels each at 3070 HP) 24 hrs/day and 7 days/week.
Standby Boat:	24 hrs/day and 7 days/week.
Work Boat:	24 hrs/day and 4 days/week.
Tug Boat:	2-4500 HP diesels 24 hrs/day for 4 days to tow rig in and out.
Welding:	1-50 HP diesel running 4 hrs/day to power welding unit.
Cementing:	2-200 HP diesels to power unit running 28 hrs/well.
Crane:	2-110 HP diesels to power crane running 4 hrs/day.
Helicopters:	3 flights/day.

Using the above estimates, the table in Attachment I was compiled. Also included in this table are the maximum allowable emissions. These values were based on exemption formulas in the Federal Register and the drilling operations being 122 miles from the nearest shore as shown in Attachment II. Considering this information, we do not plan to install air quality pollution controls.

Structure maps, cross sections, a location plat, shallow hazards survey, and a list of drilling/completion fluids are attached.

D. L. Byers
Coordinator
Environmental Affairs

RJS:kmf

Attachment 1

PROJECT EMISSIONS

GARDEN BANKS 178; Well No. 2; OCS-G6356

POUNDS PER DAY OF OPERATIONS

Pollutant	Drilling Rig 12,280 HP	Boat w/200 KW Generator	Helicopter 3TOL Cycles Two Engines	Tugboat 2-4500 HP Diesels	Crane 2-110 HP Diesels	Cement 2-200 HP Diesels	Welding 1-50 HP Diesels
SO_2	604.37	6.20	1.08	442.94	1.80	19.68	.41
TSP	649.16	0.00	1.50	475.77	1.94	21.14	.44
NO_x	9088.28	32.20	3.42	6660.79	27.14	296.04	6.17
CO	1966.96	14.30	34.20	1441.59	5.87	64.08	1.33
VOC	727.06	4.10	3.12	532.86	2.17	23.68	.49

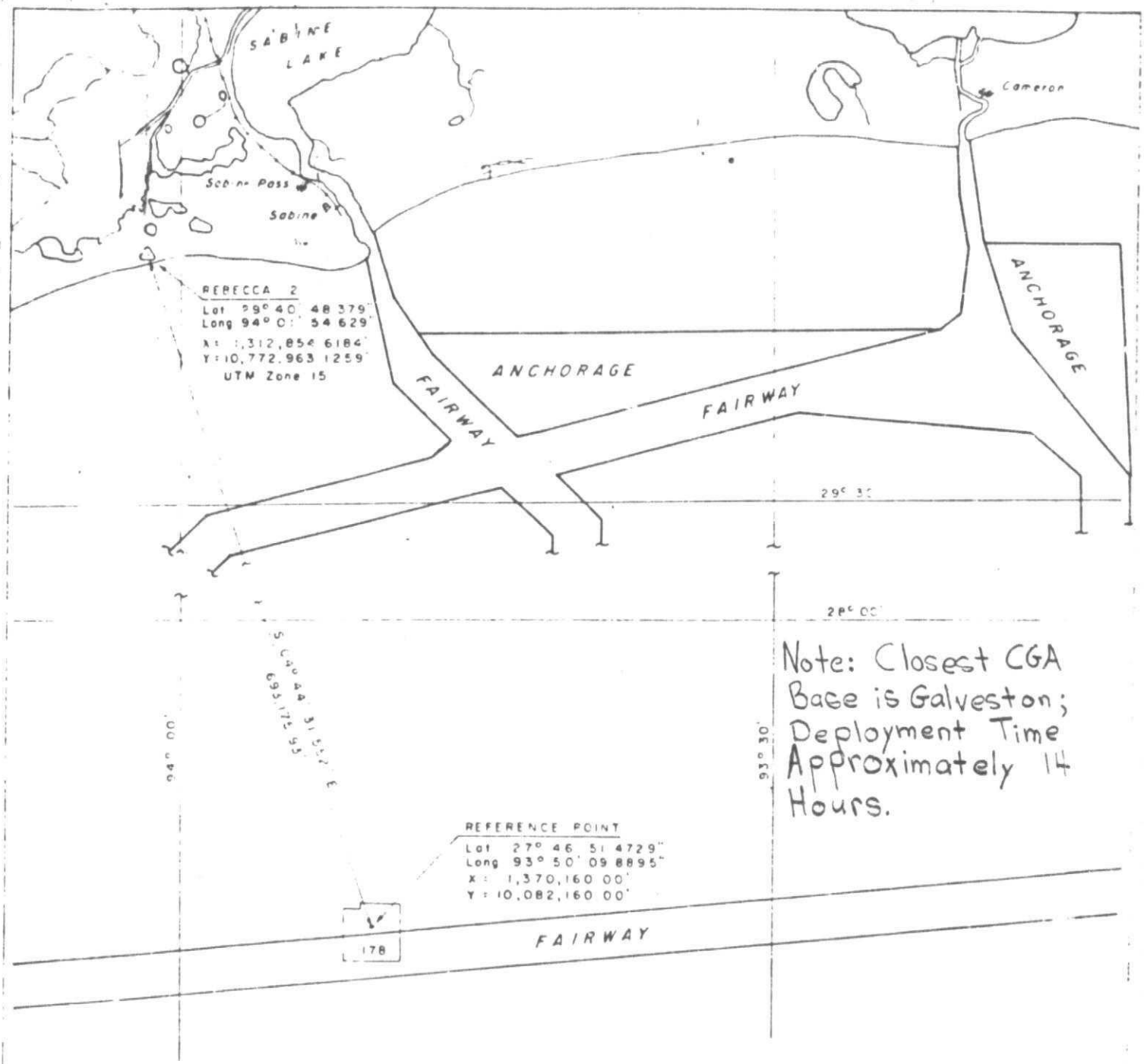
Total Emissions (Tons)

Year	SO_2	TSP	NO_x	CO	VOC
1985	28.68	30.35	426.39	94.31	34.35
Max. Allow.	4062.6	4062.6	4062.6	83634.5	4062.6

Note 1: Max. Allow (Tons Per Year) = $3400D^{2/3}$ for CO

33.3D for SO_2, TSP, NO_x, VOC, where D= 122 miles

Note 2: $\frac{\text{H.P. x hrs run/day x g/HP hr}}{\text{454 gr/\#}}$ = #/day, where g/HP hr comes from table 33.3/of EPA AP-42, Compilation of Air Pollutant Emission Factors



Note: Closest CGA Base is Galveston; Deployment Time Approximately 14 Hours.

PROPOSED DRILLING OPERATION
FOR
CONOCO INC.
GARDEN BANKS

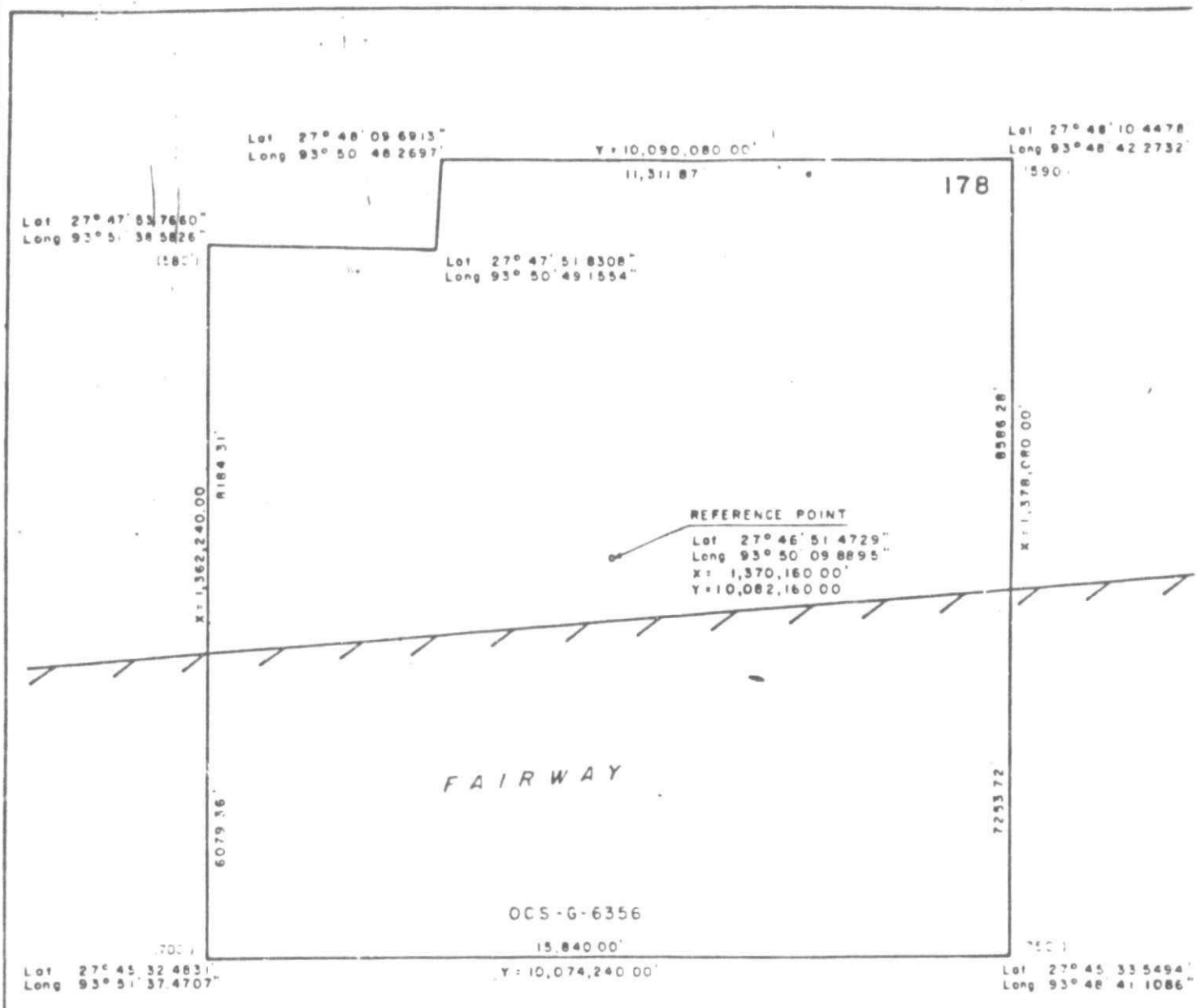
TRACED FROM U S C & G S NAVIGATION CHART No 1116-A

SCALE 1 : 459,000

10,000' 0 40,000 90,000'

Attachment II-①

VICINITY PLAT



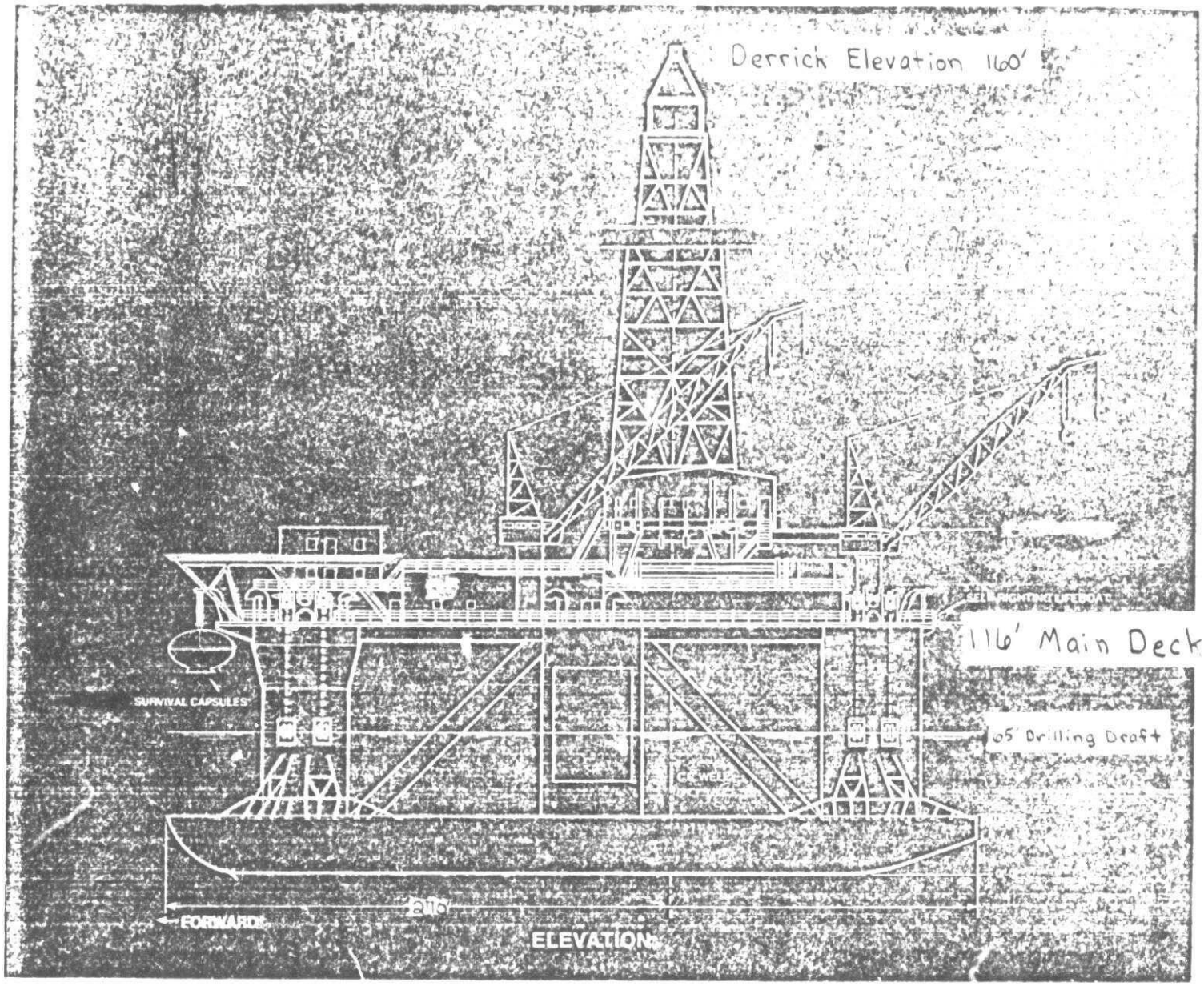
PROPOSED DRILLING OPERATION
FOR
CONOCO INC.
GARDEN BANKS

SCALE 1" = 3000'

0 1 2 4 6 8

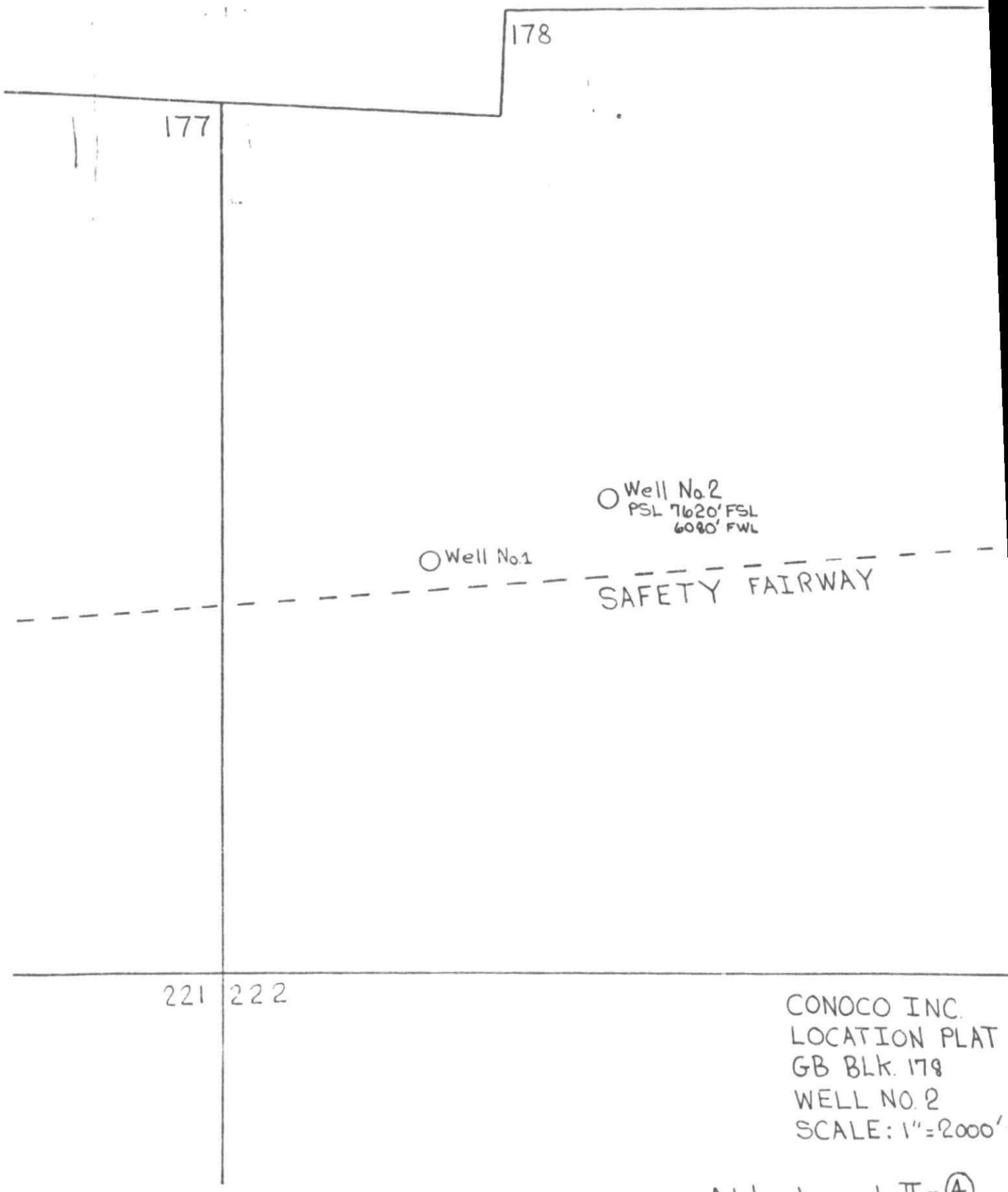
Attachment II-(2)

AREA PLAT



Conoco Inc.
Semisubmersible Rig
GB Blk. 178
OCS-G 6356
Well No. 2

Attachment II-③



CONOCO INC.
LOCATION PLAT
GB BLK. 178
WELL NO. 2
SCALE: 1" = 2000'

Attachment II-④

The following is a list of drilling and completion fluids that may be used in this plan.

There will be no intentional discharge of hazardous material in violation of EPA or DOI regulations.
Drilling mud will be disposed of on site provided it is not oil based and provided it complies with EPA's permitting procedures and guidelines.

PRODUCT	DESCRIPTION
AKTAF 10-S	Mixed Oxyethylated Phenols, Nonylphenols and Potassium Hydroxide
Aluminum Stearate	Aluminum Salts reacted with Stearic Acid
Arco Seal	Shredded Cellophane
AZ-32	Vegetable Oil base with Hydroxyethyl Cellulose type Polymer with Aldehyde
Bactron KM-7	Corrosion Inhibitor with bacterial properties
Barite	Barium Sulfate
Basco-50	Nonfermenting starch
Basco Bestos	Shredded Cellophane
Benex	Anhydride Co-polymer
Bentonite	Wyoming Bentonite
Bex	Synthetic Polymers and Carbonates
Bicarbonate of Soda	Sodium Bicarbonate
Bit Lube	High pressure lubricant with Potassium Hydroxide and Sulfurized Phenols
Breakers	Cellulose Enzymes, Sodium Persulfate
Bridge Heal	Calcium Lignosulfonates, Calcium Carbonates and Esterated Polysaccaharide
Buffer	Sodium Acetate
Calcium Bromide	Calcium Bromide
Calcium Carbonate	Calcium Carbonate

PRODUCT	DESCRIPTION
Calcium Chloride	Calcium Chloride
Carbo Free	Organophilic Clay with tall Oil Emulsifier
Carbonox	Lignite Material
Caustic Soda	Sodium Hydroxide
CC - 16	Solubilized Sodium Salt of Lignitic Humic Acid Power
Cell-o-seal	Shredded Cellophane
Cement	Mixture of Calcium Aluminates and Silicates
Chemtrol-X	Cautized lignite base with an Organo Acrylate Composition
Circotex	Blend of sized carbonates
CL/CLS	Chrome Lignite - Chrome Lignosulfonate
Clay	Sub-Bentonite
CMC	Sodium Carboxymethyl Cellulose
Con Det	Anionic Surfactant
Cortron 126	Amine Sulfite
Cortron R-66	Filming Amine
Cortron RU-14	Quaternary Amine
Cortron RU-2202	Corrosion Inhibitor with bacterial properties
Cortron RU-2264	Water soluble amine with amine sulfite and oxygen scavengers
Cottonseed Oil	Vegetable Oil from cottonseed
CQ	Causticized Ferrochrome Lignosulfoante
Cronox 609	Ethoxylated Amine with IPA
Cronox 235	Ethoxylated Amine with IPA
CV Ben	Co-polymer contains Acrylamide

PRODUCT	DESCRIPTION
Cypan	Sodium Polyacylate with Acrylonitrile
DD	Aqueous blend with Diethanol Amides
Dakolite	North Dakota Lignite
Desco	Sulfoallcylated Tannin contains chrome
Dextrid	Nonfermenting starch
Dowell F-75	Fluorochemical Quaternary of Methyl Iodide
Drillaid 420	Bentonite Extender and Selective Flocculent
Drilltreat	Phospholipid Surfactant contains Lecithin
Drispac	Polyanionic Cellulose
Duratone	Lignitic Material
EDL-5	Mineral Oil Surfactant and Isopropyl Alcohol
E-Z Mul	Emulsifier with Methanol and Maleic Anhydride
Emulsite	Caustic Lignite Compound
Fiber Seal	Processed Cane Fiber
Flo Tex	Blend of Lignosulfonates, Carbohydrates, and Carbonates
Foam Ban	Octyl Tri-butyl Phosphate and Organic Silicone
Gel Tone	Organo-Clay
Gold Fury	Degreaser, six more surfonic N-60 surfactant
Gypsum	Clacium Sulfate
HAI 75	Isopropanol
HDQ-48	Polymer Beads
HEC	Hydroxyethyl Cellulose
Heals	Calcium Lignosulfonate Calcium Carbonates

PRODUCT	DESCRIPTION
HME	Ethoxylated Nonyl-phenol and Alkylated Phenol
Hytec	Blend of Synthetic Polymers and sized Carbonates .
Imco Flo	Hemlock Extract
Imco Phos	Sodium Tetraphosphate
Imco SWS	Sulfonated Alcohol Ether and Ethoxylated Alcohol
Imco Thin	Sodium Hydroxide and Lignite
Impermix	Pre-gelatinized starch
Jel Flake	Shredded Cellophane
K-Flo	Oxide Adduct of Glycerine
K-Lig	Potassium Salt of Lignitic Material
KCL	Potassium Chloride
KOH	Potassium Hydroxide
Kemtol KW-12	Corrosion inhibitor of imidazoline salts and methanol
Kembreak	Calcium Lignosulfonate
Kleenup	Blend of Surfactants, Butyl-cellosolve, and Monoamine detergent compounds
Kwik Seal	Combination of granules, and fibers
LD-8	Aluminum salt of a fatty acid dispersed in Propoxylated Oleyl Alcohol
Lamco Flakes	Shredded Cellophane
Ligco	Lignite
Ligcon	Sodium Salt of Lignitic Material
Ligcox	Lignite
Lignite	Lignite

PRODUCT	DESCRIPTION
Lime	Calcium Hydroxide
Lubri Film	Aluminum Salt of an organo fatty acid complex
Lubri Glids	Polystyrene Teflon Beads
MD	Ethoxylated Alcohol with Sodium Silicate Buffer and CMC Viscosifier
Magco Inhibitor 303	Blend of Morpholine Amine type compounds with IPA
Magconol	2- ethyl Hexanol. 2 ethylhexyl Alcohol
Magcophos	Sodium Tetraphosphate
Mica	Mica Flakes (Silicates)
Milcon	Heavy metal modified lignite - modified with Zinc
Milflo	Hemlock Bark Extract
Miltex	Mica Flakes
Mon Pac	Polyanionic Cellulose
Mud Cleanout Acid (MCS)	Hydrochloric acid and isopropanol
Mud - Sweep	Spacer
My - Lo - Gel	Corn Starch
Nylo Seal	Ground Shredded Nylon
Nut Pack	Ground up nut shells
Nutplug	Ground walnut shells
OB Hi Cal	Calcium Hydroxide
Oilphos	Sodium Tetraphosphate
Pal Mix 110	Cellulose type Polysaccharide
Pal Mix 210	100% Tri-butyl Phosphate
Pal Mix 235-A	Contains Alkyl Pyridine with less than 2% Gluteraldehyde

PRODUCT	DESCRIPTION
Pal Mix 380	Glucose Base Polymer
Pal Mix Extender	Buffer-inorganic Alkaline Phosphate
PEN 5A	Methanol
Perma-thinz	Aluminum Chrome lignosulfonate
Petro-tone	Organo-Clay
Phenoseal	Laminated Thermoset Plastic
Potassium Carbonate	Potassium Carbonate
Potassium Chloride	Potassium Chloride
Protecto Mul B	Blend of attapulgite clay, magnesium oxide, and coconut diethanolamine
Q-Broxin	Ferrochrome Lignosulfonate
Quelbrach	Tannin from Quebracho Bark
Ray flo	Hemlock Bark Extract
RD-111	Blended Lignosulfonate contains Bichromate
Resinex	Co-polymer of a Sulfonated Lignite and a Phenol Formaldehyde
Rhe-o-con	Chrome Lignosulfonate
Royal Seal	Groundup Movie Film
SA-58	Aliphatic Carboxylic Acids
Salt	Sodium Chloride
Salt Gel	Attapulgite Clay
SAM-3	Spacer
S.A.P.P.	Sodium Acid Pyrophosphate
Slik-5	Nonionic Surfactant
SLX	Lignite Surflube Surfactant
Soda Ash	Sodium Carbonate

PRODUCT	DESCRIPTION
Sodium Bichromate	Sodium Dichromate
Sodium Chromate	Sodium Chromate
Spacer Mix	Oleic Acid, Primary Oleylamide Dimerized Oleic Acid and Free Fatty Acid
Spaced Drill	Tall Oil Soap Emulsifier
Spersene	Chrome Lignosulfonate
Stab-Vis	Chrome Lignosulfonate
Stabi-Prop	Chrome Lignite
Stabloid	Nonfermenting Starch
Starch	Pre-gelatinized Starch
Super-Col	Hydrophilic Organo-Clay Complex
Super Lig	Lignite
Superdrill	Gilsonite Compound with Causticized Lignite
Supertron 62	9% Cocodiamine with Sodium Sulfite, Methyl Alcholo and Imidazaline Alcohol
Surfactant	Oxyethalated Phenols
Surfoote	Oil soluble Amine Dodecyl Benezine Sulfonate
Synergic	Potassium Sodium Silicate with a Tannin
Tanco	Causticized Lignite-Quebracho
Tannathin	Lignite
Tannex	Quebracho Extract
Therm X	Sodium Stearate
Unical	Chrome modified Sodium Lignosulfonate
Uniflow	Gilsonite
VC-10	Modified Lignosulfonate with Chrome
Visco 938	Partially Quaternized Polyamine in IPA and Water Solution

PRODUCT	DESCRIPTION
Vix-Tex	Blend of Synthetic Polymers and Sized Carbonates
Whites PF 294	Contain liquid Quarternary Ammonia
Whites PF 296	Bactericide contains Formaldehyde
W.O. Defoamer	Contains Potassium Hydroxide
X-tend	Co-polymer Bentonite Extender
XC Polymer	High molecular weight long-chained Polymer Xanthum Gum
XMDC (RD)	Blend of Monodialkyl Polyoxyethylene and Phosphates
XP-20	Chrome Lignite contains Potassium Hydroxide
Zinc Bromide	Zinc Bromide
Zinc Carbonate	Zinc Carbonate
Zinc Chloride	Zinc Chloride

SDK:ap