UNITED STATES GOVERNMENT MEMORANDUM

October 27, 2003

To:

Public Information (MS 5034)

From:

Plan Coordinator, FO, Plans Section (MS

5231)

Subject: Public Information copy of plan

Control #

N-07946

Type

Initial Exploration Plan

Lease(s)

OCS-G24700 Block -

22 West Cameron Area

OCS-G24701 Block -

23 West Cameron Area

Operator -

Newfield Exploration Company

Description -

Wells A and B

Rig Type

JACKUP

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.

Site Type/Name Botm Lse/Area/Blk Surface Location

Surf Lse/Area/Blk

WELL/A WELL/B

G24700/WC/22 G24701/WC/23 2120 FSL, 50 FEL 2120 FSL, 50 FEL

G24700/WC/22 G24700/WC/22

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#### **VIA FEDERAL EXPRESS**

October 20, 2003

Minerals Management Service Gulf of Mexico - OCS Region 1201 Elmwood Park Boulevard New Orleans, LA 70123-2394

Attention: Mr. Nick Wetzel, MS 5231

Re: WEST CAMERON BLOCKS 22/23, OCS-G 24700/24701

INITIAL EXPLORATION PLAN (EP)

#### Gentlemen:

In accordance with the guidelines set forth in 30-CFR 250.203, Newfield Exploration Company (Newfield) hereby submits for your favorable review and approval a proposed Initial Exploration Plan (EP) for West Cameron Blocks 22/23. **Newfield is the designated operator of both blocks** 

Enclosed you will find nine (9) copies of the subject plan; five (5) of which contain "Proprietary Data" that are exempt from disclosure under the privacy Act (5 U.S.C. 552a) and the implementing regulations (43 CFR Part 2 Subpart D). Four (4) copies are considered "Public Information."

Drilling operations are expected to commence on December 15, 2003.

Should you require any additional information, please feel free to contact Susan Becnel at 281/847-6115

Sincerely,

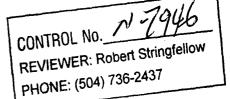
**NEWFIELD EXPLORATION COMPANY** 

Susan Becnel

Regulatory Manager

Susan Beenel.

**Enclosures** 





#### **NEWFIELD EXPLORATION COMPANY**

## INITIAL EXPLORATION PLAN LEASES OCS-G 24700/24701 WEST CAMERON BLOCKS 22/23

SECTION A Contents of Plan

SECTION B General Information

SECTION C Geological, Geophysical & H2S Information

SECTION D Biological Information

SECTION E Wastes and Discharge Information

SECTION F Oil Spill Response and Chemical Information

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SECTION H Environmental Impact Analysis

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PUBLIC INFORMATION

#### **SECTION A**

#### **CONTENTS OF PLAN**

#### LEASE DESCRIPTION/ACTIVITY

Lease OCS-G 24700 and OCS-G 24701 were both acquired by Newfield Exploration Company at the Gulf of Mexico Lease Sale 185 in 2003. The subject leases were issued with an effective date of May 1, 2003, and primary term ending date of April 30, 2008.

Newfield is the designated operator of both blocks.

#### **OBJECTIVE**

This Initial Exploration Plan provides for the drilling, testing, and completion of two (2) exploratory wells in **WEST CAMERON BLOCKS 22/23** to test the target sand(s) as detailed in **Section C** of this plan.

#### SCHEDULE

The following schedule details the proposed drilling and suspension of the wells provided for in this plan:

Activity	Estimated Start Date	Estimated Completion Date
Drill, Complete & Suspend Well A	12-15-03	01-27-04
Drill, Complete & Suspend Well B	01-28-04	03-01-04
	,	

This schedule is tentative in the meaning of Title 30 CFR 250.203-1. Additional exploratory drilling must be predicated upon the need to further define the structures and/or reservoir limitations.

#### WELL LOCATIONS

The approximate location of the subject well in this Initial Exploration Plan is shown on the table and plat included in **Section J** of this Plan.

#### **DESCRIPTION OF DRILLING UNIT**

Offshore exploratory activities are carried out from mobile drilling rigs. The five most common types of mobile rigs employed for exploratory drilling offshore are submersible drilling rig, semi-submersible drilling rigs, jack-up drilling rig, drill ships, and drill barges.

The proposed well will be drilled and completed with a typical jack-up rig. Rig specifications will be made a part of the appropriate Applications for Permit to Drill. (Newfield will not be using a Gorilla Class rig.) Newfield will use the Rowan Odessa or a rig similar to it to drill the exploratory wells proposed in our plan.

Safety features on the MODU will include well control, pollution prevention, welding procedures, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, G and O; and as invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. The appropriate life rafts, life jackets, ring buoys, etc., as prescribed by the U.S. Coast guard, will be maintained on the facility at all times.

In accordance with Title 30 CFR Part 250, Subpart O, an operator is to ensure that Well Control Training is provided for lessee and contractor personnel engaged in oil and gas operations in the OCS Gulf of Mexico.

Supervisory and certain designated personnel on-board the facility will be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in the NPDES General Permit GMG290000.

The operator is charged with the responsibility to not create conditions that will pose unreasonable risk to the public health, life, property, a quatic life, wildlife, recreation, navigation, commercial fishing, or other uses of the ocean. Some of these measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

The MMS is required to conduct onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections. The MMS also inspects the stockpiles of equipment listed in the operator's approved Oil Spill Response Plan that would be used for the containment and cleanup of hydrocarbon spills.

#### **DESCRIPTION OF STRUCTURES**

IF the well are successful, they will be completed and shut-in. Appropriate Nav-Aids and/or a buoy will be installed.

### **DESCRIPTION OF VESSELS**

Work Boat Length - 180'; 3500 HP; Fuel Capacity - 85,000 gallons

Crew Boat Length – 120'; 2000 HP; Fuel Capacity – 20,000 gallons

#### **SECTION B**

#### **GENERAL**

#### CONTACT

Inquiries may be made to the following authorized representative:

Susan B. Becnel
Newfield Exploration Company
363 N. Sam Houston Parkway E., Suite 2020
Houston, Texas 77060
281/847-6115
email address:sbecnel@newfld.com

#### **NEW OR UNUSUAL TECHNOLOGY**

Newfield does not propose utilizing any new or unusual technology during the proposed drilling and suspension operations.

#### **BONDING**

In accordance with Notice to Lessees (NTL) 99-G04 which implements the requirements for general lease surety bonds contained in 30 CRR 256, Subpart I, Newfield has a \$3,000,000 Area Wide Development Bond on file with the Minerals Management Service.

Additionally, NTL 98-18N addresses how MMS has the authority to require additional security to cover full plugging, site clearance and other associated lease liabilities which may be in excess of the general lease surety bonds. These activities are reviewed on a case-by-case basis, and if deemed warranted, Minerals Management Service will provide such notification to Newfield.

#### ONSHORE SUPPORT BASE

WEST CAMERON BLOCK 22/23 is located approximately **9 miles** from the nearest Louisiana shoreline. The onshore support base located in **Cameron**, **Louisiana**. A Vicinity Plat showing the location of WEST CAMERON BLOCKS 2/23 relative to the shoreline and onshore base is included as **Attachment B-1**.

Newfield will utilize onshore facilities located in **Cameron**, **Louisiana**, which will serve as a port of debarkation for supplies and crews. No onshore expansion or construction is anticipated with respect to the proposed activities.

This base is capable of providing the services necessary for the proposed activities. It has 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage base, drinking and drill water, etc. This base will also serve as a loading point for tools, equipment and machinery to be delivered to the MODU, crew change and transportation base, and temporary storage for materials and equipment. These facilities typically include outdoor storage, forklift and crane service, dock, trailer facilities and parking, as well as 24-hour service.

Support vessels and travel frequency during drilling and completion activities are as follows:

Support Vessel & Aircraft	Drilling & TA Operations Trips Per Week
Crew Boat	5
Supply Boat	4
Helicopter	1

Personal vehicles will be the main means of transportation to carry rig personnel form various locations to the staging areas. They will then be transported to the MODU by the crew boat. A helicopter will be used to transport small supplies and, on occasion, personnel in emergency situations. The most practical, direct route permitted by the weather and traffic conditions will be utilized.

# NEW ONSHORE CONSTRUCTION OR EXPANSION OF SUPPORT FACILITIES

The proposed operations do not mandate any immediate measures for land acquisition or expansion of the existing onshore base facilities.

Dredging and filling operations will not be required for the operations, nor will any new construction or expansion of onshore facilities be involved for the operations proposed in this Initial Exploration Plan.

#### **LEASE STIPULATIONS**

Oil and gas exploration activities on the OCS are subject to stipulations developed before the lease sale; these are attached to the lease instrument, as necessary, in the form of mitigating measures. The MMS is responsible for ensuring full compliance with lease stipulations.

The Minerals Management Service did not invoke any Lease Stipulations on this lease.

#### ARCHAEOLOGICAL ASSESSMENT

This is not an Archaeological Block.

#### SECTION D

#### **BIOLOGICAL**

The seafloor disturbing activities proposed in this Plan will be at water depth of **28 feet** at **Location A and B.** 

#### **MAPS**

Submitted under separate cover are the maps prepared using high-resolution seismic information and/or 3-D seismic data to depict bathymetry, seafloor and shallow geological features and the surface location of each proposed wells and structure.

#### **ANALYSIS**

Submitted under separate cover is the analysis of seafloor features and areas that could be disturbed by the activities proposed in this Plan.

#### **TOPOGRAPHIC INFORMATION**

MMS and the National Marine Fisheries Service (MNFS) have entered into a programmatic consultation agreement for Essential Fish Habitat that requires that no bottom disturbing activities, including anchors or cables from a semi-submersible drilling rig, may occur within 500 feet of the no-activity zone of a topographic feature. If such proposed bottom disturbings are within 500 feet of a no activity zone, the MMS is required to consult with the NMFS.

The activities proposed in this Plan are not affected by a topographic feature.

#### PINNACLE REEF TRENDS

**WEST CAMERON BLOCK 22/23** is not a Pinnacle Trend Block; therefore the Live Bottom (Pinnacle Trend) Lease Stipulation does not apply.

# SECTION E Wastes and Discharge Information

The Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA) regulate the overboard discharge and/or disposal of operational waste associated with drilling, completing, testing and/or production operations from oil and gas exploration and production activities.

Minerals Management Service regulations contained in Title 30 CFR 250.300 require operators to "prevent the unauthorized discharge of pollutants into offshore waters". These same regulations prohibit the intentional disposal of "equipment, cables, chains, containers, or other materials" offshore. Small items must be stored and transported in clearly marked containers and large objects must be individually marked. Additionally, items lost overboard must be recorded in the facility's daily log and reported to MMS as appropriate.

- U. S. Coast Guard regulations implement the Marine Pollution Research and Control Act (MARPOL) of 1987 requiring manned offshore rigs, platforms and associated vessels prohibit the dumping of all forms of solid waste at sea with the single exception of ground food wastes, which can be discharged if the facility is beyond 12 nautical miles from the nearest shore. This disposal ban covers all forms of solid waste including plastics, packing material, paper, glass, metal, and other refuse. These regulations also require preparation, monitoring and record keeping requirements for garbage generated on board these facilities. drilling contractor must maintain a Waste Management Plan, in addition to preparation of a Daily Garbage Log for the handling of these types of waste. MODU's are equipped with bins for temporary storage of certain garbage. Other types of waste, such as food, may be discharged overboard if the discharge can pass through 25-millimeter type mesh screen. Prior to off loading and/or overboard disposal, an entry will be made in the Daily Garbage Log stating the approximate volume, the date of action, name of the vessel, and destination point.
- **U. S. Environmental Protection Agency** regulations address the disposal of oil and gas operational wastes under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) which provides a framework for the safe disposal of discarded materials, regulating the management of solid and hazardous wastes. The direct disposal of operational wastes into offshore waters is limited under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by the Underground Injection Control program. If any wastes are classified as hazardous, they are to be properly transported using a uniform hazardous waste manifest, documented, and disposed at an approved hazardous waste facility.

## Wastes and Discharge Information

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. The major discharges from offshore oil and gas exploration and production activities include produced water, drilling fluids and cuttings, ballast water, and uncontaminated seawater. Minor discharges from the offshore oil and gas industry include drilling-waste chemicals, fracturing and acidifying fluids, and well completion and work over fluids; and from production operations, deck drainage, and miscellaneous well fluids (cement, BOP fluid); and other sanitary and domestic wastes, gas and oil processing wastes, and miscellaneous discharges.

Newfield has requested coverage under the Region VI NPDES General Permit GMG290000 for discharges associated with exploration and development activities WEST CAMERON BLOCK 22/23 and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

#### **Composition of Solid and Liquid Wastes**

The major operational solid waste in the largest quantities generated from the proposed operations will be the drill cuttings, drilling and/or completion fluids. Other associated wastes include waste chemicals, cement wastes, sanitary and domestic waste, trash and debris, ballast water, storage displacement water, rig wash and deck drainage, hydraulic fluids, used oil, oily water and filters, and other miscellaneous minor discharges.

These wastes are generated into categories, being solid waste (trash and debris), non-hazardous oilfield waste (drilling fluids, non-hazardous waste including cement and oil filters), and hazardous wastes (waste paint or thinners).

The type of discharges included in this permit application allow for the following effluents to be discharged overboard, subject to certain limitations, prohibitions and record-keeping requirements.

**Drilling Fluids** - Generally is discharged overboard at a volume and rate dependent upon hole size intervals and downhole conditions. Volume is estimated from both pump rate and length of time, or from tank capacity if a bulk discharge occurs. The discharge of drilling fluids is classified as an intermittent discharge, with an estimated average flow of 250 barrels a day, but no more than 1000 bbls. per hour based on permit limitations.

## Wastes and Discharge Information

**Drill Cuttings** - The drill cuttings are separated from the drilling fluid through the use of solids control equipment. Cuttings discharge rates and volumes will vary during the duration of the well, and are measured by estimating the volume of hole drilled. C onstituents of drill cuttings include sand, shale and limestone from the wellbore. The discharge of drilling cuttings is classified as an intermittent discharge, with an estimated average flow of 100 barrels a day.

**Excess Cement** - Occasionally, excess slurry will be generated while cementing casing strings and/or setting of wellbore plugs and annulus jobs. The volume of cement discharges is calculated by subtracting the volume inside the well from the total volume pumped down hole.

Well Treatment, Completion or Work-Over Fluids - These fluids are circulated down the wellbore, and sometimes discharged overboard or captured in tanks for disposal at a onshore site. The discharge of these fluids is classified as an intermittent discharge, with an estimated average flow of 300 barrels a day. The volume of cement discharges is calculated by subtracting the volume inside the wellbore from the total volume pumped down hole.

Sanitary and Domestic Waste - The discharge of sanitary and domestic waste is classified as an intermittent discharge, with an estimated average flow of 40 barrels a day. An equal amount of domestic waste (from sinks, galleys, showers and laundries) is normally discharged.

**Deck Drainage** - Consisting of rainwater and wash water with no free oil, the volume of deck drainage is calculated by multiplying average rainfall by exposed deck area.

Uncontaminated Water - This included non-contact cooling water, discharges from the firewater system, and freshwater maker blow-down. Ballast water, which is sometimes used to maintain the stability of a drilling rig, might also be discharges. These discharges are classified as miscellaneous discharges in the NPDES permit application.

#### **Wastes and Discharge Information**

**Produced Water from Well Testing** - This discharge would occur during the production test conducted after drilling and completing the wells. Much of the produced water would be vaporized as the gas is flared and/or burned. Excess water would be processed in a gravity separator and discharged in accordance with the limitations and conditions of the applicable NPDES General Permit.

In accordance with all Federal, State and Local rules and regulations, wastes which cannot be discharged overboard, will be transported to an appropriate treatment or disposal site.

#### **Overboard Discharges**

The wastes detailed in **Attachments E-1** and **E-3** are those wastes generated by our proposed activities and are released into the receiving waters of the Gulf of Mexico at the lease site.

#### Disposed Wastes

The wastes detailed in *Attachment E-2* are those wastes generated by our proposed activities that are disposed of by means of offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Water Base and Oil Base Mud System Components and Additives are listed in *Attachments E-4* and *E-5*.

# **QUANTITIES AND RATES OF DISCHARGES**

	MD		QUANTITY	
WELL	DEPTH	HOLE SIZE	(BBLS)	MAX. DISCHARGE RATE
Α	800'	26"	526	Maximum 1000 bbls/hour
	4000'	17-1/2"	952	Maximum 1000 bbls/hour
	10200'	12-1/4"	904	Maximum 1000 bbls/hour
	11800'	8-1/2"	112	Maximum 1000 bbls/hour
В	800'	22"	637	Maximum 1000 bbls/hour
	4500	14-3/4"	825	Maximum 1000 bbls/hour
	12,700'	9-7/8"	777	Maximum 1000 bbls/hour
	<u>.</u>			

TOTAL BARRELS <u>– 4733</u>

# **WEST CAMERON BLOCKS 22/23**

OCS-G 24700/24701 Diesel Oil Base Mud Component Parts

Newfield Exploration Company does not plan to use diesel oil base mud.

# **DRILLING MUD COMPONENTS**

# COMMON CHEMICAL OR CHEMICAL TRADE NAME

Aluminum Stearate "AKTAFLO-S"

Barite

Calcium Carbonate
Calcium Chloride
Calcium Oxide
Calcium Sulfate

Carboxymethyl Cellulose

Caustic Potash Caustic Soda Chrome Lignite

Chrome Lignosulfonate Drilling Detergent

"E-Pal"

Ferrochrome Lignosulfonate

Gel

Gypsum Lignite

Lignosulfonate
"Mud-Sweep"
"MOR-REX"
"Shale-Trol"

Sapp Soda Ash

Sodium Bicarbonate

Sodium Carboxymethyl Cellulose

Sodium Chloride Sodium Chromate

Starch
"TX-9010"
"TORO-Trim"

DESCRIPTION OF MATERIAL

Aluminum Stearate Nonionic Surfactant Barium Sulfate (BaSO4) Aragonite (CaCO3) Hydrophilite (CaC12)

Lime (Quick)
Anhydrite (CaSO4)
Carboxymethyl Cellulose
Potassium Hydrate

Sodium Hydroxide (NaOH)

Chrome Lignite

Chrome Lignosulfonate

Soap

No-toxic, biodegradable defoamer

Derived from wood pulp

Sodium montmorillonite, bentonite,

attapulgite CaSO4.2H2O

Lignite

Lignosulfonate Cement Pre-Flush Hydrolyzed Cereal Solid Organo-aluminum complex Sodium Acid Pyrophosphate

Sodium Carbonate

NaHCO3

Sodium Carboxymethyl Cellulose

NaC1

NaCr04.10H2O Corn Starch

Biodegradable drilling lubricant Biodegradable drilling lubricant

# **MUD ADDITIVES**

# COMMON CHEMICAL OR CHEMICAL TRADE NAME

"Black Magic"

"Black Magic Supermix"

Diesel

pills

"Jelflake"

**MICA** 

"Pipe-Lax"

"Wall-nut"

#### **DESCRIPTION OF MATERIAL**

Oil base mud conc.

Sacked concentrated oil base mud Used to mix certain loss-circulation

Plastic foil, shredded cellophane

Loss-circulation material

Surfactant mixed with diesel

Ground walnut shells

#### **Wastes and Discharges Information**

The information provided in Table 1 and Table 2 are estimates only and are based on information and plans known at the time this plan was prepared. The type of waste, amount and rate to be discharged, recycled, or disposed of and the recycle and disposal locations may change from time to time during the project life.

Table 1—Discharges

All discharges will be in accordance with EPA's general NPDES permit

GMG 290000

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location and Discharge Method
Water-based drilling fluids	1,000 bbl/well	Bulk discharge of mud in casing following TA	WC 22 Discharge overboard
Drill cuttings associated with water-based fluids	1,000 bbl/well	Bulk discharge of mud in casing following TA	WC 22 Discharge overboard
Drill cuttings associated with synthetic drilling fluids	None	None	None
Muds, cuttings and cement at the seafloor	1,000 bbl/well	Bulk discharge of mud in casing following TA	WC 22 Discharge overboard
Produced water	40,000 bbl/day (maximum)	40,000 bbl/day	WC 22 Treat for oil and grease and discharge overboard
Sanitary wastes	20 gals/person/day	Not applicable	WC 22 Chlorinate and Discharge overboard
Domestic wastes	30 gal/person/day	Not applicable	WC 22 Remove floating solids and discharge overboard

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location and Discharge Method
Deck drainage	0-4,000 bbl/day Dependant upon rainfall	Not applicable	WC 22 Remove oil and grease and discharge overboard
Well treatment, workover or completion fluids	300 bbls/day	300 bbls/day during these types of operations	WC 22 Remove oil and grease and discharge overboard
Uncontaminated fresh or seawater	Varied	Not applicable	<u>WC 22</u> Discharge overboard
Desalinization Unit water	700 bbl/day	Not applicable	WC 22 Discharged Overboard
Uncontaminated bilge water	None	None	None
Uncontaminated ballast water	10,000 bbls	400 gal/min (pump capacity)	WC 22 Discharged overboard
Misc discharges to which treatment chemicals have been added	Varied	Not applicable	WC 22 Discharged Overboard
Other misc discharges	Varied	Not applicable	WC 22 Discharged Overboard

Table 2 Disposal Table—Wastes Not Discharged

Disposal Table—wastes Not Discharged											
Type of Waste Approximate Composition	Amount	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method <sup>2</sup>							
Spent oil-based drilling fluids and cuttings	None	None	None	None							
Spent synthetic- based drilling fluids	None	None <sup>.</sup>	None	None							
Oil-contaminated produced sand	None	None	None	None							
Waste Oil	NA ·	NA	NA	NA							
Norm- contaminated wastes	Not anticipated	Not applicable	None	None							
Trash and debris	1000 ft <sup>3</sup>	3 ft <sup>3</sup>	ELI dock Cameron	Transport in storage bins on boats to shorebase							
Chemical product wastes	100 bbls	2 bbl/day	Newpark <sup>1</sup>	Transport in barrels on boat to shorebase							
Workover fluids- Not Discharged	150 bbls	2 bbl/day	Vendor or Newpark <sup>1</sup>	Transport in barrels on boats or barge to shorebase							

<sup>&</sup>lt;sup>1</sup>Newpark Transfer Stations to be utilized are located in Cameron, LA <sup>2</sup>Waste to be disposed of or recycled is normally brought to the shorebase by work boats. From the shorebase, it is usually transported to the disposal or recycling center by truck.

#### **SECTION F**

#### OIL SPILL RESPONSE AND CHEMICAL INFORMATION

The Regional Oil Spill Response Plan (OSRP) for Newfield and was approved on **July 18, 2000**. The bi-annual update was approved on **August 7, 2002**. Activities proposed in this Initial Exploration Plan will be covered by the Regional OSRP.

Newfield is the only entity operating under this subject plan.

Newfield's primary equipment provider is Clean Gulf Associates (CGA). The Marine Spill Response Corporation's (MSRC) STARS network will provide closest available personnel, as well as an MSRC supervisor to operate the equipment.

In the event of a spill, mechanical response equipment located at CGA's base in Lake Charles, LA would be transported to a staging area in Cameron, Louisiana.

The worst-case discharge (WCD) proposed in this EP equal does not exceed the previously certified worst-case discharge in the Regional OSRP. If our evaluation reveals that this WCD does, in fact, have the potential of having a more adverse impact than our currently identified WCD in our existing Regional OSRP, then Newfield will amend the Regional OSRP as required.

Activities proposed in this EP are considered near-shore (>10 miles from the shoreline). The Worst Case Discharge (WCD) scenario from the proposed activities in this EP and the WCD in the Regional OSRP on file with the MMS are compared below:

#### Comparison of WCD's in OSRP to Proposed Operations

	Regional OSRP	EP
Category	WCD	WCD
Type of Activity	Drilling & Completion	Drill & Complete
Spill Loc. (Area/Block)	HI A-472	WC 22
Facility Designation	Well A∸Ē	Wells A & B
Distance to Nearest		·
Shoreline (miles)	78	9
Volume (bbls)	17250	2040
Type of Oil	10000 rates to the remaining	·
(crude, cond., diesel)	Condensate	Condensate
API Gravity	35.0°	52.0°

#### **Worst-Case Discharge**

Since **Newfield** has the capability to respond to the worst case spill scenario included in its approved (**August 7, 2002**) regional OSRP and since the worst-case scenario determined for our EP does not replace the worst case scenario in our regional OSRP, I hereby certify that **Newfield** has the capability to respond, to a worst case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our EP.

#### **Facility Tanks**

The following table details the tanks (capacity greater than 25 bbls or more) to be used to support the proposed activities (MODU and barges):

Type of storage Tank	Type of Facility		Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil	MODU	250	2	500	38 <sup>0</sup> Diesel

#### **Produced Liquid Hydrocarbon Transportation Vessels**

Newfield is proposing to conduct well testing operations on the proposed well locations. This process will include flaring the produced gas hydrocarbons and burning the liquid hydrocarbons; therefore, Newfield does not propose the use of transportation vessels.

#### Oil and Synthetic Based drilling fluids:

Newfield does not anticipate the use of oil and/or synthetic based drilling fluids for the proposed drilling activities (Reference Section E).

#### Spill Response Sites

The following locations will be used in the event an oil spill occurs as a result of the proposed activities.

Primary Response Equipment Location: Intracoastal City, LA

Lake Charles, LA

Pre-Planned Staging Locations: Intracoastal City, LA

#### Spill Response Discussion for NEPA Analysis

In the event of an uncontrolled spill release resulting from the activities proposed in this Plan, Newfield's Person-in-Charge on the MODU of the Shore base dispatcher would most likely be the initial individuals to contact the Qualified Individual (QI) on our Spill Management Team (SMT) detailed in the Regional OSRP. The QI would immediately activate the SMT to ascertain the severity of the spill incident. Newfield's SMT Incident Command Center is located in Newfield's office in Houston, Texas.

Dependent on the severity of the spill incident, a trajectory analysis would be conducted utilizing the MMS Oil Spill Risk Analysis Model (OSRAM) as referenced in our approved Regional OSRP. This trajectory would provide the required information on percentage and timing of potential impact to the shoreline impact areas. The SMT would then identify the areas of sensitivities at potential landfall segments so additional planned may be conducted for shoreline protection strategies. If surveillance indicates a potential threat to shoreline, the appropriate equipment and personnel would be deployed, as outlined in our Regional OSRP.

An over flight may be conducted to determine the extent and dissipation rate of the spill, with potential sampling of the spill release. Mechanical recovery equipment may also be dispatched to the leading edge of the spill, as outlined in our OSRP. If additional offshore response is required, the SMT would initiate the Dispersant use Plan of the Regional OSRP and utilize the services or Airborne Support Inc.s' aircraft and personnel.

#### **Pollution Prevention Measures**

As indicated in the volumes noted above, Newfield does not anticipate a potential for initiating additional safety, pollution prevention and/or early spill detection measures beyond those already required by 30 CFR Part 250.

See Section E for additional Pollution Prevention measures.

#### **SECTION G**

#### **AIR EMISSIONS**

Offshore air emissions related to the proposed activities result mainly from the drilling rig operations, helicopters and service vessels. These emissions occur mainly from combustion or burning of fuels and natural gas, and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps or motors, and from lighter fuel motors. Other air emissions can result from catastrophic events such as oil spills or blowouts.

Primary air pollutants associated with OCS activities are nitrogen oxides, carbon monoxide, sulphur oxides, volatile organic compounds, and suspended particulates.

Included as **Attachment G-1** is the Projected Air Quality Emissions Report prepared in accordance with Appendix H of the Notice to Lessees NTL 2000-G10 addressing drilling and completion operations.

# EXPLORATION PLAN (EP) AIR QUALITY SCREENING CHECKLIST

COMPANY	Newfield Exploration Company
AREA	WEST CAMERON
BLOCK	22/23
LEASE	g24700/24701
PLATFORM	NA
WELL	A & B
COMPANY CONTACT	Susan Becnel
TELEPHONE NO.	281/847-6115
REMARKS	Drill A & B,complete, install temp caisson.

"Yes"	"No"	Air Quality Screening Questions
	Х	1. Are the proposed activities east of 87.5° W latitude?
	Х	2. Are H <sub>2</sub> S concentrations greater than 20 ppm expected?
	X	3. Is gas flaring proposed for greater than 48 continuous hours per well?
Х		Is produced liquid burning proposed?
Х		5. Is the exploratory activity within 25 miles of shore?
		6. Are semi-submersible activities involved and is the facility within 50 miles
	X	of shore?
		7. Are drillship operations involved and is the facility within 120 miles of
	X	shore?
		Will the exploratory activity be collocated (same surface location) on a
	X	production facility?

If ALL questions are answered "No":

Submit only this coversheet with your plan; a full set of spreadsheets is not needed.

If ANY of questions 1 through 7 is answered "Yes":

Prepare and submit a full set of EP spreadsheets with your plan.

If question number 8 is answered "Yes":

Prepare and submit a full set of **DOCD** spreadsheets showing the cumulative emissions from both the proposed activities and the existing production platform.

OMB Control No. XXX-XXX Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL.	1	T	CONTACT		PHONE	REMARKS					·		
Newfield Exploration Corr	WEST CAMERON	22/23	g24700/24701	NA	A&B			Susan Becnel		281/847-6115			'					
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS					
	Diesel Engines	HP	GAL/HR	GAL/D												*****		
	Nat, Gas Engines	HP	SCF/HR	SCF/D														
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	СО	PM	SOx	NOx	VOC	СО		
DRILLING	PRIME MOVER>600hp diesel	16,975	819.8925	19677.42	24	17	11.96	54.89	411.29	12.34	89.74	2.44	11.20	83.90	2.52	18.31		
2 mud pumps	PRIME MOVER>600hp diesel	0	0	0.00	24	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2 generators	PRIME MOVER>600hp diesei	0	0	0.00	24	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
3 compressors	PRIME MOVER>600hp diesel	0	0	0.00	24	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
emer gen/cranes	AUXILIARY EQUIP<600hp diesel	600	28.98	695.52	1	17	1.32	1.94	18.50	1.48	4.00	0.01	0.02	0.16	0.01	0.03		
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	4	11	1,41	6.47	48.46	1.45	10.57	0.03	0.14	1.07	0.03	0.23		
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	8	9	1.76	8.08	60.57	1.82	13.22	0.06	0.29	2.18	0.07	0.48		
]	VESSELS>600hp diesel(tugs)	12600	608.58	14605.92	12	1	8.88	40.74	305.29	9.16	66.61	0.05	0.24	1.83	0.05	0.40		
FACILITY	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
INSTALLATION	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	VESSELS>600hp diesel(supply)		. 0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	MISC.	BPD	SCF/HR	COUNT				J	l				<u> </u>	<u> </u>	L	I		
	TANK-	0			0	0				0.00					0.00			
DRILLING	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
WELL TEST	GAS FLARE		0		0	0		0.00	0.00	0.00	0,00		0.00	0.00	0.00	0.00		
2003	YEAR TOTAL						25.34	112.12	844.11	26.25	184.14	2.60	11.89	89.14	2,68	19.45		
EXEMPTION	DISTANCE FROM LAND IN		<u> </u>	L	<u>.                                    </u>		ll	J	I	i	L							
CALCULATION	MILES											299.70	299.70	299.70	299.70	14710.95		
	9,0															<u> </u>		

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL			CONTACT		PHONE	REMARKS						
Newfield Exploration Com	WEST CAMERON	22/23	g24700/24701	NA	A&B		Susan Becnel 281/847-6115										
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN	UN TIME MAXIMUM POUNDS PER HO			ER HOUR	DUR ESTIMATED					TONS		
	Diesel Engines	HP	GAL/HR	GAL/D													
	Nat. Gas Engines	HP	SCF/HR	SCF/D					· · · · · · · · · · · · · · · · · · ·			·					
		MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	voc	co	PM	SOx	NOx	voc	CO	
	PRIME MOVER>600hp diesel	16,975	819.8925	19677.42	24	58.00	11.96	54.89	411.29	12.34	89.74	8.33	38.20	286.26	8.59	62.46	
2 mud pumps	PRIME MOVER>600hp diesel	0	0	0.00	0	58.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2 generators	PRIME MOVER>600hp diesel	0	0	0.00	0	58.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3 compressors	PRIME MOVER>600hp diesel	0	0	0.00	0	58.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	AUXILIARY EQUIP<600hp diesel	600	28.98	695.52	0	58.00	1.32	1.94	18.50	1.48	4.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	0	45.00	1.41.	6.47	48.46	1.45	10.57	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	0	36.00	1.76	8.08	60.57	1.82	13.22	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(tugs)	12600	608.58	14605.92	0	1.00	8.88	40.74	305.29	9.16	66.61	0.00	0.00	0.00	0.00	0.00	
					0	0.00											
	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
INSTALLATION	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
					0		<u> </u>		L	L					L	<u> 1</u>	
	MISC.	BPD	SCF/HR	COUNT	0		<u> </u>		,					<del>,</del>		<del>,</del>	
	TANK-	0			0	0				0.00					0.00		
DRILLING	OIL BURN	200			24	2	3.50	56.92	16.67	0.08	1.75	0.08	1.37	0.40	0.00	0.04	
WELL TEST	GAS FLARE		866,666		24	2		0.51	61.88	52.26	336.70		0.01	1.49	1.25	8.08	
2004	YEAR TOTAL						28.84	169.55	922.65	78.59	522.59	8.41	39.58	288.14	9.84	70.58	
EXEMPTION	DISTANCE FROM LAND IN		l	i		L	н	L	L	1							
CALCULATION	MILES											299.70	299.70	299.70	299.70	14710.95	
	9.0																

OMB Control No. xxxx-xxxx Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		
Newfield Explora WEST CAMERON		22/23	g24700/24701	NA	A & B		
Year	Emitted Substance						
	PM	SOx	NOx	voc	co		
2003	2.60	11.89	89.14	2.68	19.45		
2004	8.41	39.58	288.14	9.84	70.58		
2005	0.00	0.00	0.00	0.00	0.00		
2006	0.00	0.00	0.00	0.00	0.00		
2007	0.00	0.00	0.00	0.00	0.00		
2008	0.00	0.00	0.00	0.00	0.00		
2009	0.00	0.00	0.00	0.00	0.00		
2010	0.00	0.00	0.00	0.00	0.00		
2011	0.00	0.00	0.00	0.00	0.00		
2012	0.00	0.00	0.00	0.00	0.00		
Allowable	299.70	299.70	299.70	299.70	14710.95		

#### **SECTION H**

#### **ENVIRONMENTAL IMPACT ANALYSIS**

#### **ENVIRONMENTAL IMPACT ANALYSIS**

Included in this section, as **Attachment H-1** is the **ENVIRONMENTAL IMPACT ANALYSIS** prepared in accordance with Appendix H of Notice to Lessees NTL 2002-G08.

# Environmental Impact Analysis for Initial Exploration Plan West Cameron Area Block 22



October 2003

(CEI 23086)

## Environmental Impact Analysis for Initial Exploration Plan West Cameron Area Block 22

#### Prepared by:

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#### **Prepared For:**

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Houston, Texas 77060



October 2003

(CEI 23086)

#### (A) Impact Producing Factors (IPFs)

The worksheet below was developed by the Minerals Management Service (MMS) and identifies IPFs that could theoretically impact the listed environmental resources. When it was determined that one of the resources may be prone to impact an "x" was placed in the corresponding IPF column and a descriptive explanation is provided. Footnotes detail the applicability of the IPF to the specific resource.

Environmental Resources	Impact Producing Factors (IPFs)  Categories and Examples (Refer to a recent GOM OCS Lease Sales EIS for a more complete list of IPFs)								
	Emissions (air, light, noise, etc.)	Effluents (muds, cuttings, other discharges to water column or seafloor)	Physical Disturbances to the seafloor (rig or anchor emplacements, etc.)	Wastes sent to shore for treatment or disposal	Accidents (e.g., oil spills, chemical spills, H2S releases)	Other IPFs identified			
						75 (5) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1			
Site Specific at Offshore Location				A Wijforfun Al					
Designated Topographic Features		(1)	(1)		(1)				
Pinnacle Trend Area Live Bottoms		(2)	(2)		(2)				
Eastern Gulf Live Bottoms		(3)	(3)		(3)				
Chemosynthetic Communities			(4)						
Water Quality		X			х				
Fisheries		×			x				
Marine Mammals	X (8)	×		Х	X (8)				
Sea Turtles	X (8)	×		x	X (8)				
Air Quality	X (9)								
Shipwreck Sites (known or potential)			X (7)						
Prehistoric Archaeological Sites			(7)						
	e i kiyi					2 me e eu			
Vicinity of Offshore Location			a isantawa		Ang eng				
Essential Fish Habitat	.,	х			X (6)				
Marine and Pelagic Birds					X	· · · · · · · · · · · · · · · · · · ·			
Public Health and Safety					(5)				
					100 California	Aviat deti-			
Coastal and Onshore			Step September 2	Salahin Principal					
Beaches					X (6)				
Wetlands					X (6)				
Shore Birds and Coastal Nesting Birds					X (6)				
Coastal Wildlife Refuges					х				
Wilderness Areas									
	***	3. S.	age of each police of	and the second of the second	2003 (1000 1 to 100 to				
Other Resources Identified	Secretary Comments			Beene a trock sign of ex-		San Arrival Comments			

#### Footnotes for the Environmental Impact Analysis Matrix

- 1. Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
  - a. 4-mile zone of the Flower Gardens Banks, or the 3-mile zone of Stetson Bank;
  - b. 1000-m, 1-mile or 3mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease:
  - c. Essential Fish Habitat (EFH) criteria of 500 ft from any no-activity zone; or
  - d. Proximity of any submarine bank (500 ft buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2. Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3. Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-relief) Stipulation attached to an OCS lease.
- 4. Activities on blocks designated by the MMS as being in water depths 400 meters or greater.
- 5. Exploration or production activities where H2S concentrations greater than 500 ppm might be encountered.
- 6. All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that is determined to impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA will note that in a sentence or two.
- 7. All activities that involve seafloor disturbances, including anchor placement, in any OCS block designated by the MMS as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which the planned activity will occur. If the proposed activities are located at sufficient distance from a shipwreck or prehistoric site that no impact would occur, the EIA will note that in a sentence or two.
- 8. All activities that are determined to possibly have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9. Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

#### (B) Analysis

#### **Site Specific at Offshore Location**

#### Designated Topographic Features

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on Designated Topographic Features due to site-specific activities. The nearest topographic feature is the Sonnier Bank located within Vermilion Area Block 305. There are also no submarine banks within West Cameron Block 22 that have relief greater than 2 meters.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any impact to the sessile biota on the seafloor due to the water depth in this block and the tendency for oil to rise in the water column and disperse. Any sub-sea leak also would not likely impact any banks as the hydrocarbons would be moved away and swept clear of the bank by the natural water flow around the bank. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Pinnacle Trend Area Live Bottoms

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on pinnacle trend area live bottoms due to site-specific activities. The nearest pinnacle trend live bottom stipulation occurs in Main Pass Area Block 290.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any impact to any pinnacle trends due to the distance to Main Pass Block 290. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Eastern Gulf Live Bottoms

There are no impacts from any of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) expected on eastern gulf live bottoms due to site-specific activities. The nearest live bottom stipulation occurs in Main Pass Area Block 290.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be an impact to any eastern gulf live bottoms because the distance to Main Pass Block 290 is great enough to alleviate impact concerns. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Chemosynthetic Communities

The proposed activities for West Cameron Block 22 occur at a water depth of ranging from 17 to 28 feet thereby eliminating any possibility that Chemosynthetic Communities would occur because they require a water depth of at least 400 meters or 1312 feet. Therefore none of the IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) are expected to impact these communities.

#### Water Quality

Effluents and accidents could possibly impact the water quality due to the proposed activities for West Cameron Block 22. The National Pollution Discharge Elimination System (NPDES), specifically Newfield Exploration Company's general permit under GMG 290000 issued by the Environmental Protection Agency (EPA) will cover all discharges and the regulations coinciding with this permit will be followed. Therefore, it is unlikely that there will be any impact to the water quality due to operational discharges within West Cameron Block 22.

It is unlikely that an oil spill (surface or sub-surface) would occur due to any of the activities proposed. However, if a spill were to occur it is unlikely that there would be any long-term impact to water quality. The spill effects to water quality would be temporary as the spilled petroleum product would disperse and break down (organic and microbial degradation), which would remove the oil from the water column or at the very least dilute the constituents to background levels. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### **Fisheries**

West Cameron Block 22 is within the limits of the principal menhaden harvest area, the brown and white shrimp high to moderate productivity area, the principal seabob grounds, and the major finfish area. These are the only fisheries at the site-specific offshore location that could be impacted by the proposed activities. It is unlikely that any of the following IPFs would have an impact on fisheries within West Cameron Block 22: emissions, physical disturbances to the seafloor, and shore bound wastes. However, an effluent discharge or an accidental spill has the possibility of causing some impact to the fisheries.

An accidental oil spill or effluent discharge that may occur due to the proposed activities for West Cameron Block 22 is unlikely. However, if either did occur it would most likely have a sub-lethal effect on the finfish or shellfish in the area because the hydrocarbons can be metabolized and increased exposure can be avoided. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Marine Mammals

There may be adverse impacts by several IPFs (including vessel traffic, noise, accidental oil spills, and loss of trash or debris) to marine mammals within West Cameron Block 22 due to the proposed activities. The only lethal effects would be due to ingestion of plastic materials, collision with a vessel or oil spills. These events, if

occurring at all, would be very rare. There are also many sublethal effects of IPFs such as noise and effluent discharge that could have chronic and sporadic effects to individuals within the population or to family groups by increasing stress levels which could cause a general weakening in individuals. This weakening would lead to increased possibilities for infection and make them more susceptible to parasitic infestation both of which might not normally be fatal. These sublethal events are not expected and are considered to be very rare occurrences.

Any disturbance could stress and possibly harm individual marine mammals but it is likely that they would travel to other areas within their home range. Both fatal and subfatal incidents are unlikely and are unexpected barring catastrophic events.

#### Sea Turtles

IPFs that could theoretically impact sea turtles include vessel traffic, noise, shore bound waste and trash losses, and accidental oil spills. These impacts could be as small as a slight stressor to an individual or as severe as to cause fatalities.

Oil spills could cause fatalities due to ingestion of oiled food, oil particles and contact with oil. The Oil Spill Pollution Act of 1990 has response planning techniques and protections in place to alleviate most of these issues. Chance collisions with vessels could occur, however, these are considered very uncommon events, as is the ingestion of plastic trash or waste material. Stress is also possible due to noise from drilling rigs and associated vessels, which could lead to increased susceptibility to disease.

The majority of the IPFs that could occur to sea turtles are not expected to be lethal however there is the possibility of gradual declines in survival and reproductive rates, which would detrimentally effect populations on a larger scale. These population effects are not typical and as stated above the Oil Spill Pollution Act of 1990 has some mitigative measures in place.

#### Air Quality

No IPFs at the site-specific location within West Cameron Block 22 are expected to impact air quality to a degree that would go above acceptable levels. Emissions will be kept within generally acceptable standards, and effluents, physical disturbances to the seafloor, and shore bound wastes are not expected to impact the air quality. In the unlikely event of an accidental oil spill, the air quality may be impacted due to the spill and response activities, however, even then the impacts would be kept to a minimum. Air quality analyses of the proposed activities indicate that the MMS exemption level is not and will not be exceeded.

#### Shipwreck Sites

There are no known shipwreck sites within West Cameron Block 22. The nearest shipwrecks area the *Orion* within West Cameron Block 41 and the *Tern* within Block 8. The locations of these shipwrecks will not be impacted by any of the proposed activities due to the distance from the activities. Therefore, no IPFs, including physical disturbances to the seafloor, would cause any impacts to this environmental resource.

#### Prehistoric Archaeological Sites

There are no IPFs including physical disturbances to the seafloor from the proposed activities that could cause impacts to known or potential prehistoric archeological sites. West Cameron Block 22 has an archeological survey and Newfield will follow the recommendations of the survey and avoid any anomalies thereby eliminating the possibility of impacting these sites. Effluents, emissions, shore bound wastes and accidents would not be expected to impact any archaeological sites if they were present.

#### Vicinity of Offshore Location

#### Essential Fish Habitat

West Cameron Block 22 is within the limits of the principal menhaden harvest area, the brown and white shrimp high to moderate productivity area, the principal seabob grounds, and the major finfish area. The oyster leases and blue crab fishing areas to the north, near the coast, would be at such a distance as to have no possibility for impact. It is unlikely that any of the following IPFs would have an impact on fisheries within West Cameron Block 22: emissions, physical disturbances to the seafloor, and shore bound wastes. However, an effluent discharge or an accidental spill has the possibility of causing some impact to fisheries and essential fish habitat.

An accidental oil spill or effluent discharge that may occur due to the proposed activities for West Cameron Block 22 is unlikely. If either did occur it would most likely have a sub-lethal effect on the finfish or shellfish in the area of impact because the hydrocarbons can be metabolized and increased exposure can be avoided. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Marine and Pelagic Birds

Most of the IPFs would have no effect on marine and pelagic bird species. Effluents, emissions, physical disturbances to the seafloor and shore bound wastes would not affect any avian species. An accidental oil spill could have a detrimental effect on individual birds that could become oiled and possibly ingest an oil product. It is unlikely that a spill would occur from the proposed activities in West Cameron Block 22 and if one did occur the activities in this plan would be covered under Newfield Exploration Company's regional OSRP (refer to Section F which contains information submitted in accordance with NTL 2002-G08.) which would help to defray some of the possible impacts to marine and pelagic avian species.

#### Public Health and Safety

There are no IPFs (including emissions, effluents, physical disturbances to the seafloor, shore bound wastes and accidents) that would cause any harm to public health and safety. In accordance with 30 CFR 250.417(c) and NTL 2002 Appendix C Newfield Exploration Company has submitted sufficient information to justify their request that the proposed activities for West Cameron Block 22 be classified by the MMS as H2S absent.

#### **Coastal and Onshore**

#### Beaches

With the exception of an oil spill no IPFs are expected to impact any of the beaches in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Cameron Parish. If an oil spill were to occur there would be a 25/41/47 percent chance (3, 10, and 30 days, respectively) that the spill would impact any beaches on the shore of Cameron Parish.

Due to the distance from shore and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any beaches along the shoreline. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Wetlands

With the exception of an oil spill no IPFs are expected to impact any of the wetlands in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Cameron Parish. If an oil spill were to occur there would be a 25/41/47 percent chance (3, 10, and 30 days, respectively) that the spill would impact the wetlands of Cameron Parish

Due to the distance from shore and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any wetland areas along the shoreline. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Shore Birds and Coastal Nesting Birds

With the exception of an oil spill no IPFs are expected to impact any of the shore birds or coastal nesting birds in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Cameron Parish bird colonies. If an oil spill were to occur there would be a 25/41/47 percent chance (3, 10, and 30 days, respectively) that the spill would impact shore birds, rookeries, or other coastal nesting birds in Cameron Parish.

Due to this distance from shore, the small impact possibility, and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any shore or coastal nesting birds areas along the shoreline. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Coastal Wildlife Refuges

With the exception of an oil spill no IPFs are expected to impact any of the coastal wildlife refuges in onshore locations. Upon review of OCS EIA/EA MMS 2002-02 publication the historical spill data and trajectory / risk calculations show that there would be a small risk to Rockerfeller Wildlife Management Area in Cameron Parish. If an oil spill were to occur there would be a 25/41/47 percent chance (3, 10, and 30 days, respectively) that the spill would impact this refuge. However the spill would have to travel in a non-typical direction over 20 miles to impact this refuge area.

Due to this distance from shore, the small impact possibility, and the response capabilities that would be implemented it is highly unlikely that if an oil spill did occur it would impact any coastal wildlife refuges along the shoreline. The activities proposed in this plan will be covered by Newfield Exploration Company's regional OSRP (refer to Section F which contains the information submitted in accordance with NTL 2002-G08).

#### Wilderness Areas

No IPFs associated with the proposed activities in West Cameron Block 22 are expected to impact any wilderness areas in onshore locations. The only wilderness area in Louisiana, as designated by the U.S. Congress, is Kisatchie Hills, which is located in central Louisiana, hundreds of miles away and land locked.

#### Other Environmental Resources Identified

It is expected that the proposed activities in West Cameron Block 22 will have no other environmental resources identified or impacted.

#### (C) Impacts on West Cameron Block 22 Proposed Activities

It is expected that the proposed activities in West Cameron Block 22 will have no impacts on site specific, offshore vicinity, or coastal and onshore environmental conditions. The conditions of the site have been analyzed in order to make this judgment.

#### (D) Alternatives

Due to the lack of environmental impacts no alternative was considered for the proposed activities in West Cameron Block 22.

#### (E) Mitigation Measures

Aside from measures required by regulation no mitigative steps will be taken to avoid, diminish, or eliminate potential impacts on environmental resources.

#### (F) Consultation

Coastal Environments, Inc. scientists were consulted regarding potential for impacts to environmental resources due to the proposed activities in West Cameron Block 22.

#### (G) References

Although not necessarily cited the following were utilized in preparing the Environmental Impact Analysis:

- High Resolution Geophysical Survey Report of West Cameron Area Blocks 22 and 23. Gulf Ocean Services, Inc. October, 2003.
- Lowery, George H. 1974. The Mammals of Louisiana and its Adjacent Waters. Louisiana State University Press, Baton Rouge, 565 pp.
- Schmidly, D.J. 1981. Marine mammals of the southeastern United States Gulf
  Coast and the Gulf of Mexico. U.S. Fish and Wildlife Service,
  Washington, D.C. FWS/OBS-80/41. 163 pp.
- U.S. Department of the Interior, Fish and Wildlife Service. 1976. Endangered and threatened species of the southeastern United States. Region IV, Atlanta, Georgia (periodically updated).
- U.S. Department of the Interior, Minerals Management Service. Gulf of Mexico OCS Oil and Gas Lease Sales: 2003-2007, Central Planning Area Sales 185, 190, 194, and 201; Western Planning Area Sales 187, 192, 196, and 200; Final Environmental Impact Statement, Volume I: Chapters 1-10; Volume II Figures and Tables. OCS EIA/EA MMS 2002-052.
- U.S. Department of the Interior, Minerals Management Service, Visual No. 4-1, 1983. Offshore Fisheries. Gulf of Mexico OCS Region, Metairie, Louisiana. Map.

#### SECTION I

#### **COASTAL ZONE CONSISTENCY**

#### COASTAL ZONE CONSISTENCY CERTIFICATION

Issues identified in the Texas Coastal Zone Management Program include the following: general coastal use guidelines, levees, linear facilities (pipelines); dredged soil deposition; shoreline modification, surface alterations, hydrologic and sediment transport modifications; waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas or other mineral activities; and air and water quality.

The Certificate of Coastal Zone Management Consistency for the State of Texas is enclosed as **Attachment I-1**.

# COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION INITIAL EXPLORATION PLAN WEST CAMERON BLOCKS 22/23 LEASE OCS-G 24700/24701

The proposed activities described in this Plan comply with Louisiana's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program.

Newfield Exploration Company Lessee or Operator

Susan B. Becnel Certifying Official

October 20, 2003

Date

# OCS PLAN INFORMATION FORM (USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN	X DEVEL	DEVELOPMENT OPERATIONS COORDINATION DOCUMENT DEVELOPMENT & PRODUCTION PLAN					DEVELOPMENT & PRODUCTION PLAN	
OPERATOR: NEWFIELD EXPLORATION COMPANY					ADDRESS: 363 N. SAM HOUSTON PARKWAY E., S. 2020			
MMS OPERATOR NO.: 013				HOUSTON, TEXAS 77060				
CONTACT PERSON: SUSAN BECNEL					PHONE NO. (281) 847-6115			
PROPOSED START DATE:12-15-03 RIG TYPE: JU SS PI					F DS OTHER DISTANCE TO CLOSEST LAND (IN MILES): 9			
NEW OR UNUSUAL TECHNOLOGY YES				NO X ONSHORE SUPPORT BASE (S): CAMERON, LA				
NARRATIVE DESCRIPTION OF PROPOSED ACTIVITIES: DRILL AND COMPLETE TWO (2) WELLS FROM A SURFACE LOCATION ON WEST CAMERON 22; INSTALL WELL PROTECTOR TEMPORARY CAISSON & NAV AIDS								
PROJECT NAME, IF APPLICABLE:								

#### PROPOSED WELL/STRUCTURE LOCATIONS

	PROFUSE	D WELL/STRUCTURE LO	CATIONS				
WELL/ STRUCTURE NAME	SURFACE LOC		BOTTOM-HOLE LOCATION (FOR WELLS)				
Platform or Well X	CALLS: 2120' FSL & 50' FEL OF I WEST CAMERON BLOCK 22	LEASE OCS-G 24700,					
Name:A	X: 1,317,611.472° Y: 381,152.192						
	LAT: 29.69721077 LONG: 93.48272017						
	TVD (IN FEET):	MD (IN FEET): 11,800'		WATER DEPTH (IN FEET): 28			
Platform or Well X	CALLS: 2120' FSL & 50' FEL OF LEASE OCS-G 24700, WEST CAMERON BLOCK 22						
Name: <u>B</u>	X: 1,317,611.472° Y: 381,152.192						
1	LAT: 29.69721077 LONG: 93.48272017						
	TVD (IN FEET):	MD (IN FEET): 12,700		WATER DEPTH (IN FEET):			
Platform or Well _	CALLS:		CALLS:				
Name:	X: Y:		X: Y:				
	LAT: LONG:		LAT: LONG:				
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET):			
Platform or Well	CALLS:		CALLS:				
Name:	X: Y:						
	LAT: LONG:		LAT: LONG:				
	TVD (IN FEET): MD (IN FEET):		WATER DEPTH (IN FEET):				

Form MMS-137 (January 2000)

Page 1 of 2

WC 22

WC 23



**WEST CAMERON 22** 

OCS-G 24700

NEWFIELD

4/30/2008

PRT

**WEST CAMERON 23** 

OCS-G 24701

NEWFIELD

4/30/2008

PRT

STATE WATER

WELL NFX A (SL)

X = 1317611.472

Y = 381152.192

LAT. = 29.69721077

LONG. = -93.48272017

WATER DEPTH = 28'

BEST AVAILABLE COPY

Newfield Exploration Co. Surf. LOC, A&B

2120'

Prop. TVD 11,800' MD/TVD

**PUBLIC INFORMATION** 

**NEWFIELD** 

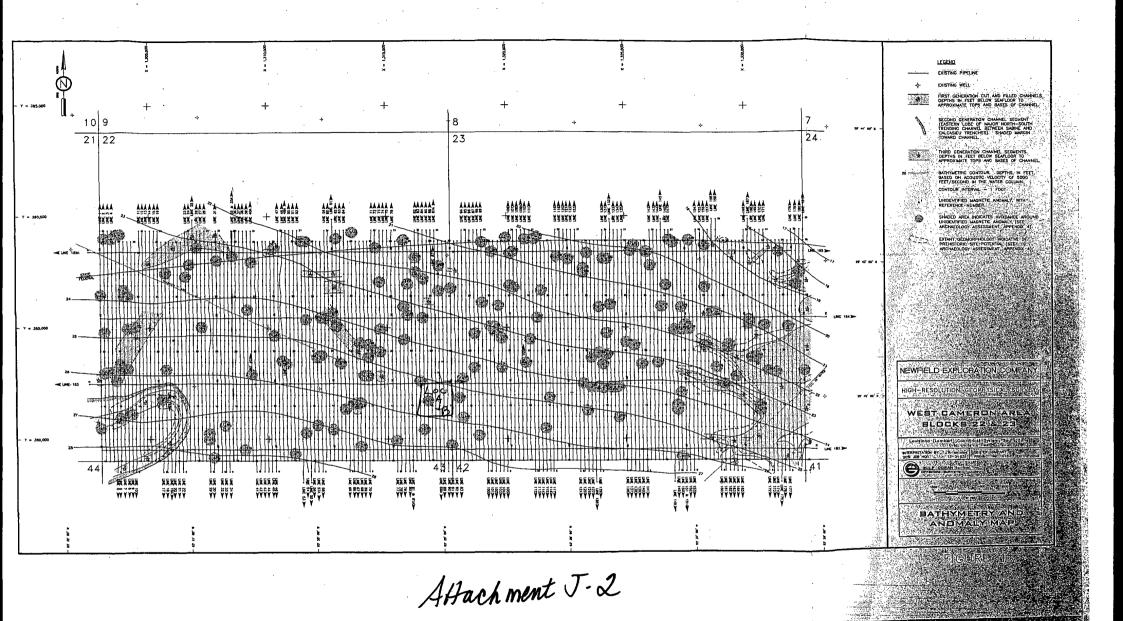
WC 22 OCS-G 24700 WC 23 OCS-G 24701 WELL LOCATION PLAT SURFACE LOCATIONS

September 2003

X=1,332,419.520

Y=379,032.192 Hackment J-3

X=1,317,661.472



**BEST AVAILABLE COPY**