UNITED STATES GOVERNMENT
MEMORANDUM

September 19, 2003

To: Public Information (MS 5034)

From: Plan Coordinator, FO, Plans Section (MS 5231)

Subject: Public Information copy of plan

Control #	-	N-07887
Type	-	Initial Development Operations Coordinations Document
Lease(s)	-	OCS-G24929 Block - 145 Ship Shoal Area
Operator	-	Tana Exploration Company LLC
Description	-	Well No 001
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.

Elmo Cooper
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/001	G24929/SS/145	6010 FSL, 6349 FWL	G24929/SS/145

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT = $3400D^{2/3}$ for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)?		X
Does your emission calculations include any emission reduction measures or modified emission factors?		X
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?		X
Do you expect to encounter H_2S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		X
Do you propose to burn produced hydrocarbon liquids?		X
Are your proposed development and production activities located within 25 miles from shore?	X	
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?	X	

Air Pollutant		Plan Emission Amounts[1] (tons)	Calculated Exemption Amounts[2] (tons)		Calculated Complex Total Emission Amounts[3] (tons)
Carbon monoxide (CO)		15.42	24547.85		NA
Particulate matter (PM)		2.06	646.02		NA
Sulphur dioxide (SO_2)		9.43	646.02		NA
Nitrogen oxides (NOx)		70.7	646.02		NA
Volatile organic compounds (VOC)		4.32	646.02		NA

[1] For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.
[2] List the exemption amounts in your proposed activities calculated using the formulas in 30 CFR 250.303(d).
[3] List the complex total emissions associated with your proposed activities calculated from the worksheets.

TANA
Exploration Company LLC

1100 Louisiana, Suite 5110
Houston, Texas 77002
Office: 832-325-6000
Fax: 832-325-6001

September 3, 2003

U.S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Attention: Mr. Nick Wetzel
Plans Unit

RE: Initial Development Operations Coordination Document for Lease OCS-G 24929, Ship Shoal Block 145, OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

In accordance with the provisions of Title 30 CFR 250.204 and that certain Notice to Lessees (NTL 2003-G17), Tana Exploration Company LLC (Tana) hereby submits for your review and approval nine (9) copies of an Initial Development Operations Coordination Document (Plan) for Lease OCS-G 24929, Ship Shoal Block 145, Offshore, Louisiana. Five (5) copies are "Proprietary Information", and four (4) copies are "Public Information".

Excluded from the Public Information copies are certain geologic and geophysical discussions and attachments.

Contingent upon receiving regulatory approvals and equipment and personnel availability, Tana anticipates operations under this Plan commencing as early as October 15, 2003.

Should additional information be required, please contact the undersigned, or our regulatory consultant, R.E.M. Solutions, Inc., Attention: Connie Goers at 281.492.8562.

Sincerely,

TANA EXPLORATION COMPANY LLC

Randy E. Judd /cjg

Randy E. Judd
Vice President, Engineering

Public Information

REJ:CJG:cag
Attachments

TANA EXPLORATION COMPANY LLC
1100 Louisiana Street, Suite 5110
Houston, Texas 77002

Randy E. Judd
rjudd@tanaexp.com

INITIAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

LEASE OCS-G 24929

SHIP SHOAL BLOCK 145

PROSPECT NAME: NONE ASSIGNED

PREPARED BY:

Connie Goers
R.E.M. Solutions, Inc.
17171 Park Row, Suite 390
Houston, Texas 77084
281.492.8562 (Phone)
281.492.6117 (Fax)
connie@remsolutionsinc.com

DATED:

September 3, 2003

SECTION A
PLAN CONTENTS

A. Description, Objectives and Schedule

Lease OCS-G 24929, Ship Shoal Block 145 was acquired by Tana Exploration Company LLC (Tana) at the Central Gulf of Mexico Lease Sale No. 185 held on March 19, 2003. The lease was issued with an effective date of July 1, 2003 and a primary term ending date of June 30, 2008.

The current lease operatorship and ownership are as follows:

Area/Block Lease No.	Operator	Ownership
Ship Shoal Block 145 Lease OCS-G 24929	Tana Exploration Company LLC	Tana Exploration Company LLC

Effective August 13, 2003, Minerals Management Service approved an Initial Exploration Plan (Control No. N-7817) providing for the drilling and completion of Well Locations A and B. Currently, Tana is drilling Lease OCS-G 24929, Well No. 001 (Well Location A); which will be completed and left with a well protector type structure as covered in the Initial Exploration Plan.

Tana does not propose any additional drilling under this Plan; therefore a geological discussion on trapping features is not required.

Tana proposes to conduct the proposed operations as outlined in the following activity schedule:

Proposed Activity	*Start Up Date*	*Completion Date*
Install Lease Pipeline	10-15-03	10-31-03
Commence Production of Well No. 001	11-01-03	12-31-08

B. Location

Included as ***Attachments A-1 and A-2*** is a bathymetry map detailing the proposed well surface location disturbance areas, and Form MMS-137 "OCS Plan Information Form".

SECTION A
Contents of Plan - Continued

C. Drilling Unit

The drilling unit for this activity was previously addressed in the approved Initial Exploration Plan (Control No. N-7817).

D. Production Facility

A minimal well protector structure will be installed over Lease OCS-G 24929, Well No. 001 while the drilling unit is on location. A typical elevation view is included as ***Attachment A-3.***

Safety of personnel and protection of the environment during the proposed operations is of primary concern with Tana, and mandates regulatory compliance with the contractors and vendors associated with the proposed operations as follows:

Minerals Management Service regulations contained in Title 30 CFR Part 250, Subparts C, D, E, G and O mandate the operations comply with well control, pollution prevention, construction and welding procedures as described in Title 30 CFR Part 250, Subparts C, D, E, G and O; and as further clarified by MMS Notices to Lessees.

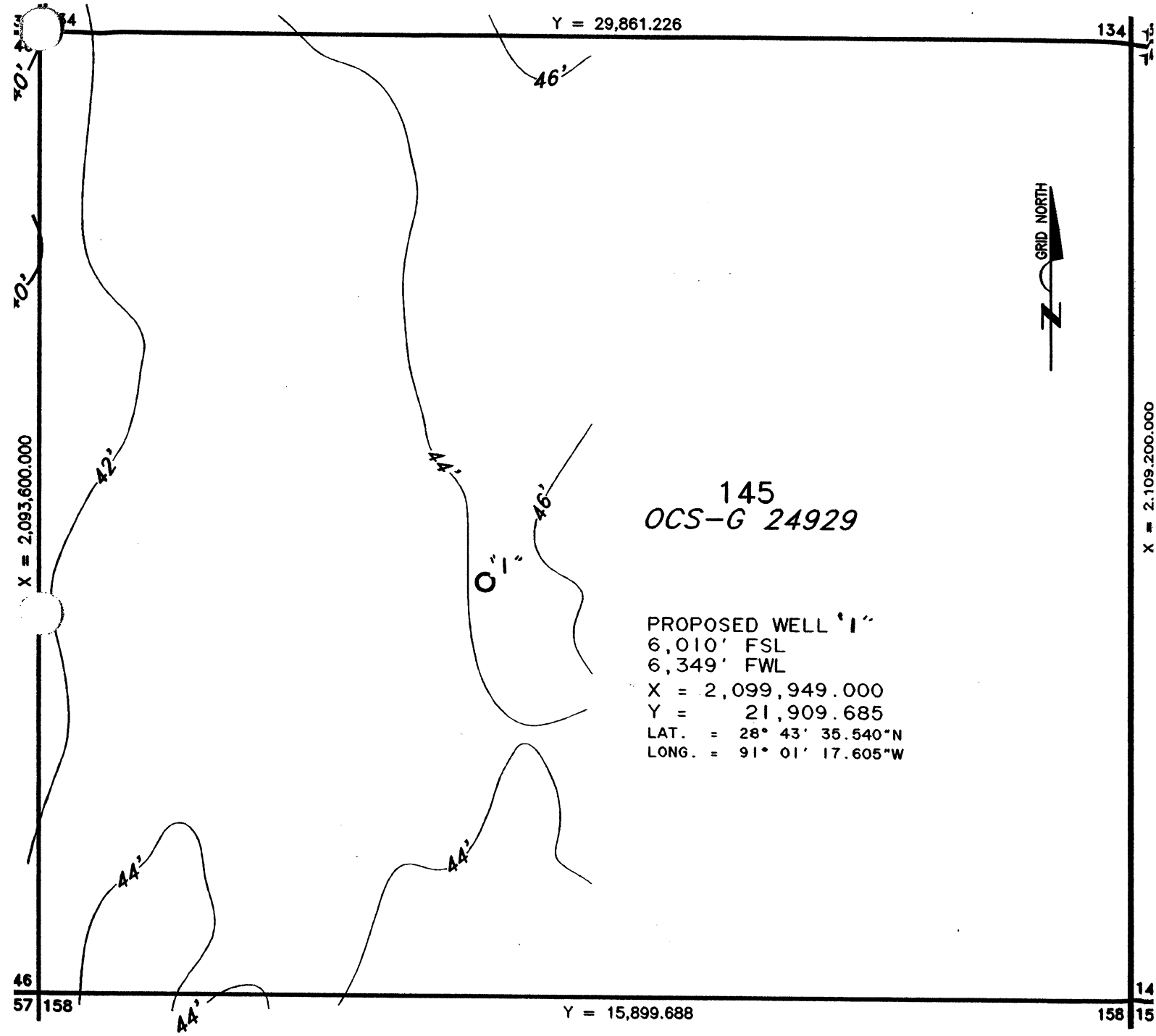
Minerals Management Service conducts periodic announced and unannounced onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions; as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections.

U. S. Coast Guard regulations contained in Title 33 CFR mandate the appropriate life rafts, life jackets, ring buoys, etc., be maintained on the facility at all times.

U. S. Environmental Protection Agency regulations contained in the NPDES General Permit GMG290000 mandate that supervisory and certain designated personnel on-board the facility be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters.

Bathymetry Map

Attachment A-1
(Public Information)



GRID – LOUISIANA LAMBERT, SOUTH ZONE (NAD 27) CLARKE 1866

1,000 0 1,000 2,000

SCALE IN FEET

2' CONTOUR INTERVAL

GEOPHYSICAL SURVEY

BATHYMETRIC MAP

WEST 1/2 OF BLOCK 145
SHIP SHOAL AREA

TANA EXPLORATION COMPANY, L.L.C.

Thales GeoSolutions, Inc.
36499 Perkins Rd.
Prairieville, Louisiana 70769
Tel: 225-673-5881 Fax: 225-673-5877

OCS Plan Information Form

Attachment A-2
(Public Information)

OMB Control No. 1010-0049
Expiration Date: September 30, 2003

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

EXPLORATION PLAN		DEVELOPMENT OPERATIONS COORDINATION DOCUMENT	X	DEVELOPMENT & PRODUCTION PLAN	

OPERATOR:	**Tana Exploration Company LLC**	ADDRESS:	**1100 Louisiana, Suite 5110, Houston, Texas 77002**
MMS OPERATOR NO.:	**02579**		
CONTACT PERSON:	**Connie Goers at R.E.M. Solutions, Inc.**	PHONE NO.	**281.492.8562**

PROPOSED START DATE: **10-15-03**	RIG TYPE: **N/A**	DISTANCE TO CLOSEST LAND (IN MILES): **19.4**

NEW OR UNUSUAL TECHNOLOGY	YES		NO	X	ONSHORE SUPPORT BASE: **Fourchon, LA**	

NARRATIVE DESCRIPTION PROPOSED ACTIVITIES:	**Install lease pipeline and commence production.**
	PROJECT NAME, IF APPLICABLE: **N/A**

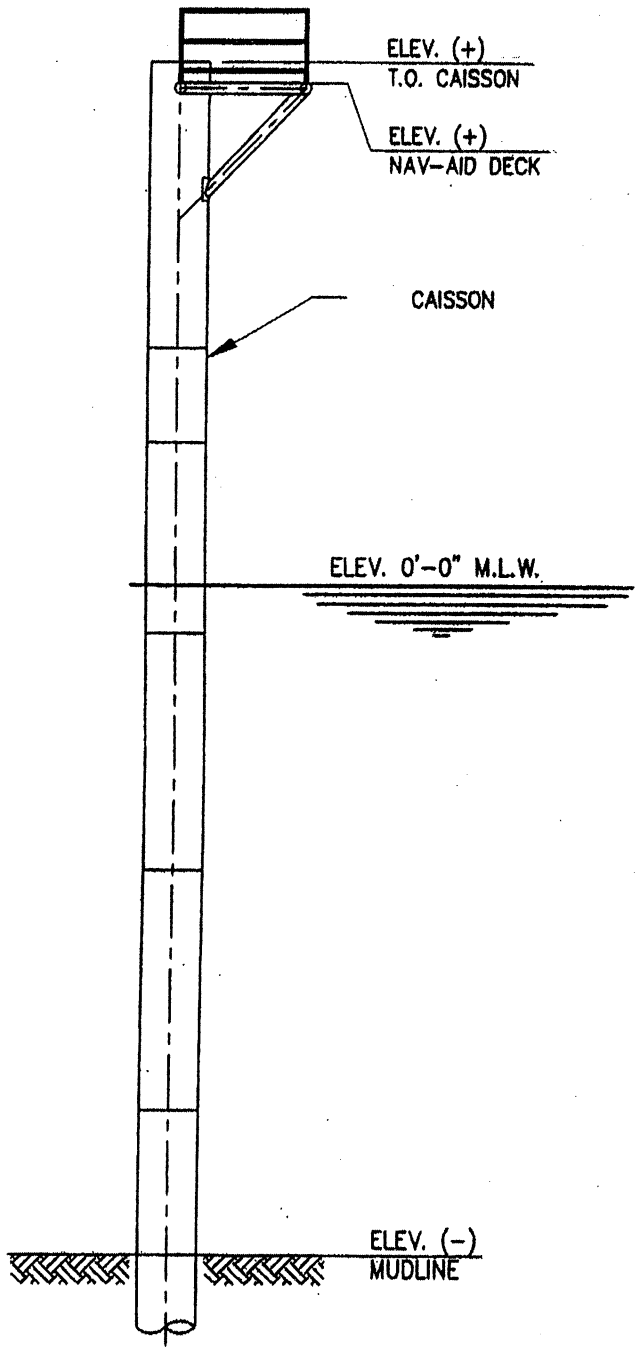
PROPOSED WELL/STRUCTURE LOCATIONS

WELL / STRUCTURE NAME	SURFACE LOCATION	BOTTOM-HOLE LOCATION (FOR WELLS)
Well No. 001	CALLS: **6010'** F **S** L and **6349'** F **W** L OF LEASE OCS **24929** , **SHIP SHOAL** AREA, BLOCK **145**	CALLS: LEASE OCS **24929** , **SHIP SHOAL** AREA, BLOCK **145**
Name:	X: **2,099,949.00** Y: **21,909.685**	X: Y:
	LAT: **28°43'35.540"N** LONG: **91°01'17.605" W**	LAT: LONG:
	TVD (IN FEET):	MD (IN FEET): WATER DEPTH (IN FEET): **44'**

Structure Elevation

Attachment A-3
(Public Information)

Typical Single Pile Caisson



ELEVATION "A"

SECTION B
General Information

A. Contact

Questions or requests for additional information should be made to Tana's s authorized representative for this project:

Connie Goers
R.E.M. Solutions, Inc.
17171 Park Row, Suite 390
Houston, Texas 77084
281.492.8562 (Phone)
281.492.6117 (Fax)
connie@remsolutionsinc.com

B. Prospect Name

Tana does not typically provide project names to their development activity.

C. Production Rates and Life of Reserves

Tana estimates the life of reserves for the proposed development activity to be five years, with the following estimated combined production rates:

Product	*Average Rates*	*Peak Rates*
Gas		
Condensate		

D. New or Unusual Technology

Tana does not propose using any new and/or unusual technology for the operations proposed in this plan.

E. Bonding Information

In accordance with Title 30 CFR Part 256, Subpart I, Tana. has on file with the Minerals Management Service Gulf of Mexico Regional Office a $3,000,000 Areawide Development Bond.

As deemed warranted, Minerals Management Service will contact the designated operator in the event a supplemental bond is required for the proposed operations, as outlined in Notice to Lessees (NTL) 2003-N06 to cover plugging liability of the wellbores, removal of associated well protector structures and site clearance.

SECTION B
General Information - Continued

As deemed warranted, Minerals Management Service will contact the designated operator in the event a supplemental bond is required for the proposed operations, as outlined in Notice to Lessees (NTL) 2003-N06 to cover plugging liability of the wellbores, removal of associated well protector structures and site clearance.

Tana is aware that such bonding may be imposed, and will submit accordingly upon notification from the

F. Onshore Base and Support Vessels

The surface disturbances in Ship Shoal Block 145 is located approximately 19.4 miles from the nearest Louisiana shoreline, and approximately 51.7 miles from the onshore support base to be located in Fourchon, Louisiana.

Tana will use an existing onshore base to accomplish the following routine operations, and does not anticipate the need for any expansion of the selected facilities as a result of the activities proposed in this Plan:

- Loading/Offloading point for equipment supporting the offshore operations,
- Dispatching personnel and equipment,
- Temporary storage for materials and equipment,
- 24-Hour Dispatcher

Personnel involved in the proposed operations will typically use their own vehicles as transportation to and from the selected onshore base; whereas the selected vendors will transport the equipment by a combination of trucks, boats and/or helicopters to the onshore base. The personnel and equipment will then be transported to the field via the transportation methods and frequencies shown below, taking the most direct route feasible as mandated by weather and traffic conditions:

Support Vessel	Production Trips Per Week
Crew Boat	3
Supply Boat	3
Helicopter	As Needed

A Vicinity Plat showing the surface location in Ship Shoal Block 145 relative to the shoreline and onshore base is included as ***Attachment B-1.***

SECTION B
General Information - Continued

G. Lease Stipulations

Under the Outer Continental Shelf Lands Act, the Minerals Management Service is charged with the responsibility of managing and regulating the exploration and development on the OCS.

As part of the regulatory process, an Environmental Impact Statement (EIS) is prepared for each lease sale, at which time mitigation measures are addressed in the form of lease stipulations, which then become part of the oil and gas lease terms and are therefore enforceable as part of that lease.

As part of this process, the designated operator proposing to conduct related exploratory and development activities, must review the applicable lease stipulations, as well as other special conditions, which may be imposed by the Minerals Management Service, and other governing agencies.

Military Warning Area

The hold and save harmless section of the Military Areas Stipulation serves to protect the U.S. Government from liability in the event of an accident involving the designated oil and gas lease operator and military activities.

The electromagnetic emissions section of the stipulation requires the operator and its agents to reduce and curtail the use of radio or other equipment emitting electromagnetic energy within some areas.

This serves to reduce the impact of oil and gas activity on the communications of military missions and reduces the possible effects of electromagnetic energy transmissions on missile testing, tracking, and detonation.

The operational section requires notification to the military of oil and gas activity to take place within a military use area. This allows the base commander to plan military missions and maneuvers that may avoid the areas where oil and gas activities are taking place or to schedule around these activities. Prior notification helps reduce the potential impacts associated with vessels and helicopters traveling unannounced through areas where military activities are underway.

The Military Areas Stipulation reduces potential impacts, particularly in regards to safety, but does not reduce or eliminate the actual physical presence of oil and gas operations in areas where military operations are conducted.

The reduction in potential impacts resulting from this stipulation makes multiple-use conflicts most unlikely. Without the stipulation, some potential conflict is likely. The best indicator of the overall effectiveness of the stipulation may be that there has never been an accident involving a conflict between military operations and oil and gas activities.

The proposed surface disturbance in Ship Shoal Block 145 is located within Military Warning Area W-159A. Therefore, in accordance with the requirements of the referenced stipulation, Tana will contact the Naval Air Station – JRB in order to coordinate and control the electromagnetic emissions during the proposed operations.

Protected Species

Lease Stipulation No. 5 is to reference measures to minimize or avoid potential adverse impacts to protected species (sea turtles, marine mammals, gulf sturgeon, and other federally protected species). MMS has issued Notice to Lessees NTL 2003-G08 "Implementation of Seismic Mitigation Measures", NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting" and NTL 2003-G11 "Marine Trash and Debris Awareness and Elimination".

Special Conditions

The proposed surface disturbance activity in Ship Shoal Block 145 will not be affected by any special conditions and/or multiple uses, such as designated shipping/anchorage areas, lightering zones, rigs-to-reef zone, or ordnance disposal zones.

I. Related OCS Facilities and Operations

As addressed earlier in this Plan, Tana is proposing installation of a minimal well protector structure to be designated as Caisson No. 1. An approximate 500' bulk gas lease pipeline will be installed to transport production from Caisson No. 1 to a subsea tie-in point with Tana's s existing 4-inch right-of-way pipeline (Segment No. 14019) for delivery and processing at Newfield Exploration Company's existing Ship Shoal Block 145 B Platform (Expired Lease OCS-G 0104).

The anticipated flow rates and shut-in times for the proposed pipeline are as follows:

Origination Point	*Flow Rates*	*Shut In Time*
Caisson No. 1		

SECTION B
General Information - Continued

J. Transportation Information

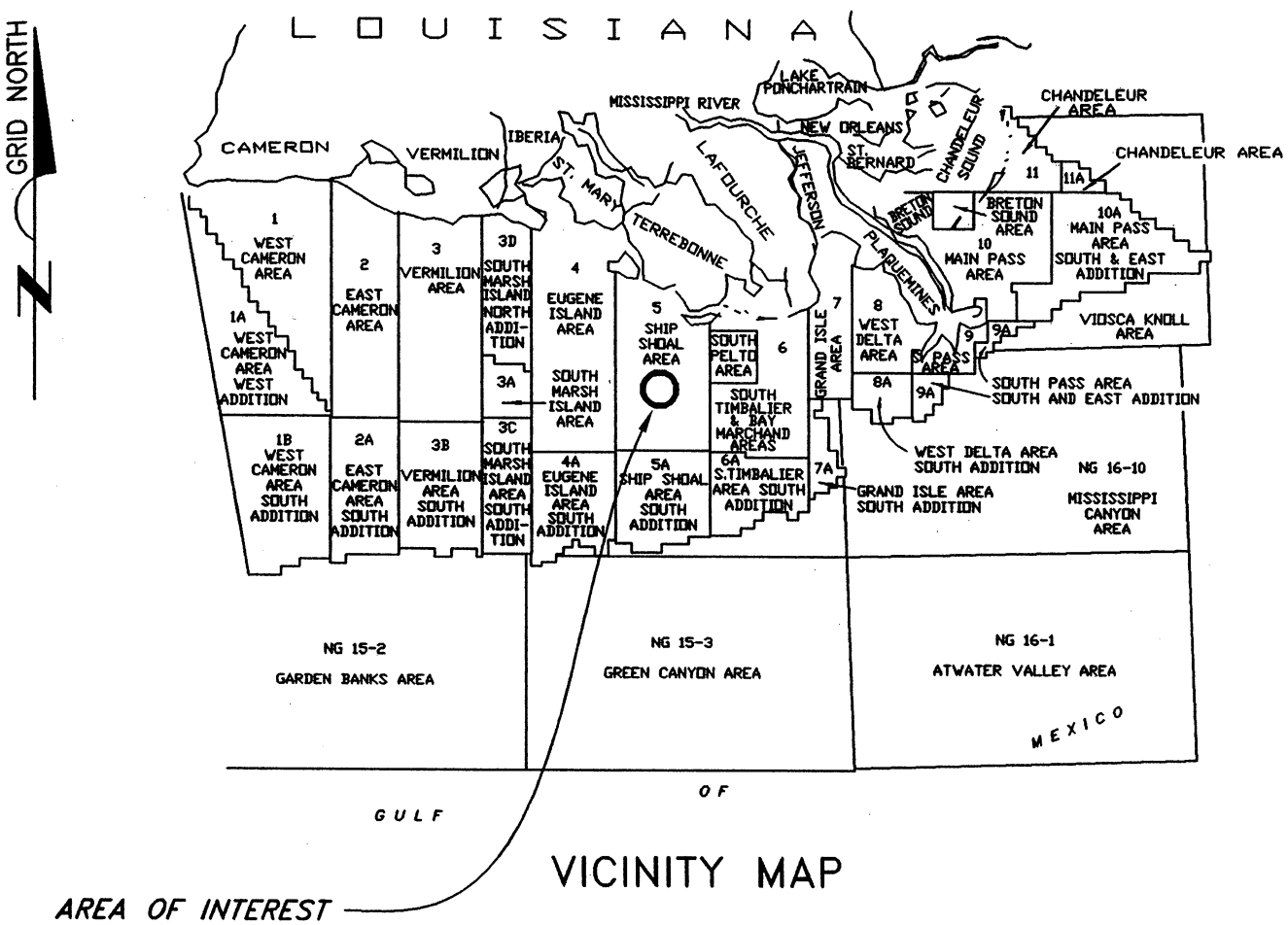
Produced hydrocarbons from Newfield Exploration Company's existing Ship Shoal Block 145 B Platform stated above will be further transported via Tennessee Gas Pipeline Company's existing 16-inch pipeline (Segment No. 1255) for ultimate delivery into MMS Operations System No. 28.0.

Tana does not anticipate installation of any new and/or modified onshore facilities to accommodate the production of Ship Shoal Block 145.

Vicinity Plat

Attachment B-1
(Public Information)

LOUISIANA GULF COAST INDEX
M.M.S. O.C.S. LEASING AREAS



VICINITY MAP

SHEET 1 OF 3

I hereby certify that this proposed well location is accurately represented.

NOT VALID WITHOUT THE SIGNATURE AND RAISED SEAL OF THE LOUISIANA PROFESSIONAL LAND SURVEYOR

6/17/03

DATUM:	NAD 27
SPHEROID:	CLARKE 1866
PROJECTION:	LAMBERT
ZONE:	LOUISIANA SOUTH

Thales GeoSolutions, Inc.
36499 Perkins Rd.
Prairieville, Louisiana 70769
Tel: 225-673-5881 Fax: 225-673-5877

TANA EXPLORATION COMPANY, L.L.C.

PROPOSED WELL LOCATION
WELL No. "A"
BLOCK 145
SHIP SHOAL AREA
OFFSHORE LOUISIANA

DATE:	DRAWN BY:	CHECKED BY:	DRAWING No.:
06-17-2003	ELA		03-100440 WELL No."A"

SECTION C
Geological, Geophysical & H2S Information

A. Structure Contour Map

Included as ***Attachment C-1*** is a current structure map (depth base and expressed in feet subsea) depicting the entire lease coverage area; drawn on the top of each prospective hydrocarbon sand. The map depicts the bottom hole location of the respective well provided for in this Plan.

B. Interpreted Deep Seismic Lines

The proposed surface disturbance operations will be conducted from a previously approved surface location as provided for in the Plan of Exploration for Lease OCS-G 24929, Ship Shoal Block 145 (Control No. N-7817); therefore, no deep seismic lines are required for the proposed activity.

C. Geological Structure Cross Sections

The proposed operations will be conducted from a previously approved surface location as provided for in the Plan of Exploration (Control No. N-7817); therefore, no geological cross sections are required.

D. Shallow Hazards Report

Thales GeoSolutions, Inc. conducted a high resolution geophysical survey in Ship Shoal Block 145 during June 2003 on behalf of Tana. The purpose of this survey was to evaluate geologic conditions and inspect for potential hazards or constraints to lease development.

Copies of these reports have been previously submitted to the Minerals Management Service under separate cover.

E. Shallow Hazards Assessment

The proposed operations will be conducted from an existing surface location under a previously approved Plan of Exploration (Control No. N-7817); therefore a shallow hazards analysis is not required.

F. High Resolution Seismic Line

The proposed operations will be conducted from an existing surface location under a previously approved Plan of Exploration (Control No. N-7817); therefore a shallow hazards analysis is not required.

SECTION C
Geological, Geophysical & H2S Information-Continued

G. Stratigraphic Column

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the subject well is not required for the operations provided for in this Plan.

H. Hydrogen Sulfide Classification

By letter dated August 13, 2003, Minerals Management Service classified Ship Shoal Block 145, as "H2S absent".

Structure Map

Attachment C-1
(Proprietary Information)

SECTION D
Biological and Physical Information

A. Chemosynthetic Information

The proposed seafloor disturbing activities are in water depths less than 400 meters (1312 feet); therefore, this section of the Plan is not applicable.

B. Topographic Features Information

MMS and the National Marine Fisheries Service (NMFS) 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 disturbing activities 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.

C. Live Bottom (Pinnacle Trend) Information

Certain leases are located in areas characterized by the existence of live bottoms. Live bottom areas are defined as seagrass communities; those areas that contain biological assemblages consisting of sessile invertebrates living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; and areas where the lithotope favors the accumulation of turtles, fishes, or other fauna. These leases contain a Live Bottom Stipulation to ensure that impacts from nearby oil and gas activities on these live bottom areas are mitigated to the greatest extent possible.

For each affected lease, the Live Bottom Stipulation requires that you prepare a live bottom survey report containing a bathymetry map prepared by using remote sensing techniques. This report must be submitted to the Gulf of Mexico OCS Region (GOMR) before you may conduct any drilling activities or install any structure, including lease term pipelines in accordance with NTL 99-G16.

Ship Shoal Block 145 is not located within the vicinity of a proposed live bottom area.

D. Remotely Operated Vehicle (ROV Surveys)

Pursuant to NTL No. 2003-G03, operators my be required to conduct remote operated vehicle (ROV) surveys during pre-spudding and post-drilling operations for the purpose of biological and physical observations.

Ship Shoal Block 145 is not located within an area where ROV Surveys are required.

SECTION D
Biological and Physical Information - Continued

E. Archaeological Reports

In conjunction with this geophysical survey, an archaeological survey and report was also prepared to comply with the requirements of NTL 2002-G01, as Ship Shoal Block 145 is located within a high probability historic area for potential archaeological resources. This requirement provides protection of prehistoric and historic archaeological resources by requiring remote sensing surveys in areas designated to have a high probability for archaeological resources.

Copies of these reports have been previously submitted to the Minerals Management Service under separate cover.

SECTION E
Wastes and Discharge/Disposal 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. The 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.

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. Tana has requested coverage under the Region VI NPDES General Permit GMG290000 for discharges associated with exploration and development activities in Ship Shoal Block 145 and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

SECTION E
Wastes and Discharge/Disposal Information-Continued

A. Composition of Solid and Liquid Wastes

Associated solid and liquid wastes generated during the proposed activities addressed in this Plan are well treatment/completion/workover fluids, with associated wastes such as chemicals, cement wastes, sanitary and domestic waste, trash and debris, ballast water, storage displacement water, deck drainage, hydraulic fluids, used oil, oily water and filters, and other miscellaneous minor discharges.

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), nonhazardous oilfield waste (drilling fluids, nonhazardous 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 recordkeeping requirements.

B. Overboard Discharges

The wastes generated by our proposed activities and released into the receiving waters of the Gulf of Mexico at the associated well location are considered exempt from this reporting requirement.

C. Disposed Wastes

The wastes detailed in ***Attachment E-1*** 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.

Tana will manifest these wastes prior to being offloaded from the MODU, and transported to shore for disposal at approved sites regulated by the applicable State. Additionally, Tana will comply with any approvals or reporting and recordkeeping requirements imposed by the State where ultimate disposal will occur.

Waste Disposal Table

Attachment E-1
(Public Information)

Tana Exploration Company LLC
Ship Shoal Block 145
Examples of Wastes and Discharges Information

Disposal Table (Wastes to be disposed of, not discharged)

Type of Waste Approximate Composition	Amount*	Rate per day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Oil-contaminated produced sand	200 lb/yr	0.6 bbl/day	Newpark Environmental Fourchon, LA	Store in a cuttings box and transport to a land farm
Waste Oil	200 bbl/yr	0.5 bbl/yr	Newpark Environmental Fourchon, LA	Pack in drums and transported to an onshore Incineration site
Produced Water	250,000 bbl/yr	1,000 bbl/day	Ship Shoal Block 145	Transport by vessel and inject at Ship Shoal Block 145
Produced Water	250,000 bbl/yr	1,000 bbl/day	Ship Shoal Block 145	Pipe to a well on-lease, inject down hole
Norm – contaminated wastes	1 ton	Not applicable	Ship Shoal Block 145	Transport to a transfer station via dedicated barge
Trash and debris	1,000 ft^3	3 ft^3/day	Newpark Environmental Fourchon, LA	Transport in storage bins on crew boat to disposal facility
Chemical product wastes	50 bbl/yr	2 bbl/day	Newpark Environmental Fourchon, LA	Transport in containers to shore location
Chemical product wastes	100 bbl	2 bbl/day	Newpark Environmental Fourchon, LA	Transport in barrels on crew boat to shore location

*can be expressed as a volume, weight, or rate

SECTION F
Oil Spill Response and Chemical Information

A. Regional Oil Spill Response Plan (OSRP) Information

Effective February 5, 2003, Minerals Management Service approved Tana Exploration Company LLC's Regional Oil Spill Response Plan (OSRP). Activities proposed in this Initial Development Operations Coordination Document will be covered by the Regional OSRP.

B. Oil Spill Removal Organizations (OSRO)

Tana utilizes Clean Gulf Associates (CGA) as its primary provider for equipment, which is an industry cooperative owning an inventory of oil spill clean-up equipment. CGA is supported by the Marine Spill Response Corporation's (MSRC), which is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. The MSRC STARS network provides for the closest available personnel, as well as an MSRC supervisor to operate the equipment.

C. Worst-Case Scenario Comparison (WCD)

Category	*Current Regional OSRP WCD*	*Proposed Development WCD*
Type of Activity	Production	Production
Facility Surface Location	Ship Shoal Block 133	Ship Shoal Block 145
Facility Description	Caisson No. 1	Caisson No. 1
Distance to Nearest Shoreline (Miles)	19 Miles	19.4 Miles
Volume: Storage Tanks (total) Facility Piping (total) Lease Term Pipeline Uncontrolled Blowout (day) **Potential 24 Hour Volume (Bbls.)**	 **450**	 0 1 15 255 **271**
Type of Liquid Hydrocarbon	Condensate	Condensate
API Gravity	45°	45°

SECTION F
Oil Spill Response and Chemical Information-Continued

Since Tana has the capability to respond to the worst-case discharge (WCD) spill scenario included in its Regional OSRP approved on February 5, 2003 and since the worst-case scenario determined for our DOCD does not replace the worst-case scenario in our Regional OSRP, I hereby certify that Tana has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our DOCD.

D. Facility Tanks, Production Vessels

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	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil	MODU	250	2	500	No. 2 Diesel

E. Spill Response Sites

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

Primary Response Equipment Location	Pre-Planned Staging Location(s)
Houma, LA	Fourchon, LA Grand Isle, LA

F. Diesel Oil Supply Vessels

The following table details the vessels to be used for purposes other than fuel (i.e., corrosion control):

Size of Fuel Supply Vessel	Capacity of Fuel Supply Vessel	Frequency of Fuel Transfers	Route Fuel Supply Vessel Will Take
180' feet	1500 bbls	Weekly	From Fourchon, LA shorebase, to SS 145 and onto other fields in vicinity

SECTION F
Oil Spill Response and Chemical Information (Continued)

G. Support Vessel Fuel Tanks

The following table details the vessel and fuel tanks on supply, service and/or crew vessels to be used to support the proposed activities:

Type of Vessel	Number in Field Simultaneously	Estimated Maximum Fuel Tank Capacity (bbls)
Tug Boats	2	3000
Supply Vessels	1	500
Service Vessels	1	500
Crew Vessels	1	500

H. Produced Liquid Hydrocarbon Transportation Vessels

Produced liquid hydrocarbons from the proposed operations will be transported via the proposed pipeline(s) detailed in Section B of this Plan.

I. Oil and Synthetic-Based Drilling Fluids

This section of the Plan is not applicable to the proposed operations.

J. Oil Characteristics

This section of the Plan is exempt from the reporting requirements.

K. Blowout Scenario

The subject well will be drilled under the previously approved Exploration Plan utilizing a typical structural, conductor and surface casing program. If mandated by wellbore conditions, an intermediate casing string will be set prior to drilling through the objective sand. In the event of a blowout during the course of drilling open hole in the objective sands, Tana anticipates a rate of 25 MMCF/D and 255 BCP/D with an anticipated gravity of 45°. The wellbore would most likely bridge over in approximately 3-5 days. Tana would immediately activate it's Regional Oil Spill Response Plan and Spill Management Team to initiate potential recovery of liquid hydrocarbons on the receiving water and review potential well intervention options. In the event a relief well is initiated, Tana does not anticipate any delays in acquiring a jack-up type rig to conduct the proposed operations.

SECTION F
Oil Spill Response and Chemical Information (Continued)

L. Spill Discussion for NEPA Analysis

In the event of an uncontrolled spill release resulting from the activities proposed in this Plan, Tana's Person-In-Charge on the MODU or the Shorebase Dispatcher would most likely be the initial individuals to contact the Qualified Individual (QI) or 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. Tana's SMT Incident Command Center is located at O'Brien's Oil Pollution Services office in Slidell, Louisiana.

Dependent upon 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 segment(s), so additional planning 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 overflight 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 Regional OSRP. If additional offshore response is required, the SMT would initiate the Dispersant Use Plan of the Regional OSRP and utilize the services of Airborne Support Inc.'s aircraft and personnel.

M. Pollution Prevention Measures

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

N. FGBNMS Monitoring Plans

This section of the Plan is exempt from reporting requirements.

SECTION G
Air Emissions Information

The primary air pollutants associated with OCS development activities are:

- Carbon Monoxide
- Particulate Matter
- Sulphur Oxides
- Nitrogen Oxides
- Volatile Organic Compounds

These offshore air emissions result mainly from the drilling rig operations, helicopters, and support 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.

A. Calculating Emissions

Included as ***Attachment G-1*** is the Projected Air Quality Emissions Report (Form MMS-138) for Plan Emissions addressing related support vessels and construction barge information.

B. Screening Questions

As evidenced by ***Attachment G-1***, the worksheets were completed based on narrative on which questions responded with a yes.

C. Emission Reduction Measures

The projected air emissions are within the exemption level; therefore, no emission reduction measures are being proposed.

D. Verification of Non-Default Emissions Factors

Tana has elected to use the default emission factors as provided in ***Attachment G-1.***

E. Non-Exempt Activities

The proposed activities are within the exemption amount as provided in ***Attachment G-1.***

SECTION G
Air Emissions Information-Continued

F. Review of Activities with Emissions Below the Exemption Level

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area, as provided in ***Attachment G-1***.

G. Modeling Report

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area.

Air Emissions Report

Attachment G-1
(Public Information)

DOCD AIR QUALITY SCREENING CHECKLIST

OMB Control No. 1010-0049
OMB Approval Expires: September 30, 2003

COMPANY	Tana Exploration Company LLC
AREA	Ship Shoal
BLOCK	145
LEASE	OCS-G 24929
PLATFORM	Caisson No. 1
WELL	1
COMPANY CONTACT	Connie Goers, R.E.M. Solutions, Inc.
TELEPHONE NO.	281.492.8562
REMARKS	Install lease pipeline and commence production.

LEASE TERM PIPELINE CONSTRUCTION INFORMATION:

YEAR	NUMBER OF PIPELINES	TOTAL NUMBER OF CONSTRUCTION DAYS
1999		
2000		
2001		
2002		
2003	1	17 Days
2004		
2005		
2006		
2007		
2008		
2009		

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT = $3400D^{2/3}$ for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)?		X
Does your emission calculations include any emission reduction measures or modified emission factors?		X
Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells?		X
Do you expect to encounter H_2S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas in excess of the criteria set forth under 250.1105(a)(2) and (3)?		X
Do you propose to burn produced hydrocarbon liquids?		X
Are your proposed development and production activities located within 25 miles from shore?	X	
Are your proposed development and production activities located within 200 kilometers of the Breton Wilderness Area?		X

Air Pollutant		Plan Emission Amounts[1] (tons)	Calculated Exemption Amounts[2] (tons)		Calculated Complex Total Emission Amounts[3] (tons)
Carbon monoxide (CO)		15.42	24547.85		NA
Particulate matter (PM)		2.06	646.02		NA
Sulphur dioxide (SO_2)		9.43	646.02		NA
Nitrogen oxides (NOx)		70.7	646.02		NA
Volatile organic compounds (VOC)		4.32	646.02		NA

[1] For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.
[2] List the exemption amounts in your proposed activities calculated using the formulas in 30 CFR 250.303(d).
[3] List the complex total emissions associated with your proposed activities calculated from the worksheets.

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
Tana Exploration Compar	Ship Shoal	145	OCS-G 24929	Caisson No. 1	1		Connie Goers, R.E.M. Solutions,	281.492.8562	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	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	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp 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
	PRIME MOVER>600hp 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
	PRIME MOVER>600hp 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
	PRIME MOVER>600hp 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
	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	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	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(tugs)	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
PIPELINE INSTALLATION	PIPELINE LAY/BURY BARGE diesel	2000	96.6	2318.40	24	17	1.41	6.47	48.46	1.45	10.57	0.29	1.32	9.89	0.30	2.16
	SUPPORT VESSEL diesel	2500	120.75	2898.00	24	17	1.76	8.08	60.57	1.82	13.22	0.36	1.65	12.36	0.37	2.70
	VESSELS>600hp diesel(crew)	2065	99.7395	2393.75	8	7	1.46	6.68	50.03	1.50	10.92	0.04	0.19	1.40	0.04	0.31
	VESSELS>600hp diesel(supply)	2065	99.7395	2393.75	10	7	1.46	6.68	50.03	1.50	10.92	0.05	0.23	1.75	0.05	0.38
FACILITY INSTALLATION	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
	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	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRODUCTION	RECIP.<600hp 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
	RECIP.>600hp 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
	SUPPORT VESSEL diesel(crew)	2065	99.7395	2393.75	8	36	1.46	6.68	50.03	1.50	10.92	0.21	0.96	7.20	0.22	1.57
	SUPPORT VESSEL diesel(supply)	2065	99.7395	2393.75	10	36	1.46	6.68	50.03	1.50	10.92	0.26	1.20	9.01	0.27	1.96
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	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												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			1000.0		61				0.50					0.37	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	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
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	2003 YEAR TOTAL						8.99	41.26	309.16	9.77	67.45	1.21	5.55	41.61	1.61	9.08
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											646.02	646.02	646.02	646.02	24547.85
	19.4															

AIR EMISSIONS CALCULATIONS - SECOND YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
Tana Exploration Compa	Ship Shoal	145	OCS-G 24929	Caisson No. 1	1		Connie Goers, R.E.M. Solutions	281.492.8562	#REF!

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	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	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	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
	PRIME MOVER>600hp diesel	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
	PRIME MOVER>600hp diesel	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
	PRIME MOVER>600hp diesel	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
	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	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(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
	VESSELS>600hp diesel(tugs)	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
PIPELINE INSTALLATION	PIPELINE LAY 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
	SUPPORT VESSEL 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
	PIPELINE BURY 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
	SUPPORT VESSEL 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
FACILITY INSTALLATION	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
	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
PRODUCTION	RECIP.<600hp 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
	RECIP.>600hp 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
	SUPPORT VESSEL diesel(crew)	2065	99.7395	2393.75	8	157	1.46	6.68	50.03	1.50	10.92	0.91	4.19	31.42	0.94	6.86
	SUPPORT VESSEL diesel(supply)	2065	99.7395	2393.75	10	157	1.46	6.68	50.03	1.50	10.92	1.14	5.24	39.28	1.18	8.57
	TURBINE nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.2 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle lean nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	RECIP.4 cycle rich nat gas	0	0	0.00	0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	BURNER nat gas	0	0.00	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												
	TANK-	0			0	0				0.00					0.00	
	FLARE-		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
	PROCESS VENT-		0		0	0				0.00					0.00	
	FUGITIVES-			1000.0		366				0.50					2.20	
	GLYCOL STILL VENT-		0		0	0				0.00					0.00	
DRILLING WELL TEST	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
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
2004 YEAR TOTAL							2.91	13.35	100.07	3.50	21.83	2.06	9.43	70.70	4.32	15.42
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											646.02	646.02	646.02	646.02	24547.85
	19.4															

AIR EMISSION CALCULATIONS

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Tana Exploration Company LLC	Ship Shoal	145	OCS-G 24929	Caisson No. 1	1

Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2003	1.21	5.55	41.61	1.61	9.08
2004	2.06	9.43	70.70	4.32	15.42
2005	2.06	9.43	70.70	4.32	15.42
2006	2.06	9.43	70.70	4.32	15.42
2007	2.06	9.43	70.70	4.32	15.42
2008	2.06	9.43	70.70	4.32	15.42
Allowable	646.02	646.02	646.02	646.02	24547.85

SECTION H
Environmental Impact Analysis

A. IMPACT PRODUCING FACTORS (IPF'S)

The following matrix is utilized to identify the environmental resources that could be impacted by these IPF's. An "x" has been marked for each IPF category that Tana has determined may impact a particular environmental resource as a result of the proposed activities. For those cells which are footnoted, a statement is provided as to the applicability of the proposed activities, and where there may be an effect, an analysis of the effect is provided.

Environmental Resources	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, other discharges to the water column or seafloor	Physical Disturbances To the seafloor (rig or anchor emplacement, etc.)	Wastes Sent to Shore for Treatment Or disposal	Accidents (e.g. oil spills, chemical spills, H2S releases)	Other IPF's identified
Site Specific at Offshore Location						
Designated topographic feature						
Pinnacle Trend area live bottoms						
Eastern Gulf live bottoms						
Chemosynthetic communities						
Water quality		X			X	
Fisheries		X			X	
Marine mammals						
Sea turtles	X	X			X	
Air quality	X	X			X	
Shipwreck sites (known or potential)						
Prehistoric archaeological sites						
Vicinity of Offshore Location						
Essential fish habitat					X	
Marine and pelagic birds					X	
Public health and safety						
Coastal and Onshore						
Beaches					X	
Wetlands					X	
Shorebirds and coastal nesting birds					X	
Coastal wildlife refuges					X	
Wilderness areas					X	
Other Resources						

SECTION H
Environmental Impact Analysis-Continued

B. VICINITY OF OFFSHORE LOCATION ANALYSES

1. Designated Topographic Features

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to topographic features. The proposed surface disturbances within Ship Shoal Block 145 is located approximately 50 miles away from the closest designated topographic feature (Ewing Bank). The crests of designated topographic features in the northern Gulf are found below 10 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by the currents moving around the bank; thereby avoiding the sessile biota.

2. Pinnacle Trend Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to a pinnacle trend area. The proposed surface disturbances within Ship Shoal Block 145 are located a significant distance (> 100 miles) from the closest pinnacle trend live bottom stipulated block. The crests of the pinnacle trend area are much deeper than 20 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and thus not impacting the pinnacles.

3. Eastern Gulf Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to Eastern Gulf live bottoms. The proposed surface disturbances within Ship Shoal Block 145 are located a significant distance (>100 miles) from the closest pinnacle Eastern Gulf live bottom stipulated block. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and would not be expected to cause adverse impacts to Eastern Gulf live bottoms because of the depth of the features and dilutions of spills.

4. Chemosynthetic Communities

Water depths in Ship Shoal Block 145 range from 40 feet to 46 feet. Therefore, the proposed activities are not located within the vicinity of any known chemosynthetic communities, which typically occur in water depths greater than 400 meters.

SECTION H
Environmental Impact Analysis-Continued

5. Water Quality

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity could potentially cause impacts to water quality. It is unlikely that an accidental oil spill release would occur from the proposed activities. In the event of such a release, the water quality would be temporarily affected by the dissolved components and small droplets. Currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Tana will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

6. Fisheries

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity may potentially cause some detrimental effects on fisheries. It is unlikely a spill would occur; however, such a release in open waters closed to mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Tana will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

7. Marine Mammals

As a result of the proposed activities, marine mammals may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharge activity, and loss of trash and debris.

Chronic and sporadic sublethal effects could occur that may stress and/or weaken individuals of a local group or population and make them more susceptible to infection from natural or antrhropogenic sources. Few lethal effects are expected from accidental oil spill, chance collisions with service vessels and ingestion of plastic material.

The net results of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin), 1980). Collisions between cetaceans and ship could cause serious injury or death (Laist et al., 2001). Sperm whales are one of 11 whale species that are him commonly by ships (Laist et al., 2001). Collisions between OCS vessels and cetaceans within the project area are expected to be unusual events.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Tana will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Tana and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

8. Sea Turtles

As a result of the proposed activities, sea turtles may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharges, and loss of trash and debris. Small numbers of turtles could be killed or injured by chance collision with service vessels or by eating indigestible trash, particularly plastic items accidentally lost from drilling rigs, production facilities and service vessels. Drilling rigs and project vessels (construction barges) produce noise that could disrupt normal behavior patterns and crease some stress to sea turtles, making them more susceptible to disease. Accidental oil spill releases are potential threats which could have lethal effects on turtles. Contact and/or consumption of this released material could seriously affect individual sea turtles. Most OCS related impacts on sea turtles are expected to be sublethal. Chronic and/or avoidance of effected areas could cause declines in survival or productivity, resulting in gradual population declines.

SECTION H
Environmental Impact Analysis-Continued

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which addresses available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Tana will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements.

As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Tana and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

9. Air Quality

The proposed activities are located approximately 19.4 miles to the nearest shoreline. There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Air quality analyses of the proposed activities are below the MMS exemption level.

10. Shipwreck Site (Known or Potential)

There are no physical disturbances to the seafloor which could impact known or potential shipwreck sites, as the review of high resolution shallow hazards data indicate there are no known or potential shipwreck sites located within the surveyed area.

11. Prehistoric Archaeological Sites

There are no physical disturbances to the seafloor which could cause impacts to prehistoric archaeological sites, as the review of high resolution shallow hazards data and supporting studies did not reflect the occurrence of prehistoric archaeological sites.

Site Specific Offshore Location Analyses

1. Essential Fish Habitat

An accidental oil spill that may occur as a result of the proposed activities has potential to cause some detrimental effects on essential fish habitat. It is unlikely that an accidental oil spill release would occur; however, if a spill were to occur in close proximity to finfish or shellfish, the effects would likely be sublethal and the extent of damage would be reduced to

the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

2. Marine and Pelagic Birds

An accidental oil spill that may occur as a result of the proposed activities has potential to impact marine and pelagic birds, by the birds coming into contact with the released oil. It is unlikely that an accidental oil spill release would occur.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

3. Public Health and Safety Due to Accidents

There are no anticipated IPF's from the proposed activities that could impact the public health and safety. Tana has requested MMS approval to classify the proposed objective area as absent of hydrogen sulfide.

Coastal and Onshore Analyses

1. Beaches

An accidental oil spill release from the proposed activities could cause impacts to beaches. However, due to the distance from shore (approximately 19.4 miles), and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

2. Wetlands

An accidental oil spill release from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (approximately 19.4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

3. Shore Birds and Coastal Nesting Birds

An accidental oil spill release from the proposed activities could cause impacts to shore birds and coastal nesting birds. However, due to the distance from shore (approximately 19.4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

4. Coastal Wildlife Refuges

An accidental oil spill release from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (approximately 19.4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced

in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

5. Wilderness Areas

An accidental oil spill release from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (approximately 19.4 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Tana's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

Other Identified Environmental Resources

Tana has not identified any other environmental resources other than those addressed above.

Impacts on Proposed Activities

No impacts are expected on the proposed activities as a result of taking into consideration the site specific environmental conditions.

A High Resolution Shallow Hazards Survey was conducted, a report prepared in accordance with NTL 2003-G17 and NTL 98-20.

Based on the analysis of the referenced data, there are no surface or subsurface geological and manmade features and conditions that may adversely affect the proposed activities.

SECTION H
Environmental Impact Analysis-Continued

Tana will institute procedures to avoid pipelines and abandoned wells within the vicinity of the proposed operations.

Alternatives

Tana did not consider any alternatives to reduce environmental impacts as a result of the proposed activities.

Mitigation Measures

Tana will not implement any mitigation measures to avoid, diminish, or eliminate potential environmental resources, other than those required by regulation and policy.

Consultation

Tana has not contacted any agencies or persons for consultation regarding potential impacts associated with the proposed activities. Therefore, a list of such entities is not being provided.

SECTION H
Environmental Impact Analysis-Continued

References

The following documents were utilized in preparing the Environmental Impact Assessment:

Document	*Author*	*Dated*
Shallow Hazards Survey	Thales GeoSolutions, Inc.	2003
MMS Environmental Impact Statement Report No. 2002-15	Minerals Management Service	2002
NTL 2003-N06 "Supplemental Bond Procedures"	Minerals Management Service	2003
NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species"	Minerals Management Service	2003
NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination"	Minerals Management Service	2003
NTL 2002-G09 "Regional and Subregional Oil Spill Response Plans"	Minerals Management Service	2002
NTL 2003-G17 "Guidance for Submitting Exploration Plans and Development Operations Coordination Documents"	Minerals Management Service	2003
NTL 2002-G01 "Archaeological Resource Surveys and Reports"	Minerals Management Service	2002
NTL 2000-G16 "Guidelines for General Lease Surety Bonds"	Minerals Management Service	2000
NTL 98-20 "Shallow Hazards Survey Requirements"	Minerals Management Service	1998
NTL 98-16 "Hydrogen Sulfide Requirements"	Minerals Management Service	1998
NPDES General Permit GMG290000	EPA – Region VI	1998
Regional Oil Spill Response Plan	Tana Exploration Company LLC	2003

SECTION I
CZM Consistency

Under direction of the Coastal Zone Management Act (CMZA), the States of Alabama, Florida, Louisiana, Mississippi and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

A certificate of Coastal Zone Management Consistency for the State of Louisiana is enclosed as ***Attachment I-1.***

Tana Exploration Company LLC certifies that consistency with the State of Louisiana's enforceable policies has been considered.

Louisiana CZM Statement

Attachment I-1
(Public Information)

COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION

INITIAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

SHIP SHOAL BLOCK 145

LEASE OCS-G 24929

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

By: **Tana Exploration Company LLC**

Signed By: _____

Dated: 9/2/03