UNITED STATES GOVERNMENT
MEMORANDUM

December 20, 2005

To: Public Information (MS 5030)

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

Subject: Public Information copy of plan

Control #	-	N-08627
Type	-	Initial Development Operations Coordinations Document
Lease(s)	-	OCS-G02592 Block - 149 South Marsh Island Area OCS-G27091 Block - 152 South Marsh Island Area
Operator	-	Ridgelake Energy, Inc.
Description	-	Platform D and Wells D-1, D-2, and D-3
Rig Type	-	PLATFORM

Attached is a copy of the subject plan.

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

Michael Tolbert
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
FIXED/D		1259 FSL, 1553 FEL	G02592/SM/149
WELL/D-1	G27091/SM/152	1259 FSL, 1553 FEL	G02592/SM/149
WELL/D-2	G27091/SM/152	1259 FSL, 1553 FEL	G02592/SM/149
WELL/D-3	G27091/SM/152	1259 FSL, 1553 FEL	G02592/SM/149

P/RS
DEC 2 2 2005

Public Copy
November 17, 2005

JOINT INITIAL SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

Lease Number (s):	OCS-G 02592 and 27091
Area/Block:	South Marsh Island Blocks 149 and 152
Prospect Name:	N/A
Offshore:	Louisiana

Submitted by:

Ridgelake Energy, Inc.
3636 North Causeway Blvd.
Suite 300
Metairie, LA 70002-7216

John Rubin
(504) 837-5766
jrubin@nashold.com

Estimated start up Date: February 1, 2006

Authorized Representative:
Cheryl Murphy
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
cheryl.murphy@jccteam.com

No. Copies Being Submitted:

Proprietary:	2 (1 hard + 1 cd)
Public Info:	2 (1 hard + 1cd)

For MMS:
Plan No. _____
Assigned to: _____

RIDGELAKE ENERGY, INC.

JOINT INITIAL SUPPLEMENTAL

DEVELOPMENT OPERATIONS COORDINATON DOCUMENT

LEASE OCS-G 02592 AND 27091

SOUTH MARSH ISLAND BLOCKS 149 AND 152

APPENDIX A
CONTENTS OF PLAN

Ridgelake Energy, Inc. (REI) is the designated operator of the subject oil and gas lease in South Marsh 152. REI will obtain a right of use and easement from Union Oil Company of California (acquired by Chevron in a recent merger) to install a production platform in South Marsh Block 149.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This DOCD provides for installation of a drilling and production platform (D platform) on Right of Use and Easement acreage on adjacent Chevron leased South Marsh Island Blocks 149, to drill and complete three wells directionally to South Marsh Island Blocks 152 for commencement of production from the target sands as detailed in Appendix C of this DOCD.

Appendix J contains an Plan Information Form, which provides a description of proposed activities, and a tentative schedule.

(B) LOCATION

Included as ***Attachment A-1 and Attachment A-2*** are maps showing the proposed locations of wells and facilities and any associated anchors, and the area expected to be disturbed by any anchors during construction of the facility. Included as ***Attachment A-3*** is a table containing the locations, water depth, MD and TVD of the proposed wells. Additional well information is included in Appendix J, on the Plan Information Form.

(C) DRILLING UNIT

A description of the drilling unit is included in Appendix J, on the Plan Information Form. The rig specifications will be made a part of the Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, welding procedures, and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, and G; and as further clarified by MMS Notices to Lessees, and current policy making invoked by the MMS, Environmental Protection Agency and the U.S. Coast Guard. Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times.

REI will ensure employees and contractor personnel engaged in well control or production safety operations understand and can properly perform their duties.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

REI does not propose additional safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR 250.

(D) PRODUCTION FACILITIES

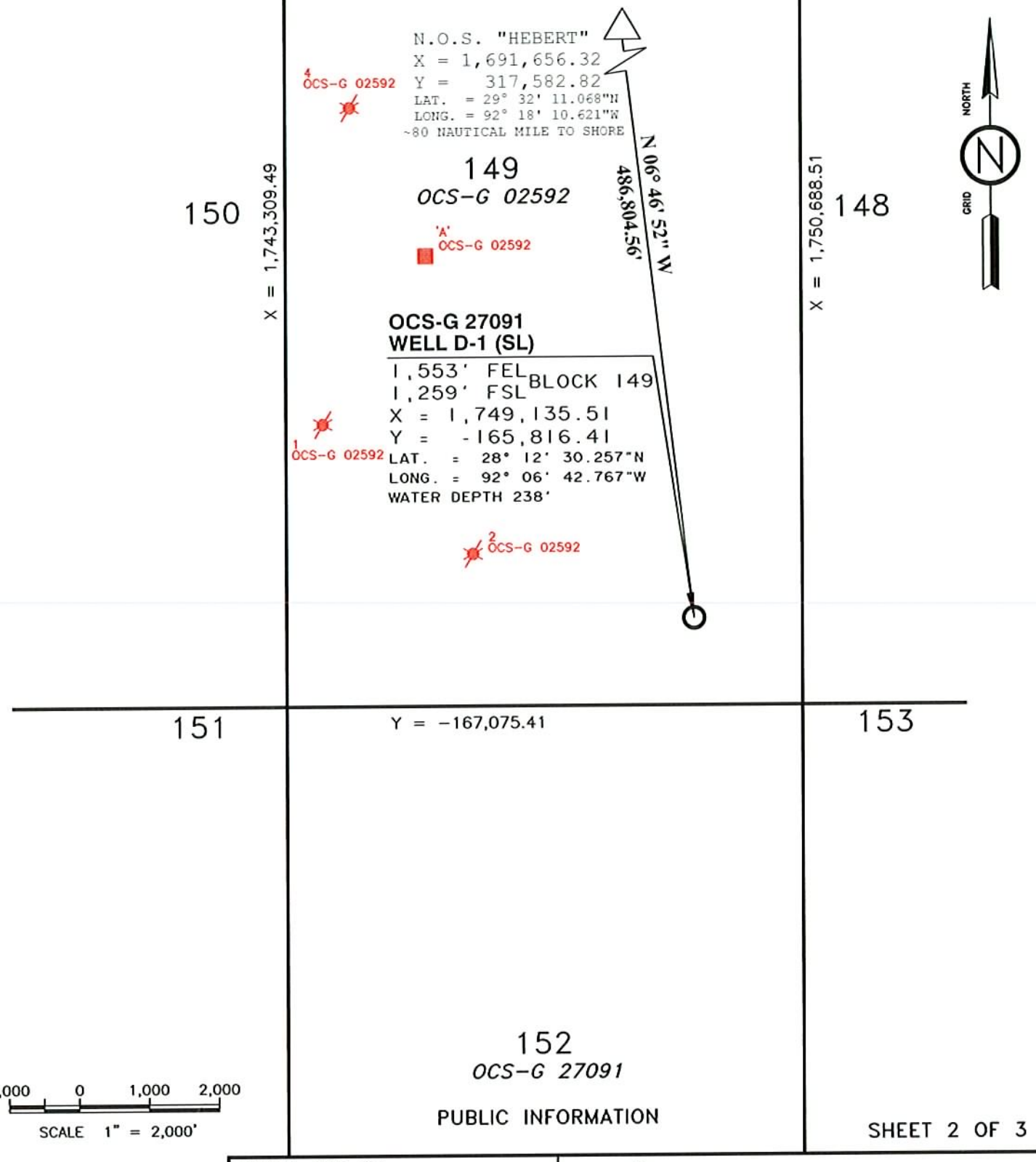
The subject well(s) will be protected by a 4-pile well protector structure to be designated as the D platform. A schematic of the proposed structure is included as ***Attachment A-4***.

REI anticipates installing minimal processing equipment on this structure. All hydrocarbon handling equipment installed for testing and production operations will be designed, installed and operated to prevent pollution.

The facility will be installed utilizing a derrick barge

A ROW pipeline will be installed to transport produced hydrocarbons from the subject structure to an existing pipeline in South Marsh Island Block 150 owned by ANR Pipeline Company. No new nearshore or onshore pipelines or facilities will be constructed.

The facility will be designed, installed and operated in accordance with current regulations, engineering documents incorporated by reference, and industry practice in order to ensure protection of personnel, environment and the facilities. When necessary, maintenance or repairs that are necessary to prevent pollution of offshore waters shall be undertaken immediately.



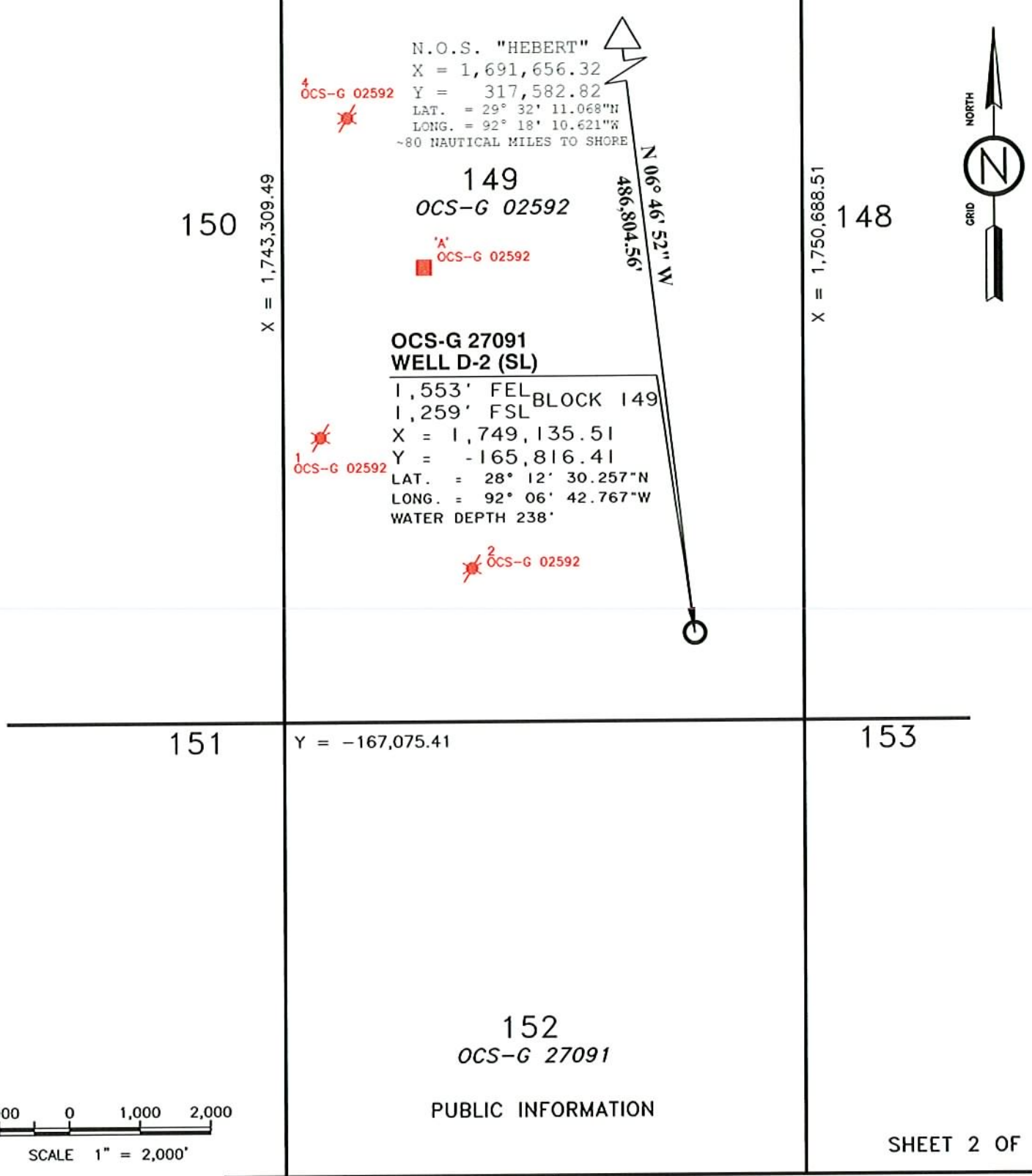
SHEET 2 OF 3

DATUM: NAD 27	RIDGELAKE ENERGY, INC.
SPHEROID: CLARKE 1866	PROPOSED WELL LOCATION
PROJECTION: LAMBERT	OCS-G 27091 WELL D-1 BLOCK 152 WITH SURFACE LOCATION IN BLOCK 149 SOUTH MARSH ISLAND AREA SOUTH ADDITION
ZONE: LOUISIANA SOUTH	GULF OF MEXICO

TECH OFFSHORE
36499 Perkins Road
Prairieville, Louisiana 70769
Tel: 225-673-2163
Fax: 225-744-3116

DRAWN BY:	DATE:	CHECKED BY:	DRAWING No.:
KBR	10/27/2005	JJZ	05-378-WELL D-1
REV. DATE:	REV. No.:	SCALE:	JOB No.:
		AS-SHOWN	05-378

Attachment A-1



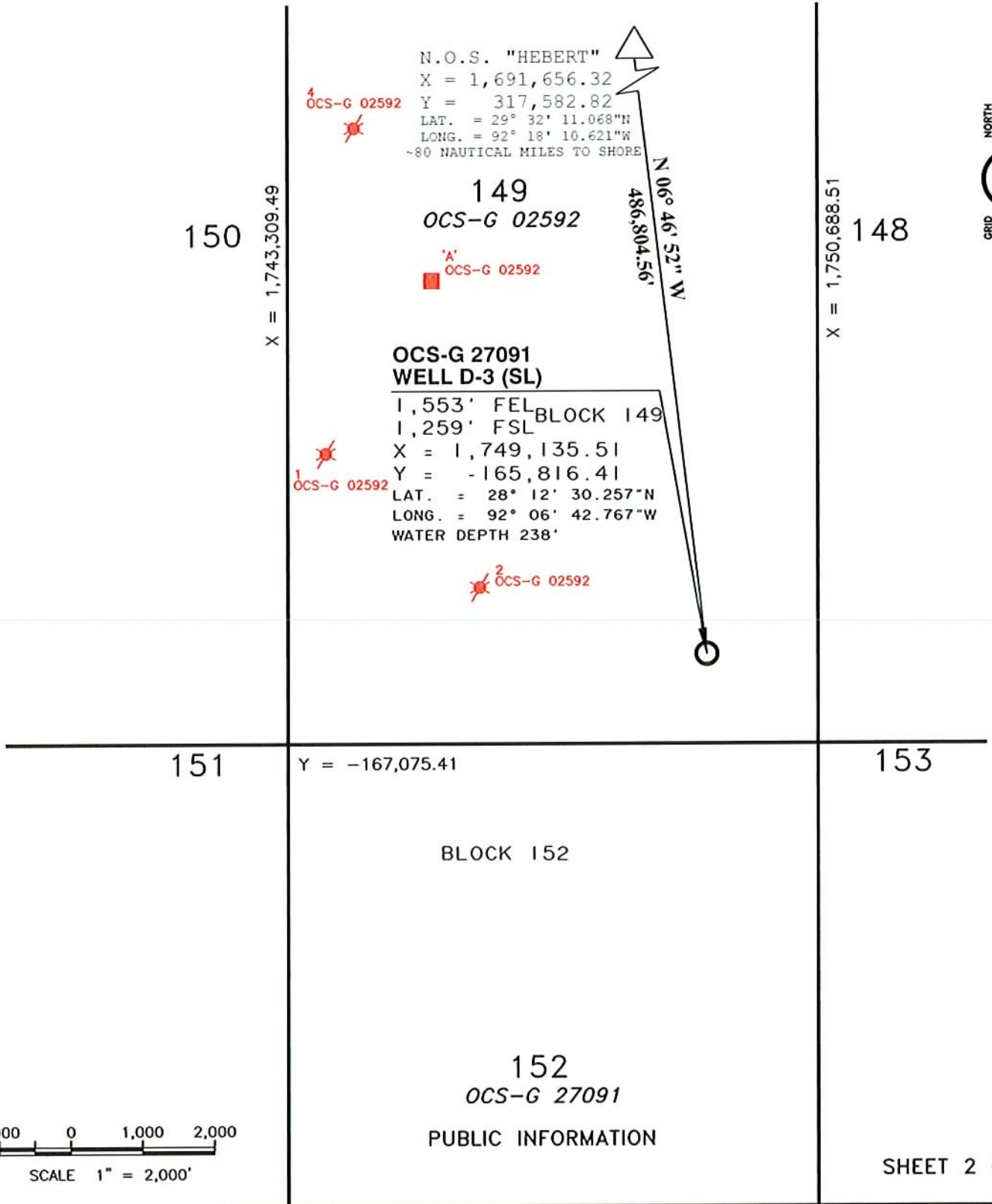
SHEET 2 OF 3

DATUM: NAD 27	RIDGELAKE ENERGY, INC.
SPHEROID: CLARKE 1866	PROPOSED WELL LOCATION
PROJECTION: LAMBERT	OCS-G 27091 WELL D-2 BLOCK 152 WITH SURFACE LOCATION IN BLOCK 149 SOUTH MARSH ISLAND AREA SOUTH ADDITION
ZONE: LOUISIANA SOUTH	GULF OF MEXICO

TEX OFFSHORE
36499 Perkins Road
Prairieville, Louisiana 70769
Tel: 225-673-2163
Fax: 225-744-3116

DRAWN BY:	DATE:	CHECKED BY:	DRAWING No.:
KBR	10/27/2005	JSL	05-378-WELL D-2
REV. DATE:	REV. No.:	SCALE:	JOB No.:
		AS-SHOWN	05-378

Attachment A-1



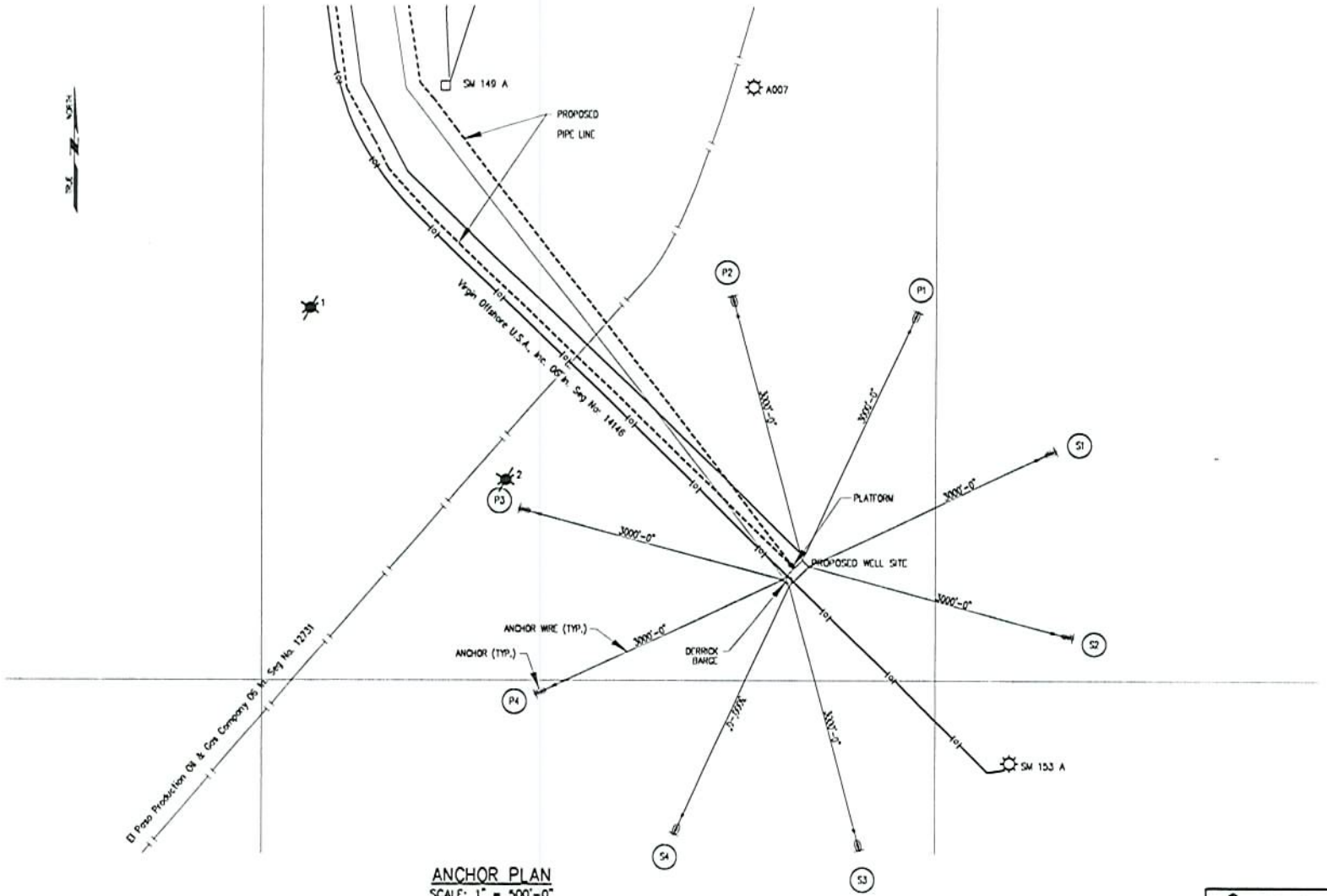
SHEET 2 OF 3

DATUM: NAD 27	RIDGELAKE ENERGY, INC.
SPHEROID: CLARKE 1866	PROPOSED WELL LOCATION
PROJECTION: LAMBERT	OCS-G 27091 WELL D-3 BLOCK 152 WITH SURFACE LOCATION IN BLOCK 149 SOUTH MARSH ISLAND AREA SOUTH ADDITION
ZONE: LOUISIANA SOUTH	GULF OF MEXICO

TECH OFFSHORE
36499 Perkins Road
Prairieville, Louisiana 70769
Tel: 225-673-2163
Fax: 225-744-3116

DRAWN BY:	DATE:	CHECKED BY:	DRAWING No.:
KBR	10/27/2005	JSZ	05-378-WELL D-3
REV. DATE:	REV. No.:	SCALE: AS-SHOWN	JOB No.: 05-378

Attachment A-1



ANCHOR PLAN
SCALE: 1" = 500'-0"

NOTES:

MK	LA	LA	11/8/05	ISSUED FOR APPROVAL	MARK
APP'D	CHK'D	DRAFT	DATE	REVISION	

RIDGELAKE ENERGY, INC.

TECHNICAL ENGINEERING CONSULTANTS
SPRING LOUISIANA

APPROVED	DATE
CLIENT	
MGR. MK	11/8/05
DESIGN MK	11/8/05
DATE	
DRAFT LA	11/8/05

TITLE: PRODUCTION PLATFORM
SOUTH MARSH ISLAND 149 "D"
DERRICK BARGE
TYPICAL ANCHOR LAYOUT

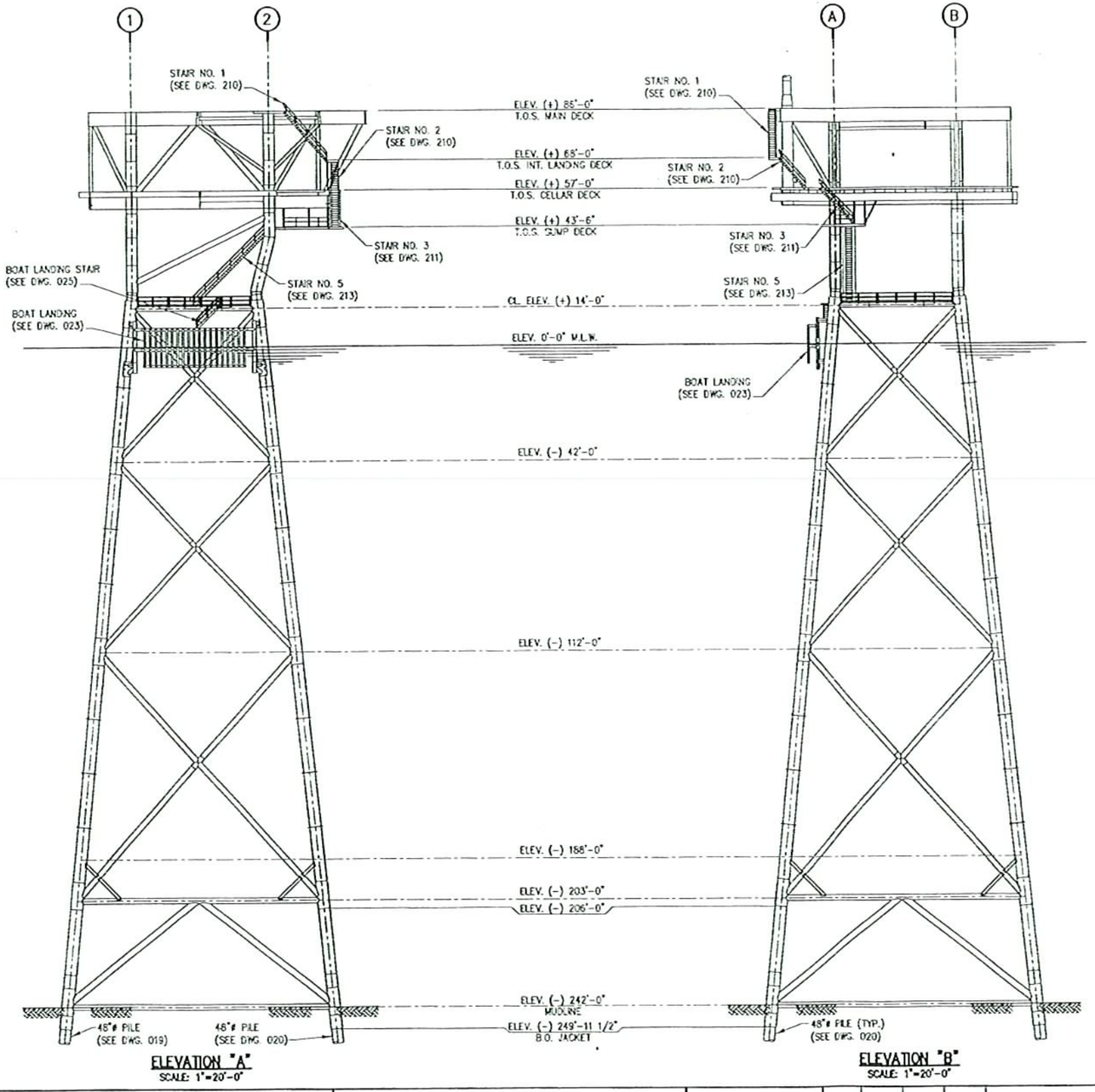
CLIENT: RIDGELAKE ENERGY, INC.
JOB NO. 80525
DWG. NO. 001

Proposed Locations

LOCATION	CALL NS	CALL EW	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE	WD	TVD	MD
D1 SURF	1,259' FSL	1,553' FEL	1,749,135.51'	-165,816.41'	28° 12' 30.257"N	92° 06' 42.767"W	238'		
D2 SURF	1,259' FSL	1,553' FEL	1,749,135.51'	-165,816.41'	28° 12' 30.257"N	92° 06' 42.767"W	238'		
D3 SURF	1,259' FSL	1,553' FEL	1,749,135.51'	-165,816.41'	28° 12' 30.257"N	92° 06' 42.767"W	238'		

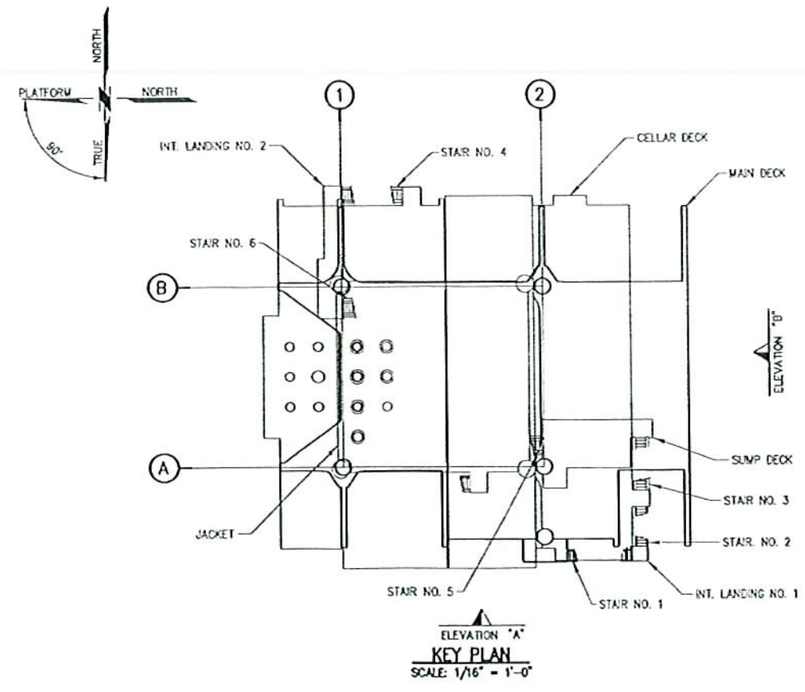
Attachment A-3

LIST OF COMPONENTS	
ITEMS	TOTAL WEIGHT (TONS)
JACKET (W/ANODES)	665.0
BOAT LANDING (W/CONCRETE)	33.0
PILING (3)	712.0
DECK (W/O EQUIPMENT)	518.0
TOTAL	1928.0



ELEVATION "A"
SCALE: 1"=20'-0"

ELEVATION "B"
SCALE: 1"=20'-0"



KEY PLAN
SCALE: 1/16" = 1'-0"

NOTES:

MARK	REVISION	DRAFT	DATE

TECHNICAL ENGINEERING CONSULTANTS INC
GRETNA LOUISIANA

	APPROVED	DATE
CLIENT		
PROJECT	SS	6/03/05
DESIGN	SS	6/03/05
CHECK		
DRAFT	EV	6/03/05

TITLE: ASSEMBLY ELEVATIONS

CLIENT | JOB NO. 50517 | DWG. NO. 002

Attachment A-4

APPENDIX B
GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

Cheryl Murphy
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
E-mail address: Cheryl.murphy@jccteam.com

(B) PROJECT NAME

REI does not utilize project names.

(C) PRODUCTION RATES AND LIFE OF RESERVOIR

Type of Production	Average Estimated Rates	Estimated Peak
1) Crude Oil		
2) Gas		
3) Condensate		
Estimated Life of the Reservoir = ***Proprietary Data***		

(D) NEW OR UNUSUAL TECHNOLOGY

REI does not propose to use any new or unusual technology to carry out the proposed development/production activities. New or unusual technology is defined as equipment and/or procedures that:

1. Function in a manner that potentially causes different impacts to the environment than the equipment or procedures did in the past;
2. Have not been used previously or extensively in an MMS OCS Region;
3. Have not been used previously under the anticipated operating conditions; or
4. Have operating characteristics that are outside the performance parameters established by 30 CFR 250.

(E) BONDING INFORMATION

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by an area wide bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. N2000-G16, "Guidelines for General Lease Surety Bonds", dated September 7, 2000.

(F) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as ***Attachment B-1*** showing South Marsh Island Blocks 149 and 152 located approximately 87 miles from the nearest shoreline and approximately 107 miles from the onshore support base in Intracoastal City, Louisiana.

The existing onshore base provides 24-hour service, a radio tower with a phone patch, dock space, equipment, and supply storage area, drinking and drill water, etc. The base serves as a loading point for tools, equipment, and machinery, and temporary storage for materials and equipment. The base also supports crew change activities. The proposed operations do not require expansion or major modifications to the base.

During the proposed activities, support vessels/helicopters and travel frequency are as follows:

Type	Weekly Estimate (No.) of Roundtrips	
	Drilling & Completion	Production Operations
Crew Boat	7	1
Supply Boat	7	1
Helicopter	10	3

The most practical, direct route from the shorebase as permitted by the weather and traffic conditions will be utilized.

(G) LEASE STIPULATIONS

The following lease stipulations are attached to OCS-G 02592 and 27091, South Marsh Island Blocks 149 and 152.

Military Warning Area (MWA)

South Marsh Island Blocks 149 and 152 are located within designated MWA-59. The Naval Air Station – JRB 159 Fighter Wing will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

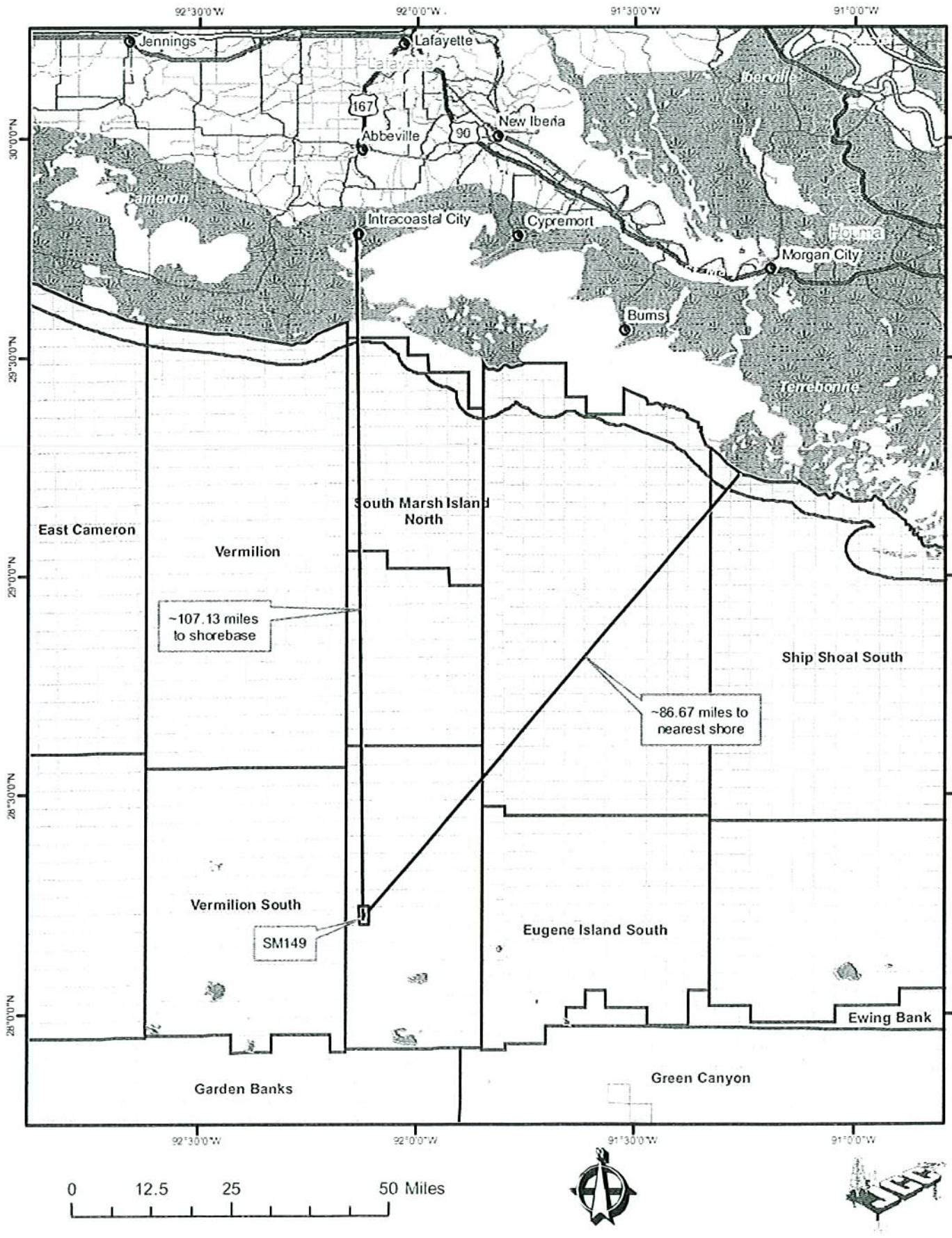
Marine Protected Species

Lease Stipulation No. 6 is meant to reduce the potential taking of marine protected species. REI will operate in accordance with NTL 2003-G10, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and NTL 2003-G11 to prevent intentional and/or accidental introduction of debris into the marine environment.

(H) RELATED OCS FACILITIES AND OPERATIONS

REI plans to install a four pile drilling and production platform on Right of Use and Easement acreage on adjacent Union Oil Company of California's leased South Marsh Island 149 (acquired by Chevron in recent merger). Drill three wells directionally onto SMI 152 and complete for production. Gas will be compressed (if necessary), processed and sold through a 14,453', 6" ROW pipeline connecting to the ANR Pipeline Company's Segment No. 5503 in SMI 150. The ROW pipeline is estimated to have a maximum flow rate of 20,000 MMCFD and 200 BCPD.

Ridgelake Energy, Inc.



Attachment B-1

(I) TRANSPORTATION INFORMATION

REI has proposed to install a 6" right-of-way pipeline to transport sales gas and condensate from platform D to ANR Pipeline Company's existing 24" sales line for ultimate delivery to shore in Patterson, Louisiana.

APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H_2S INFORMATION

(A) STRUCTURE CONTOUR MAPS
Current structure contour maps drawn on the top of each productive hydrocarbon sand, showing the entire lease block the location of each proposed well, and the locations of geological cross-sections are included as ***proprietary data.***

(B) TRAPPING FEATURES
Proprietary data.

(C) DEPTH OF GEOPRESSURE
Proprietary data.

(D) INTERPRETED DEEP SEISMIC LINES
REI does not have the rights to the deep seismic lines, therefore the deep seismic lines are not available.

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS
Proprietary data.

(F) SHALLOW HAZARDS REPORT
A shallow hazards survey was conducted over South Marsh Block 149. Two copies of a shallow hazard report are being submitted to the MMS under separate cover.

(G) SHALLOW HAZARDS ASSESSMENT
A shallow hazards assessment has been prepared for the proposed surface location, evaluating seafloor and subsurface geological and manmade features and conditions that may adversely affect operations, and is included as ***Attachment C-3.***

(H) HIGH-RESOLUTION SEISMIC LINES
Proprietary data.

(I) STRATIGRAPHIC COLUMN
Proprietary data.

(J) HYDROGEN SULFIDE INFORMATION
In accordance with Title 30 CFR 250.417(c), REI requests that South Marsh Island Blocks 149 and 152 be classified by the MMS as H_2S absent.

Tesla Offshore, LLC
36499 Perkins Road
Prairieville, Louisiana 70769
Telephone: (225) 673-2163
Fax: (225) 744-3116

October 17, 2005

Minerals Management Service (MS 5230)
Gulf of Mexico OCS Region
1201 Elmwood Park Blvd.
New Orleans, LA 70123-2394

RE: Ridgelake Energy, Inc.
Proposed OCS-G 02592 'A' Surface Location
Block 149, South Marsh Island Area
Shallow Hazard Analysis

Dear Staff:

Ridgelake Energy, Inc. proposes to drill the OCS-G 02592 'A' well from the following surface location:

- ***1,259' FSL & 1,553' FEL of Block 149, South Marsh Island Area***

Tesla Offshore, LLC surveyed the entire lease block in October of 2005 along 300-meter primary grid spacing with 900-meter tie lines. Ridgelake Energy, Inc. operates the lease and submits this shallow hazard analysis of the proposed drill site in compliance with **NTL No. 98-20** from the Minerals Management Service. Geophysical record copies are enclosed for the magnetometer, side scan sonar, subbottom profiler, echo sounder, and near trace seismic sections from the survey line nearest the proposed well site as required by the MMS in **NTL No. 2003-G17**.

- ***Water depth*** is 239 feet (tide and velocity corrected) surrounding the proposed drill site, and anchor drag scars were scattered across the seafloor.
-
- ***Identified man-made features*** include a Virgin 6" pipeline (Segment 14146) trending northwest/southeast approximately 150' SW of the proposed well site at the nearest point. Normal precautions will be taken by moving the jack-up rig in from northeast on to the exact drilling location. Several other pipelines throughout the lease were verified and will be marked and avoided when deploying anchors.
- ***Magnetic anomalies*** all correlated to the existing pipeline near the proposed well sites. Rig moves and drilling operations will not affect anomalies in other parts of the block.
- **Sonar data** highlighted the existing pipelines and platforms in the block. No obstructions or shipwrecks were detected near the proposed well site.

•

The operator has identified the primary hazards to rig movements, anchor deployments, and drilling.

The proposed well site, pipelines, wells, and platforms will be marked with appropriate marine survey equipment during rig moves and drilling operations to comply with the **MMS On-Site Requirements specified in NTL No. 98-20, Section IV, Item B.**

In lieu of using buoys as stipulated in **Item B-1**, the operator requests MMS approval to mark potential hazards with best available technology using computer graphic screens that are integrated to DGPS positioning units aboard the drilling rig and all support vessels.

In further compliance with **Item B-2**, a map at a scale of 1:12,000 will be provided to key personnel on the drilling rig and anchor handling vessels. The field map will depict the location of the proposed well, existing pipelines, and wells.

Ridgelake Energy, Inc. and subcontractors will apply the safest and best available technologies during rig moves and drilling operations.

Yours truly,

Robert J Floyd

Robert J. Floyd Ph.D.
Chief Geoscientist

APPENDIX D
BIOLOGICAL AND PHYSICAL INFORMATION

CHEMOSYNTHETIC INFORMATION

This DOCD does not propose activities that could disturb seafloor areas in water depths of 400 meters (1312 feet) or greater, therefore chemosynthetic information is not required.

TOPOGRAPHIC FEATURES INFORMATION

The activities proposed in this plan will not take place within 500 feet of any identified topographic feature, therefore topographic features information is not required.

LIVE BOTTOM (PINNACLE TREND) INFORMATION

South Marsh Island Blocks 149 and 152 is not located within 100 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom information is not required.

APPENDIX E
WASTES AND DISCHARGES INFORMATION

DISCHARGES

All discharges associated with operations proposed in this Development Operation Coordination Document will be in accordance with regulations implemented by Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA).

Discharge information is not required per NTL No. 2003-G17.

WASTES

For disposed wastes, the type and general characteristics of the wastes, the amount to be disposed of (volume, rate, or weight), the daily rate, the name and location of the disposal facility, a description of any treatment or storage, and the methods for transporting and final disposal are provided in tabular format in ***Attachment E-1.*** For purposes of this Appendix, disposed wastes describes those wastes generated by the proposed activities that are disposed of by means other than by releasing them in to the waters of the Gulf of Mexico at the site where they are generated. These wastes can be disposed of by offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Disposal Table Example (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
Spent oil-based drilling fluids and cuttings	800 bbl/well	120 bbl/day	Newpark Environmental, Berwick, LA	Transport to shore in barge tanks to a land farm
Waste Oil	4 bbl/yr	.01 bbl/day	Newpark Environmental, Berwick, LA	Pack in drums and transport to an onshore Incineration site
Trash and debris	1,000 ft^3/well	3 ft^3 /day	Newpark Environmental, Berwick, LA	Transport in storage bins on crew boat to shorebase; truck to landfill

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

APPENDIX F
OIL SPILL INFORMATION

1. SITE-SPECIFIC OSRP

N/A

2. REGIONAL OSRP INFORMATION

Ridgelake Energy, Inc.'s Regional Oil Spill Response Plan (OSRP) was approved in April 2004 and most recently updated on October 26, 2004. Activities proposed in this DOCD will be covered by the Regional OSRP.

3. OSRO INFORMATION

REI'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.

4. WORST-CASE SCENARIO COMPARISON

Category	Regional OSRP WCD	DOCD WCD
Type of Activity	Production >10 miles from shore	Production >10 miles from shore
Facility Location (South Marsh Island Blocks 149 and 152)	EI324	SM149
Facility Designation		D
Distance to Nearest Shoreline (miles)	65	87
Volume		
Storage tanks (total)	N/A	50
Flowlines (on facility)	N/A	0
Lease pipelines	0	0
Uncontrolled blowout	700	200
Total Volume	700	250
Type of Oil(s) (crude, condensate, diesel)	Condensate	Condensate
API Gravity	50°	45°

REI has determined that the worst-case scenario from the activities proposed in this DOCD does not supercede the worst-case scenario from our approved regional OSRP for far-shore activities.

Since REI has the capability to respond to the worst-case spill scenario included in its regional OSRP approved in April 2004, 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 REI 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.

5. FACILITY TANKS, PRODUCTION VESSELS

All facility tanks of 25 barrels or more.

Type of Storage Tank	Type of Facility	Tank Capacity (bbls)	Number of Tanks	Total Capacity (bbls)	Fluid Gravity (API)
Fuel Oil (Marine Diesel)	Platform Rig	230	2	460	32.4°
Production	N/A				

6. SPILL RESPONSE SITES

Primary Response Equipment Location	Preplanned Staging Location
Houma, LA	Houma or Fourchon, LA

7. DIESEL OIL SUPPLY VESSELS

a. Size of fuel supply vessel:	N/A
b. Carrying capacity of fuel supply vessel:	N/A
c. Frequency of fuel transfers:	N/A
d Route fuel supply vessel will take:	N/A

8. SUPPORT VESSELS FUEL TANKS

The estimated total storage capacity (maximum per class of vessel in the field at any given time) of fuel tanks on the vessels supporting activities in this Plan are as follows:

Type of Vessels	Number in Field Simultaneously	Estimated Maximum Fuel Tank Storage Capacity
a. Tug Boats	3	20,000
b. Supply Vessels	1	20,000
c. Service Vessels	N/A	N/A
b. Crew Vessels	1	10,000

9. PRODUCED LIQUID HYDROCARBONS TRANSPORTATION VESSELS

REI proposes/does not propose transfer of stored production and/or hydrocarbons from well testing activities under this DOCD.

10. OIL- AND SYNTHETIC-BASED DRILLING FLUIDS

Oil/SBMs are proposed to be use as follows:

Type of Drilling Fluid	Est. Vol. Mud Used/Well (bbls)	Mud Disposal Method	Est. Vol. Cuttings Generated/Well (bbls)	Cuttings Disposal Method
Oil-based	1,000	Onshore disposal	800	Onshore disposal
Synthetic-based		Recycle		Recycle

11. BLOWOUT SCENARIO

Should a blowout occur, the formation types present in the GOM tend to bridge over in most cases. If the wellhead and BOP system is still in tact, wellbore intervention should be possible in as little as 7 to 10 days. In a relief well scenario, rig availability is typically not an issue. The time required to drill a relief well would be in the 30 day range depending on the well intersection depth. The maximum condensate discharge is calculated to be 750 barrels per day.

12. OILS CHARACTERISTICS

The estimated chemical and physical characteristics of the oils that will be handled, stored, or transported on/by the facility are as follows:

Estimated Chemical and Physical Characteristics of Oils Anticipated
Based on fluid characteristics in the nearest field with public fluid data,

1. Gravity (API)
2. Flash Point (°C)
3. Pour Point (°C)
4. Viscosity (Centipoise @ 25° C)
5. Wax Content (wt %)
6. Asphaltene Content (wt %)
7. Resin Content (wt %)
8. Boiling point distribution including for each fraction, the percent volume or weight and the boiling point range in °C
9. Sulphur (wt %)

Anticipated Flash Stock Tank Liquid Analysis:

	Mole %	Liquid Vol %
Hydrogen Sulfide	0	0
Carbon Dioxide	0	0
Nitrogen	0	0
Methane	0	0
Ethane	0.15	0.03
Propane	0.83	0.26
Iso-butane	0.46	0.17
n-butane	1.56	0.57
Iso-pentane	1.26	0.54
n-pentane	1.74	0.73
Hexanes	4.75	2.19
Heptanes Plus	89.25	95.51

Anticipated Properties of Flash Gas:

Gas Calculated Specific Gravity (Air = 1)	0.63
Gas Heat of Combustion (Btu/cuft @ 60° F) Dry	1144
Gas Heat of Combustion (Btu/cuft @ 60° F) Wet	1124
Gas Compressibility (@ 1 atm & 60° F) Z	0.9973

Estimated Physical and Chemical Properties of Fuel Oil (No. 2 Diesel)

API Gravity: 32.4°
Viscosity: 2.7cSt @ 38° C
Flash Point: 66° C
Distillation Cuts:

Volume %	Temperature (°C)
1	66
5	205
10	218
50	263
90	317
95	331
99	352

SPILL RESPONSE DISCUSSION

For the purpose of NEPA and Coastal Zone Management Act analysis, the largest spill volume originating from the proposed activity would be loss of the largest single fuel tank on the platform rig, estimated to be 230 barrels of diesel fuel with an API gravity of 32.4°.

Land Segment and Resource Identification

Trajectories of a spill and the probability of it impacting a land segment have been projected utilizing information in MMS Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on MMS website. The results are shown in Figure F-1.

The MMS OSRAM identifies a 13% probability of impact to the shorelines of Cameron Parish, Louisiana within 30 days. Cameron Parish includes the east side of Sabine Lake, Sabine National Wildlife Refuge, Calcasieu Lake, Lacassine National Wildlife Refuge (inland) and Grand Lake; along the Gulf beach from Sabine Pass to Big Constance Lake in Rockefeller Wildlife Refuge. This region is composed of open public beaches, marshlands and swamps. It serves as a habitat for numerous birds, finfish and other animals, including several rare, threatened and endangered species. Additional discussion of protection strategies for potentially affected resources is included in Ridgelake's Regional Oil Spill Response Plan.

Response

Ridgelake will make every effort to respond to the Worst Case Discharge as effectively as possible. A description of the response equipment available to contain and recover the Worst Case Discharge is shown in Figure F-2.

Using the estimated chemical and physical characteristics of diesel fuel, an ADIOS weathering model was run on a similar product from the ADIOS oil database (Fuel Oil No.2 AMOCO, API 32.4°). The results indicate 66% of the product would be evaporated/dispersed within 12 hours, leaving approximately 78 barrels on the water.

Figure F-2 outlines equipment, personnel, materials and support vessels as well as temporary storage equipment to be considered in order to cope with an initial spill of 230 barrels. The list estimates individual times needed for procurement, load out, travel time to the site and deployment. If appropriate, 1 sortie (1,000 gallons) from the DC-3 should disperse approximately 429 barrels of oil.

Offshore response strategies may also include attempting to skim utilizing two (2) FRU's with a total derated skimming capacity of 6,800 barrels. Temporary storage associated with the identified skimming equipment equals 400 barrels. If additional temporary storage is needed, a temporary barge may be mobilized. **SAFETY IS FIRST PRIORITY. AIR MONITORING WILL BE ACCOMPLISHED AND OPERATIONS DEEMED SAFE PRIOR TO ANY CONTAINMENT/SKIMMING ATTEMPTS**

If the spill went unabated, shoreline impact in coastal environments would depend upon existing environmental conditions. Onshore response may include the deployment of shoreline boom on beach areas, or protection and sorbent boom in vegetated areas. Strategies would be based upon surveillance and real time trajectories that depict areas of potential impact given actual sea and weather conditions. Strategies from the One Plan GOM Area Contingency Plans (ACP) and Unified Command would be consulted to ensure that environmental and special economic resources would be correctly identified and prioritized to ensure optimal protection. ACPs depict the protection response modes applicable for oil spill clean-up operations. Each response mode is schematically represented to show optimum deployment and operation of the equipment in areas of environmental concern. Supervisory personnel have the option to modify the deployment and operation of equipment allowing a more effective response to site-specific circumstances.

FIGURE F-1
TRAJECTORY BY LAND SEGMENT

Trajectory of a spill and the probability of it impacting a land segment have been projected utilizing Ridgelake's WCD and information in MMS Oil Spill Risk Analysis Model (OSRAM) for the Central and Western Gulf of Mexico available on MMS website using thirty (30) day impact. The results are tabulated below.

Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 30 days
Install Platform D and 6" ROW Pipeline; Drill and complete three wells South Marsh 149 *87 miles from shore*	02592	C35	Aransas County, TX	1
			Calhoun County, TX	1
			Matagorda County, TX	5
			Brazoria County, TX	3
			Galveston County, TX	9
			Jefferson County, TX	6
			Cameron Parish, LA	**13**
			Vermilion Parish, LA	5
			Iberia Parish, LA	2
			Terrebonne Parish, LA	2
			Plaquemines Parish, LA	1

WCD Scenario > 10 Miles From Shore– BASED ON LOSS OF THE LARGEST SINGLE FUEL TANK (87 miles from shore)
South Marsh 149, Platform D
230 bbls of Diesel Fuel, API Gravity 32.4°

FIGURE F-2 Equipment Response Time to: South Marsh 149

	EQUIPMENT TYPE	Derated Capacity (BBLS)	Storage (BBLS)	No. of Units	Owner/Location	Initial Staging	Hours To Staging Area	Total Time to Procure (1)	Time to Load Out (2)	Travel Time (Staging/ Spill) (3)	Time to Deploy (4)	Total Estimated Response Time
A	DC 3 Spray Aircraft	--	--	1	ASI/Houma	Houma	0					
	Spotter Plane	--	--	1	ASI/Houma	Houma	0					
	Spotter Personnel			2	ASI/Houma	Houma	1					
	Dispersant				CGA/Houma	Houma	0	1	1	1.25	0	3.25
B	FRU/Expandi	6,800	400	2	CGA/Houma	Fourchon	1					
	Operators			12	STARS*	Fourchon	1					
	Utility Boat			2	Vessel of Opportunity	Fourchon	1					
	Crew Boat			2	Vessel of Opportunity	Fourchon	1	2	1	9	1	13
C	**INITIAL SUPPORT**											
	Spotter Helo	--	--	1	PHI/Houma	Spill Site	.5	1	--	1.25	--	2.25
	Surveillance Helo	--	--	1	PHI/Houma	Spill Site	.5	1	--	1.25	--	2.25
	Hand Held Radios	--	--	30	STARS*	Fourchon	1	1.5	--	1.25	--	2.75
	TOTAL	6,800	400									

*STARS contractor called out by MSRC

14. POLLUTION PREVENTION MEASURES

REI does not propose safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR 250.

APPENDIX G
AIR EMISSIONS INFORMATION

AIR EMISSIONS INFORMATION (If any of these answers are "yes" – the spreadsheets need to be submitted)

Screening Questions for DOCD's	Yes	No
Is any calculated Complex Total (CT) Emission amount (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
Do 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

Summary Information

There are no existing facilities or activities co-located with the currently proposed activities, therefore the Complex Total Emissions are the same as the Plan Emissions and are provided in the table below.

Air Pollutant	Plan Emission Amounts[1] (tons)	Calculated Exemption Amounts[2] (tons)	Calculated Complex Total Emission Amounts[3] (tons)
Carbon Monoxide (CO)	88.1	66756.22	88.1
Particular matter (PM)	10.15	2897.10	10.15
Sulphur dioxide (SO_2)	46.57	2897.10	46.57
Nitrogen oxides (NO_x)	437.29	2897.10	437.29
Volatile organic compounds (VOC)	16.34	2897.10	16.34

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

This information was calculated by: Cheryl Murphy
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Cheryl Murphy@jccteam.com

Based on this data, emissions from the proposed activities will not cause any significant effect on onshore air quality.

APPENDIX H
ENVIRONMENTAL IMPACT ANALYSIS (EIA)
Ridgelake Energy (REI)

Joint Initial Supplemental Development Operations Coordination Document
South Marsh Island 149
OCS-G 02592

(A) Impact Producing Factors

ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET

Environment Resources	Impact Producing Factors (IPFs) Categories and Examples Refer to recent GOM OCS Lease Sale EIS for a more complete list of IPFs					
	Emissions (air, noise, light, etc.)	Effluents (muds, cutting, other discharges to the 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, H_2S releases)	Discarded Trash & Debris
Site-specific at Offshore Location						
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	X		X	
Fisheries		X	X		X	
Marine Mammals	X(8)	X			X(8)	X
Sea Turtles	X(8)	X			X(8)	X
Air quality	X(9)					
Shipwreck sites (known or potential)			(7)			
Prehistoric archaeological sites			(7)			
Vicinity of Offshore Location						
Essential fish habitat		X	X		X(6)	
Marine and pelagic birds	X				X	X
Public health and safety					(5)	
Coastal and Onshore						
Beaches					X(6)	X
Wetlands					X(6)	
Shore birds and coastal nesting birds					X(6)	X
Coastal wildlife refuges					X	
Wilderness areas					X	

Footnotes for 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:
   - 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
   - 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
   - Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
   - 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 you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
7) All activities that involve seafloor disturbances, including anchor emplacements, 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 your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
8) All activities that you determine might 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 South Marsh Island 149

Proposed operations consist of the installation of Platform D, the installation of a 6" ROW pipeline, and the drilling and completion of 3 wells.

1. Designated Topographic Features

Potential IPFs on topographic features include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: South Marsh Island 149 is 12 miles from the closest designated Topographic Features Stipulation Block (Alderice Bank); therefore, no adverse impacts are expected.

Effluents: South Marsh Island 149 is 12 miles from the closest designated Topographic Features Stipulation Block (Alderice Bank); therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities, which could impact topographic features.

2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: South Marsh Island 149 is 233 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: South Marsh Island 149 is 233 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact a live bottom (pinnacle trend) area.

3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: South Marsh Island 149 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Effluents: South Marsh Island 149 is not located in an area characterized by the existence of live bottoms; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in **Item 5**, Water Quality). Oil spills cause damage to live bottom organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine invertebrates. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom area. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact an Eastern Gulf live bottom area.

4. Chemosynthetic Communities

There are no IPFs (including emissions, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities that could cause impacts to chemosynthetic communities.

Operations proposed in this plan are in water depths of 238 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters); therefore, REI's proposed operations in South Marsh Island 149 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in South Marsh Island 149 include disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: Bottom area disturbances resulting from the emplacement of drill rigs, the drilling of wells and the installation of platforms and pipelines would increase water-column turbidity and re-suspension of any accumulated pollutants, such as trace metals and excess nutrients. This would cause short-lived impacts on water quality conditions in the immediate vicinity of the emplacement operations.

Effluents: Levels of contaminants in drilling muds and cuttings and produced water discharges, discharge-rate restrictions and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to water quality.

Accidents: Oil spills have the potential to alter offshore water quality; however, it is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. Between 1980 and 2000, OCS operations produced 4.7 billion barrels of oil and spilled only 0.001 percent of this oil, or 1 bbl for every 81,000 bbl produced. The spill risk related to a diesel spill from drilling operations is even less. Between 1976 and 1985, (years for which data were collected), there were 80 reported diesel spills greater than one barrel associated with drilling activities. Considering that there were 11,944 wells drilled, this is a 0.7 percent probability of an occurrence. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved components and small oil droplets. Dispersion by currents and microbial degradation would remove the oil from the water column and dilute the constituents to background levels. Historically, changes in offshore water quality from oil spills have only been detected during the life of the spill and up to several months afterwards. Most of the components of oil are insoluble in water and therefore float. The activities proposed in this plan will be covered by REI's Regional Oil Spill Response Plan (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities which could cause impacts to water quality.

6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in South Marsh Island 149 include physical disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: The emplacement of a structure or drilling rig results in minimal loss of bottom trawling area to commercial fishermen. Pipelines cause gear conflicts which result in losses of trawls and shrimp catch, business downtime and vessel damage. Most financial losses from gear conflicts are covered by the Fishermen's Contingency Fund (FCF). The emplacement and removal of facilities are not expected to cause significant adverse impacts to fisheries.

Effluents: Effluents such as drilling fluids and cuttings discharges contain components and properties which are detrimental to fishery resources. Moderate petroleum and metal contamination of sediments and the water column can occur out to several hundred meters down-current from the discharge point. Offshore discharges are expected to disperse and dilute to very near background levels in the water column or on the seafloor within 3,000 m of the discharge point, and are expected to have negligible effect on fisheries.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on fisheries; however, it is unlikely that such an event would occur from the proposed activities (refer to **Item 5**, Water Quality). The effects of oil on mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capacity of adult fish and shellfish to avoid the spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no IPFs from emissions, or wastes sent to shore for disposal from the proposed activities which could cause impacts to fisheries.

7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale, occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in South Marsh Island 149 include emissions, effluents, discarded trash and debris, and accidents.

Emissions: Noises from drilling activities, support vessels and helicopters may elicit a startle reaction from marine mammals. This reaction may lead to disruption of marine mammals' normal activities. Stress may make them more vulnerable to parasites, disease, environmental contaminants, and/or predation (Majors and Myrick, 1990). There is little conclusive evidence for long-term displacements and population trends for marine mammals relative to noise.

Effluents: Drilling fluids and cuttings discharges contain components which may be detrimental to marine mammals. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of debris have caused the death or serious injury of marine mammals (Laist, 1997; MMC, 1999). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm marine mammals. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA).

REI will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the twenty-eight species of whales and dolphins, and the single species of manatee that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at

(305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in REI's OSRP is considered to be low when compared with the constituents and fractions of crude oils and diesel products. The activities proposed in this plan will be covered by REI's OSRP (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact marine mammals.

8. Sea Turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations include emissions, effluents, discarded trash and debris, and accidents. GulfCet II studies sighted most loggerhead, Kemp's ridley and leatherback sea turtles over shelf waters. Historically these species have been sighted up to the shelf's edge. They appear to be more abundant east of the Mississippi River than they are west of the river (Fritts et al., 1983b; Lohoefener et al., 1990). Deep waters may be used by all species as a transitory habitat.

Emissions: Noise from drilling activities, support vessels, and helicopters may elicit a startle reaction from sea turtles, but this is a temporary disturbance.

Effluents: Drilling fluids and cuttings discharges are not known to be lethal to sea turtles. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). REI will operate in accordance with the regulations and also avoid accidental loss of

solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the Marine Mammal and Sea Turtle Stranding Hotline at (800) 799-6637, or the Marine Mammal Stranding Network at (305) 862-2850. In addition, if the injury or death was caused by a collision with a contract vessel, the MMS must be notified within 24 hours of the strike by email to protectedspecies@mms.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

All sea turtle species and their life stages are vulnerable to the harmful effects of oil through direct contact or by fouling of their food. Exposure to oil can be fatal, particularly to juveniles and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to the possibility of collisions with sea turtles. The activities proposed in this plan will be covered by REI's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact sea turtles.

9. Air Quality

South Marsh Island 149 is located 195 miles from the Breton Wilderness Area and 87 miles from shore. Applicable emissions data is included in Appendix G of the Plan.

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions for the proposed activities do not exceed the annual exemption levels as set forth by MMS. Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of South Marsh Island 149 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which would impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in South Marsh Island 149 include disturbances to the seafloor. South Marsh Island 149 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. REI will report to MMS the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs which could impact prehistoric archaeological sites as a result of the proposed operations in South Marsh Island 149 include disturbances to the seafloor (structure emplacement) and accidents (oil spill). South Marsh Island 149 is located outside the Archaeological Prehistoric high probability line. REI will report to MMS the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). The activities proposed in this plan will be covered by REI's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix F**).

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal) from the proposed activities which could impact prehistoric archaeological sites.

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in South Marsh Island 149 include physical disturbances to the seafloor, effluents and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

Physical disturbances to the seafloor: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from bottom disturbing activities (e.g., anchoring, structure emplacement and removal).

Effluents: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from operational waste discharges. Levels of contaminants in drilling muds and cuttings and produced-water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to EFH.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on EFH. Oil spills that contact coastal bays and estuaries, as well as OCS waters when pelagic eggs and larvae are present, have the greatest potential to affect fisheries. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (including emissions, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact essential fish habitat.

2. Marine and Pelagic Birds

IPFs that could impact marine birds as a result of the proposed activities include air emissions, accidental oil spills, and discarded trash and debris from vessels and the facilities.

Emissions: Emissions of pollutants into the atmosphere from these activities are far below concentrations which could harm coastal and marine birds.

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Marine and pelagic birds feeding at the spill location may experience chronic, nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by

various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). REI will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

There are no other IPFs (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact marine and pelagic birds.

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H2S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No. 2003 G-17, sufficient information is included in **Appendix C** to justify our request that our proposed activities be classified by MMS as H_2S absent.

Coastal and Onshore

1. Beaches

IPFs from the proposed activities that could cause impacts to beaches include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (87 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

Discarded trash and debris: Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging

debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). REI will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact beaches.

2. Wetlands

Accidents: Oil spills could cause impacts to wetlands, however, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Due to the distance from shore (87 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact wetlands.

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Given the distance from shore (87 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

Discarded trash and debris: Coastal and marine birds are highly susceptible to entanglement in floating, submerged, and beached marine debris: specifically plastics. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the

United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). REI will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shore birds and coastal nesting birds.

4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (87 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F**).

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to coastal wildlife refuges.

5. Wilderness Areas

An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Due to the distance from the nearest designated Wilderness Area (195 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by REI's Regional OSRP (refer to information submitted in **Appendix F).**

6. Other Environmental Resources Identified

None

(C) Impacts on your proposed activities.

The site–specific environmental conditions have been taken into account for the proposed activities. No impacts are expected on the proposed activities from site-specific environmental conditions.

(D) Alternatives

No alternatives to the proposed activities were considered to reduce environmental impacts.

(E) Mitigation Measures

No mitigation measures other than those required by regulation will be employed to avoid, diminish, or eliminate potential impacts on environmental resources.

(F) Consultation

No agencies or persons were consulted regarding potential impacts associated with the proposed activities. Therefore, a list of such entities has not been provided.

(G) References

Authors:

American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.

Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.

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Vermeer, K. and R. Vermeer, 1975 Oil threat to birds on the Canadian west coast. The Canadian Field-Naturalist. 89:278-298.

Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- MMS EIS's:
  - GOM Deepwater Operations and Activities. Environmental Assessment. MMS 2000-001
  - GOM Central and Western Planning Areas Sales 166 and 168 Final Environmental Impact Statement. MMS 96-0058

APPENDIX I
COASTAL MANAGEMENT CONSISTENCY INFORMATION

Relevant enforceable policies were considered in certifying consistency for Louisiana. A certificate of Coastal Management Consistency for the State of Louisiana is enclosed as ***Attachment I-1***.

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION
JOINT INITIAL SUPPLEMENTAL
DEVELOPMENT OPERATIONS COORDINATION DOCUMENT
SOUTH MARSH ISLAND BLOCKS 149 AND 152
OCS-G 02592 AND 27091

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

Ridgelake Energy, Inc.

Lessee or Operator

John V. Rush

Certifying Official

11/16/05

Date

U.S. Department of the Interior
Minerals Management Service

OMB Control Number: 1010-0049
OMB Approval Expires: August 31, 2006

OCS PLAN INFORMATION FORM

GENERAL INFORMATION

Type of OCS Plan:		Exploration Plan (EP)	X	Development Operations Coordination Document (DOCD)
Company Name:	Ridgelake Energy, Inc.			MMS Operator Number: 02066
Address:	3636 North Causeway Blvd., Suite 300			Contact Person: Cheryl Murphy
	Metairie, LA 70002-7216			Phone Number: (281) 578-3388
				Email Address: cheryl.murphy@jccteam.com

Lease(s): G-02592 & 27091	Area: South Marsh Island	Block(s):149 & 152	Project Name (If Applicable): N/A
Objective(s): ☐Oil ☒Gas ☐Sulphur ☐Salt	Onshore Base: Intracoastal City		Distance to Closest Land (Miles): 87

Description of Proposed Activities (Mark all that apply)

☐ Exploration drilling	☒ Development drilling
☐ Well completion	☒ Installation of production platform
☐ Well test flaring (for more than 48 hours)	☒ Installation of production facilities
☐ Installation of caisson or platform as well protection structure	☐ Installation of satellite structure
☐ Installation of subsea wellheads and/or manifolds	☒ Commence production
☐ Installation of lease term pipelines	☐ Other (Specify and describe)

Have you submitted or do you plan to submit a Conservation Information Document to accompany this plan?		Yes	X	No
Do you propose to use new or unusual technology to conduct your activities?		Yes	X	No
Do you propose any facility that will serve as a host facility for deepwater subsea development?		Yes	X	No
Do you propose any activities that may disturb an MMS-designated high-probability archaeological area?		Yes	X	No
Have all of the surface locations of your proposed activities been previously reviewed and approved by MMS?		Yes	X	No

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Install Production Platform and Facilities	02/01/06	02/15/06	15
Install ROW Pipeline and Tie-in	02/16/06	02/25/06	10
Drill and Case Well No. D-1	02/16/06	03/15/06	28
Drill and Case Well No. D-2	03/16/06	04/13/06	28
Drill and Case Well No. D-3	04/14/06	05/11/06	28
Complete Well No. D-1	05/12/06	05/26/06	15
Complete Well No. D-2	05/27/06	06/10/06	15
Complete Well No. D-3	06/11/06	06/25/06	15
Commence Production	06/26/06	06/26/06	1

Description of Drilling Rig		Description of Production Platform	
☐ Jackup	☐ Drillship	☐ Caisson	☐ Tension leg platform
☐ Gorilla Jackup	☒ Platform rig	☐ Well protector	☐ Compliant tower
☐ Semisubmersible	☐ Submersible	☒ Fixed platform	☐ Guyed tower
☐ DP Semisubmersible	☐ Other (Attach Description)	☐ Subsea manifold	☐ Floating production system
☐ Drilling Rig Name (If Known):		☐ Spar	☐ Other (Attach description)

Description of Lease Term Pipelines

From (Facility/Area/Block)	To (Facility/Area/Block)	Diameter (inches)	Length (Feet)

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): D-1			Subsea Completion
Anchor Radius (if applicable) in feet: N/A			☐ Yes ☒ No

	Surface Location	Bottom-Hole Location (For Wells)
Lease No.	OCS-G 02592	
Area Name	South Marsh Island	
Block No.	149	
Blockline Departures (in feet)	N/S Departure: 1259' FSL	
	E/W Departure: 1553' FEL	
Lambert X-Y coordinates	X: 1,749,135.51	
	Y: -165,816.41	
Latitude/ Longitude	Latitude: 28° 12' 30.257"	
	Longitude: -92° 06' 42.767"	

TVD (Feet):	MD (Feet):	Water Depth (Feet): 238

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

Paperwork Reduction Act of 1995 Statement: The Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35) requires us to inform you that MMS collects this information as part of an Exploration Plan or Development Operations Coordination Document submitted for MMS approval. We use the information to facilitate our review and data entry for OCS plans. We will protect proprietary data according to the Freedom of Information Act and 30 CFR 250.196. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid Office of Management and Budget Control Number. The use of this form is voluntary. The public reporting burden for this form is included in the burden for preparing Exploration Plans and Development Operations Coordination Documents. We estimate that burden to average 580 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, Mail Stop 4230, Minerals Management Service, 1849 C Street, N.W., Washington, DC 20240.

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): D-2			Subsea Completion
Anchor Radius (if applicable) in feet: N/A			☐ Yes ☒ No
	Surface Location	**Bottom-Hole Location (For Wells)**	
Lease No.	OCS-G 02592		
Area Name	South Marsh Island		
Block No.	149		
Blockline Departures (in feet)	N/S Departure: 1259' FSL		
	E/W Departure: 1553' FEL		
Lambert X-Y coordinates	X: 1,749,135.51		
	Y: -165,816.41		
Latitude/ Longitude	Latitude: 28° 12' 30.257"		
	Longitude: -92° 06' 42.767"		
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 238

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

Proposed Well/Structure Location			
Well or Structure Name/Number (If renaming well or structure, reference previous name): D-3			Subsea Completion
Anchor Radius (if applicable) in feet: N/A			☐ Yes ☒ No
	Surface Location	**Bottom-Hole Location (For Wells)**	
Lease No.	OCS-G 02592		
Area Name	South Marsh Island		
Block No.	149		
Blockline Departures (in feet)	N/S Departure: 1259' FSL		
	E/W Departure: 1553' FEL		
Lambert X-Y coordinates	X: 1,749,135.51		
	Y: -165,816.41		
Latitude/ Longitude	Latitude: 28° 12' 30.257"		
	Longitude: -92° 06' 42.767"		
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 238

Anchor Locations for Drilling Rig or Construction Barge (If anchor radius supplied above, not necessary)

Anchor Name or No.	Area	Block	X Coordinate	Y Coordinate	Length of Anchor Chain on Seafloor
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	
			X =	Y =	

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