UNITED STATES GOVERNMENT
MEMORANDUM

April 22, 2005

To: Public Information (MS 5034)

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

Subject: Public Information copy of plan

Control #	-	S-06658
Type	-	Supplemental Exploration Plan
Lease(s)	-	OCS-G25536 Block - 298 Galveston Area
Operator	-	Gryphon Exploration Company
Description	-	Well Protector and Well C
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.

Karen Dunlap
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WP/C		5954 FSL, 6400 FEL	G25536/GA/298
WELL/C	G25536/GA/298	5954 FSL, 6400 FEL	G25536/GA/298

PUBLIC COPY
April 5, 2005

SUPPLEMENTAL EXPLORATION PLAN

Lease Number:	OCS-G 25536
Area/Block:	Galveston Block 298
Prospect Name:	Guns 'n Roses
Offshore:	Texas

Submitted by:

Gryphon Exploration Company
1200 Smith Street, Suite 1740
Houston, Texas 77002

Jack Shelledy
(713) 571-1800
jds@gryphon-exploration.com

Estimated start up date: May 19, 2005

Authorized Representative:
Valerie Land
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
valerie.land@jccteam.com

No. Copies Being Submitted:
Proprietary: 5
Public Info: 4

For MMS:
Plan No. _____
Assigned to: _____

GRYPHON EXPLORATION COMPANY

SUPPLEMENTAL EXPLORATION PLAN

LEASE OCS-G 25536

GALVESTON BLOCK 298

APPENDIX A
CONTENTS OF PLAN

Gryphon Exploration Company (Gryphon) is the designated operator of the subject oil and gas lease.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

This Supplemental Exploration Plan provides for the drilling, completion and testing of satellite Well Location C in Lease OCS-G 25536, Galveston Block 298 and the installation of a well protective structure over the proposed location. The well protective structure will be installed with the drilling unit. There are no associated anchors with these operations.

(B) LOCATION

Included as ***Attachments A-1 and A-2*** is a proposed well location plat and bathymetry map showing the surveyed water depths in this area, additional well information on the proposed location is included on the OCS Plan Information Form. A schematic of the well protective structure is included as ***Attachment A-3***.

(C) DRILLING UNIT

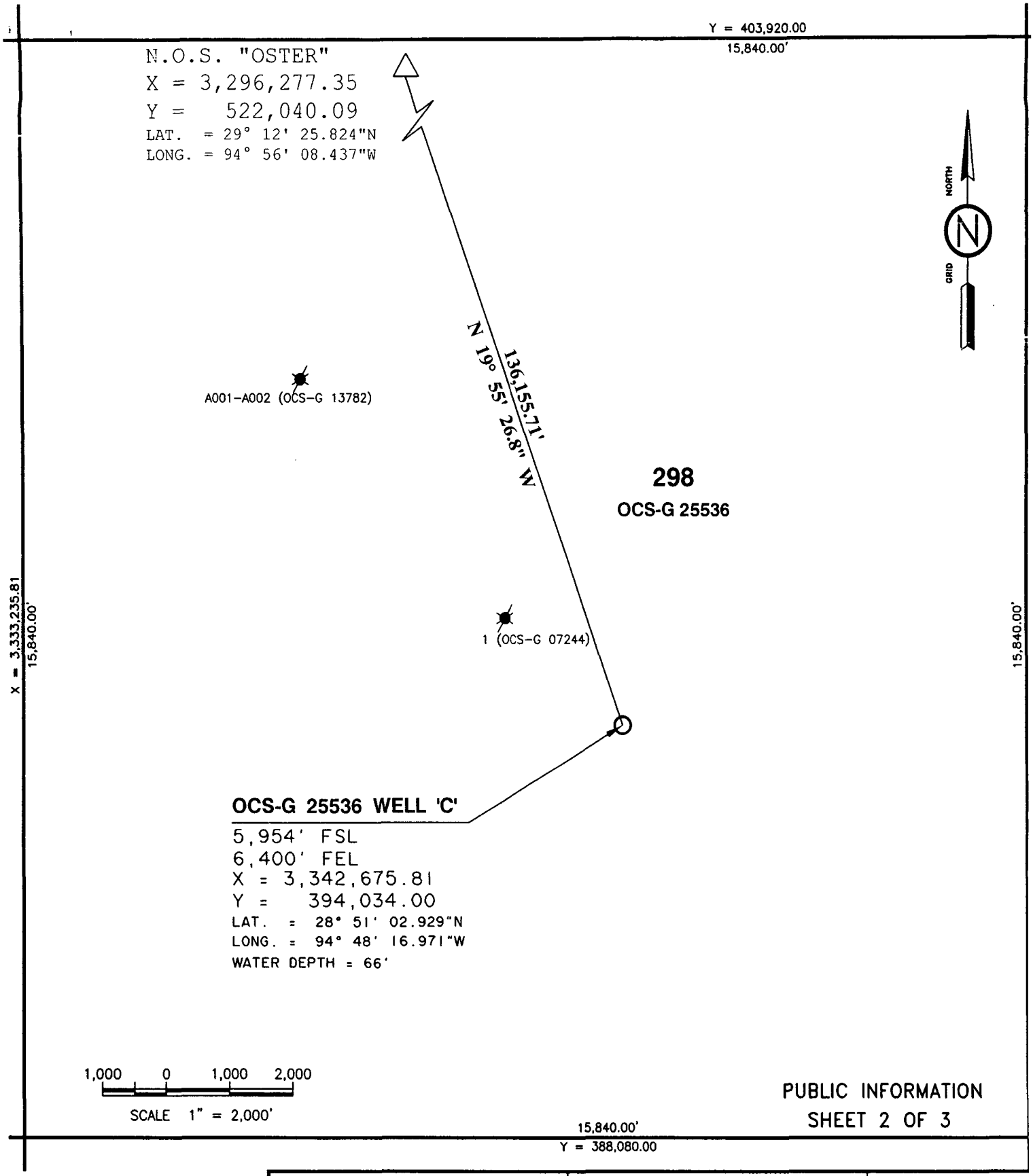
A description of the drilling unit is included in Appendix J, on the OCS Plan Information Form. Rig specifications will be made part of the Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, 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.

Operator will ensure employees and contractor personnel engaged in well control 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.

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



PUBLIC INFORMATION
SHEET 2 OF 3

DATUM: NAD 27	GRYPHON EXPLORATION COMPANY
SPHEROID: CLARKE 1866	
PROJECTION: LAMBERT	
ZONE: TEXAS SOUTH CENTRAL	

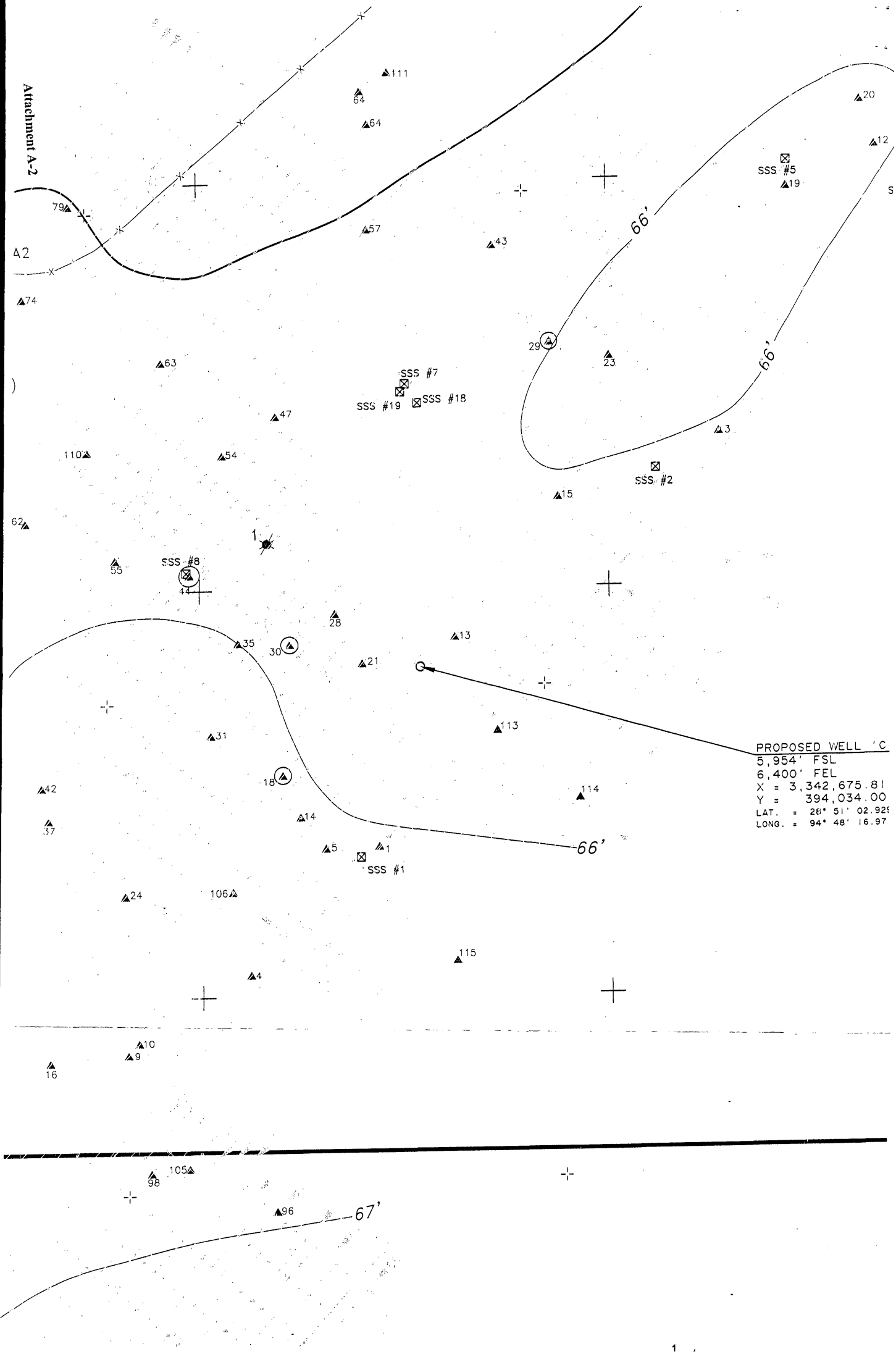
TESLA OFFSHORE
36499 Perkins Road
Prairieville, Louisiana 70769
Tel: 225-673-2163
Fax: 225-744-3116

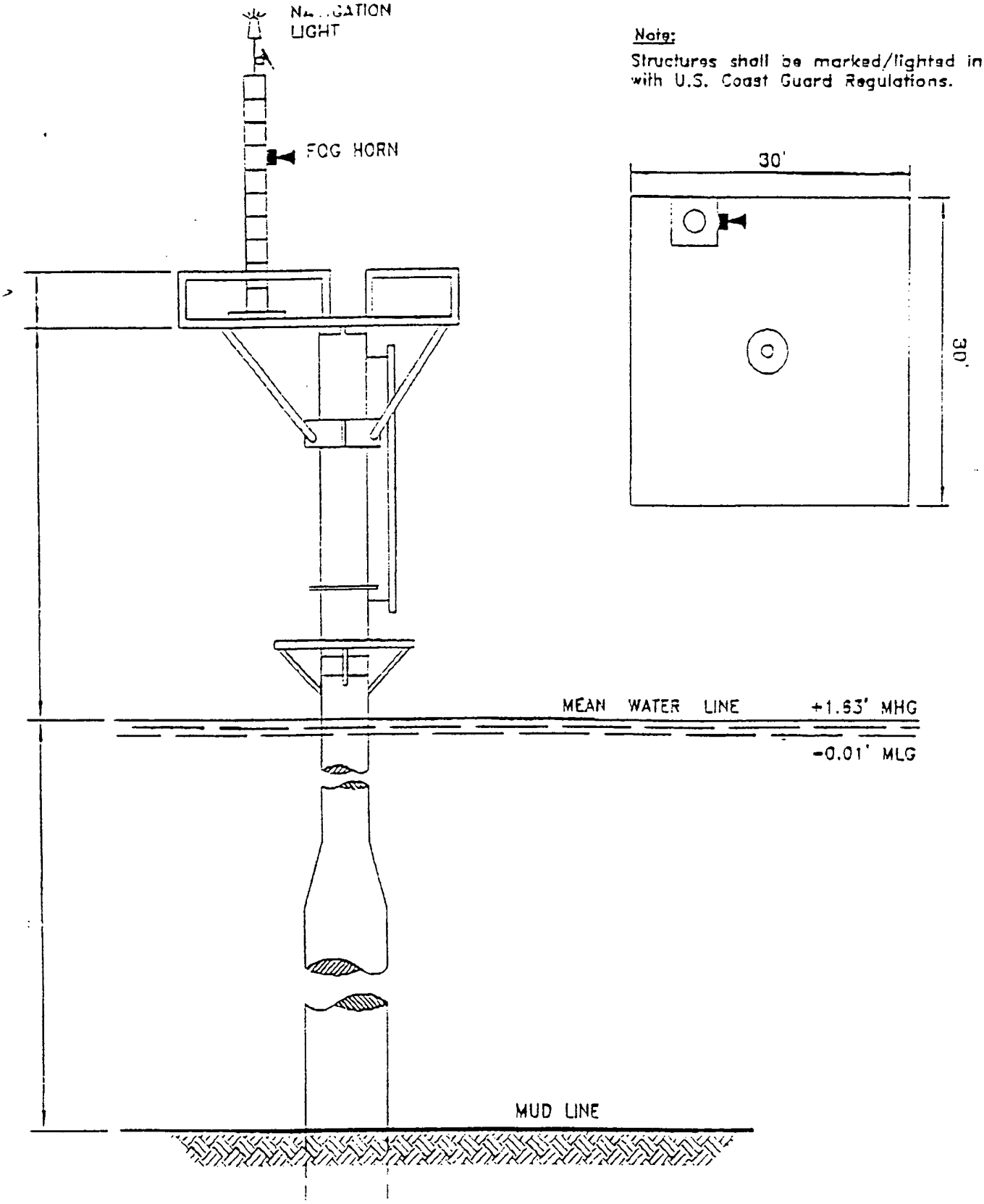
PROPOSED WELL LOCATION

OCS-G 25536 WELL 'C'
BLOCK 298
GALVESTON AREA

GULF OF MEXICO

DRAWN BY:	DATE:	CHECKED BY:	DRAWING No.:
R. NEWCHURCH	03/28/2005		05-084-C
REV. DATE:	REV. No.:	SCALE: AS-SHOWN	JOB No.: 05-084


Attachment A-2
111
64
64
20
12
SSS #5
19
S
79
57
43
66'
42
74
29
23
66'
63
SSS #7
SSS #19
SSS #18
47
3
110
54
SSS #2
15
62
1
SSS #8
55
44
28
35
30
13
21
PROPOSED WELL 'C
5,954' FSL
6,400' FEL
X = 3,342,675.81
Y = 394,034.00
LAT. = 28° 51' 02.92
LONG. = 94° 48' 16.97
113
31
18
42
114
14
37
5
1
66'
SSS #1
24
106
115
4
10
9
16
105
98
96
67'



TYPICAL CAISSON WELL PROTECTOR

Attachment A-3

APPENDIX B
GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

Valerie Land/ Brenda Montalvo
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
E-mail address: valerie.land@jccteam.com/brenda.montalvo@jccteam.com

(B) PROSPECT NAME

Guns 'n Roses

(C) NEW OR UNUSUAL TECHNOLOGY

Gryphon does not propose to use any new or unusual technology to carry out the proposed exploration 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.

(D) BONDING INFORMATION

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

(E) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as ***Attachment B-1***, showing Galveston Block 298 located approximately 22 miles from the nearest shoreline and approximately 24 miles from the onshore support base in Galveston, Texas.

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
Crew Boat	3
Supply Boat	4
Helicopter	2

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

(F) LEASE STIPULATION

Exploration activities are subject to the following stipulation attached to Lease OCS-G 25536 Galveston Block 298.

- **Marine Protected Species**
  Lease Stipulation No. 6 is meant to reduce the potential taking of marine protected species. Gryphon 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.

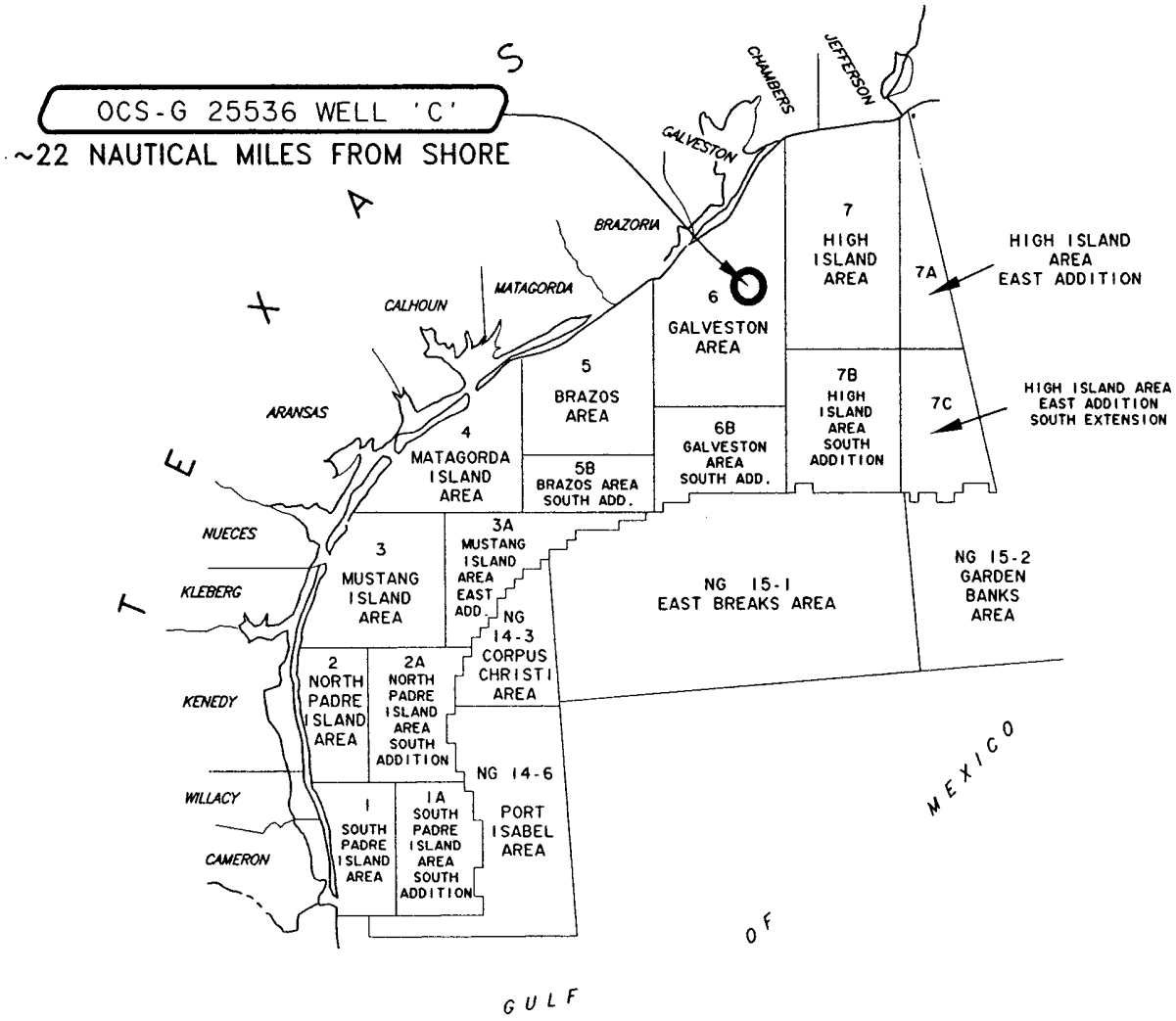
SPECIAL CONDITIONS

There are no related OCS facilities other than those proposed in this plan.

ARCHAEOLOGY SURVEY BLOCKS

Galveston Block 298 has been determined as potentially containing historic and prehistoric archaeological properties; therefore, an Archaeological Survey Report has been prepared in accordance with NTL 2002-G01, and is being submitted under separate cover.

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



VICINITY MAP

DATUM: NAD 27	GRYPHON EXPLORATION COMPANY
SPHEROID: CLARKE 1866	
PROJECTION: LAMBERT	PROPOSED WELL LOCATION
ZONE: TEXAS SOUTH CENTRAL	OCS-G 25536 WELL 'C' BLOCK 298 GALVESTON AREA 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.:
R. NEWCHURCH	03/28/2005		05-084-C
REV. DATE:	REV. No.:	SCALE: NOT TO SCALE	JOB No.: 05-084

Attachment B-1

APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H_2S INFORMATION

(A) STRUCTURE CONTOUR MAP
Proprietary Information.

(B) TRAPPING FEATURES
Proprietary Information.

(C) DEPTH OF GEOPRESSURE
Proprietary Information.

(D) INTERPRETED DEEP SEISMIC LINES
Proprietary Information.

(E) GEOLOGICAL STRUCTURE CROSS-SECTIONS
Proprietary Information.

(F) SHALLOW HAZARDS REPORT
A shallow hazards survey was conducted over Galveston Block 298 by Tesla Offshore, LLC. Three 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 drilling operations, and is included as ***Attachment C-1.***

(H) HIGH-RESOLUTION SEISMIC LINES
Proprietary Information.

(I) STRATIGRAPHIC COLUMN
Proprietary Information.

(J) TIME VS DEPTH TABLES
Proprietary Information.

(K) HYDROGEN SULFIDE INFORMATION
In accordance with Title 30 CFR 250. 490(c) and NTL No. 2003-G17, Gryphon requests that the Minerals Management Service classify Galveston Block 298 as an area where the absence of hydrogen sulfide has been confirmed.

APPENDIX D
BIOLOGICAL AND PHYSICAL INFORMATION

CHEMOSYNTHETIC INFORMATION

This EP 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

Galveston Block 298 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.

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

March 30, 2005

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

RE: Gryphon Exploration Company
Proposed OCS-G 25536 'C' Surface Location
Block 298, Galveston Area
Archaeological & Shallow Hazard Analysis

Dear Staff:

Gryphon Exploration Company proposes to drill the OCS-G 25536 'C' well location at:

- ***5,954' FSL & 6,400' FEL of Block 298, Galveston Area***

Tesla Offshore, LLC surveyed the lease in June 2004 and March 2005 along a 50-meter primary grid spacing with 900-meter tie lines. Gryphon Exploration Company operates the lease and submits this shallow hazard analysis and archaeological assessment of the proposed drill site in compliance with **NTL No. 98-20 and NTL No. 2002-G01** 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 66 feet surrounding the proposed drill site, and there were no topographic irregularities along the seafloor.
- ***Seafloor soils*** are clayey sand (MMS database).
- ***Identified man-made features*** include the Devon 8" pipeline (Segment 10705) about 6,500 feet NW of location. P&A #1 well is 2,400 feet NW of the proposed well, and the P&A #A-2 well is 7,000 feet NW of the proposed location.
- ***Magnetic anomalies*** nearest the proposed well site included #13 approximately 500 feet NE of the proposed drill site. The small ferrous source will not be disturbed by rig moves or drilling. The closest obstruction is SSS #1 approximately 2,400 feet SSW of the proposed location. The seafloor target will be avoided by at least 150 feet when deploying any anchors from support vessels. The object will not be disturbed by rig moves or drilling of the proposed well site, and the sonar data indicated that the proposed drill site was clear of shipwrecks and debris. The closest magnetic anomaly designated for avoidance was #30, which was 1,600 feet WNW of the well site. The anomaly will be avoided by at least 105 feet when deploying any anchors.

- ***Subbottom Data*** showed 11 feet of tightly laminated sand layers overlying top of the Pleistocene Beaumont clay formation, which contains 15 feet of dense, oxidized clay. A normal fault strikes NE/SW approximately 2,300 feet east of the location. The proposed borehole will not intersect the fault, which is downthrown to the ESE. A channel cutting the Pleistocene clay is 14 feet BML approximately 7,000 feet north of the proposed well. A deeper channel at 195 feet BML is buried 1,900 feet SW of the proposed well. The channels will not affect drilling. Seismic analog sections did not show any amplitude anomalies. Processed 3-D data will be used to resolve bright spots and faults below the 500 milliseconds of recorded analog data.

The operator has identified the primary hazards to rig movements, anchor deployments, and drilling. Subbottom profiles indicated that the near-seafloor layers at the proposed well site exhibit low probability for the occurrence of prehistoric archaeological features. The proposed drilling will not disturb any shipwrecks based on the geophysical data within the lease.

The proposed well site, pipeline, P&A wells, and designated magnetic anomalies and sonar targets 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 designated magnetic anomalies.

Gryphon Exploration Company 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
Marine Archaeologist

APPENDIX E
WASTES AND DISCHARGES INFORMATION

DISCHARGES

All discharges associated with operations proposed in this Exploration Plan 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).

For discharges, the type and general characteristics of the waste, the amount to be discharged (volume or rate), the maximum discharge rate, a description of any treatment or storage and the discharge location and method for each type of discharge are provided in tabular format in ***Attachment E-1.*** For purposes of this Appendix, the term discharges describe those wastes generated by the proposed activities that will be disposed of by releasing them into the waters of the Gulf of Mexico at the site where they are generated, usually after receiving some form of treatment before they are released, and in compliance with applicable NPDES permits.

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-2.*** 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.

Discharges Table (Wastes to be discharged overboard)

Type of Waste Approximate Composition	Amount to be Discharged (volume or rate)	Maximum Discharge Rate	Treatment and/or Storage, Discharge Location* and Discharge Method
Water-based drilling fluids	5,000 bbl/well	1000 bbl/hr	Galveston Blocks 298. Discharge overboard
Drill cuttings associated with water-based fluids	3,000 bbl/well	1,000 bbl/hr	Galveston Block 298. Discharge overboard
Drill cuttings associated with synthetic drilling fluids	NA	NA	NA
Muds, cuttings and cement at the seafloor	Cement – 200 bbls WBM-5,000 bbls Cuttings-3,000 bbls	NA	Galveston Block 298. Discharge at seafloor
Produced Water	NA	NA	NA
Sanitary wastes	15 gal/person/day	NA	Galveston Block 298. Chlorinate and discharge
Domestic waste	15 gal/person/day	NA	Galveston Block 298. Remove floating solids and discharge
Deck Drainage	0-200 bbl/day Dependant upon rainfall	10 bbl per hour	Galveston Block 298. Remove oil and grease and discharge
Well treatment workover or completion fluids	NA	NA	NA
Uncontaminated fresh or seawater	5,000 bbl (drilling)	NA	Galveston Block 298. Discharge overboard
Desalinization Unit Water	150 bbl/day	NA	Galveston Block 298. Discharge overboard
Uncontaminated bilge water	500 bbl	NA	Galveston Block 298. Discharge overboard
Uncontaminated ballast water	1,000 bbl	NA	Galveston Block 298. Discharge overboard
Misc. discharges to which treatment chemicals have been added.	100 bbl/day	10 bbl/hr	Galveston Block 298. Discharge overboard
Miscellaneous discharges (permitted under NPDES) (excess cement with cementing chemicals)	100 bbl	NA	Galveston Block 298. Discharge at seafloor without treatment

* Area, block, MMS facility ID (if available)

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
Spent oil-based drilling fluids and cuttings	0 bbl/well	0 bbl/day	NA	NA
Spent synthetic-based drilling fluids and cuttings	0 bbl/well	0 bbl/day	NA	NA
Oil-contaminated produced sand	0 1b/yr	0 bbl/day	NA	NA
Waste Oil	183 bbl/yr	0.51 bbl/day	Chemical Waste Management;Alvin,Tx	Loaded in tote tanks and transported by boat to shorebase.
Produced water	NA	NA	NA	NA
Norm-contaminated wastes	0 tons	NA	NA	NA
Trash and debris	1,000 ft^3	3 ft^3 /day	Waste Management; Galveston, Tx	Transported to shorebase
Chemical product wastes	0 bbl/yr	0 bbl/day	NA	NA
Chemical product wastes	0 bbl	0 bbl/day	NA	NA
Workover fluids	0 bbl	0 bbl/day	NA	NA

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

APPENDIX F
OIL SPILL INFORMATION

1. Regional OSRP Information

Gryphon Exploration Company's Regional Oil Spill Response Plan (OSRP) was approved on November 3, 2004 through October 31, 2006. Activities proposed in this EP will be covered by the Regional OSRP.

2. OSRO Information

Gryphon'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.

3. Worst-Case Scenario Comparison

Category	Regional OSRP WCD	EP WCD
Type of Activity	Exploratory Drilling	Exploratory Drilling
Facility Location (Area/Block)	GA 313	GA 298
Facility Designation		
Distance to Nearest Shoreline (miles)	13	22
Volume Storage tanks (total) Uncontrolled blowout Total Volume	1500 bbls	1500 bbls
Type of Oil(s) (crude, condensate, diesel)	Condensate	Condensate
API Gravity	43°	43°

Gryphon has determined that the worst-case scenario from the activities proposed in this EP does not supercede the worst-case scenario from our approved regional OSRP.

Since Gryphon has the capability to respond to the worst-case spill scenario included in our regional OSRP approved on November 3, 2005, and since the worst-case scenario determined for our EP does not replace the worst-case scenario in our regional OSRP, I hereby certify that Gryphon 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 EP.

4. FACILITY TANKS, PRODUCTION FACILITIES

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)	Jack-up	1100 bbls	2	2200 bbls	32.4
Dirty Oil Tank	Jack-up	100 bbls	1	100 bbls	45

5. SPILL RESPONSE SITES

Primary Response Equipment Location	Preplanned Staging Location
Galveston, Texas	Galveston, Texas

6. PRODUCED LIQUID HYDROCARBONS TRANSPORTATION VESSELS

Gryphon does not propose the transfer of stored production or well test fluids under this EP.

7. OIL- AND SYNTHETIC-BASED DRILLING FLUIDS

Gryphon does not propose the use of oil or synthetic based drilling fluids for this EP.

8. SPILL RESPONSE DISCUSSION FOR NEPA ANALYSIS

For the purpose of NEPA and Coastal Zone Management Act analysis, the largest spill volume originating from the proposed activity would be a well blowout during drilling operations, estimated to be 1,500 barrels of condensate with an API gravity of 43°.

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 26% probability of impact to the shorelines of Matagorda County, Texas. Matagorda County stretches from Matagorda Bay, across the Colorado River and up to the border of San Bernard Wildlife Refuge (immediately west of the San Bernard River). The county includes Matagorda Peninsula on the Gulf coast and Matagorda Bay. This area is primarily open beach. However, marshland exists along the east side of Matagorda Bay. Several bird rookeries are present around the peninsula. Seagrass is present off of Matagorda Peninsula on the bay side. Additional discussion of protection strategies for potentially affected resources is included in Gryphon Exploration's Regional Oil Spill Response Plan.

Response

Gryphon Exploration 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 condensate, an ADIOS weathering model was run on a similar product from the ADIOS oil database (West Delta 97). The results indicate 73% of the product would be evaporated/dispersed within 12 hours, leaving approximately 405 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 1,500 barrels. The list estimates individual times needed for procurement, load out, travel time to the site and deployment. If appropriate, 2 sorties (4,000 gallons) from the DC-4 should disperse approximately 1, 714 barrels of oil.

Offshore response strategies may also include attempting to skim utilizing two (2) Fast Response Units (FRU's) and the R/V Timbalier Bay spill response vessel, with a total derated skimming capacity of 11,800 barrels. Temporary storage associated with the identified skimming equipment equals 465 barrels. If additional temporary storage is needed, a 23,000 barrel open ocean storage 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 Plan (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 Gryphon Exploration'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 ten (10) day impact. The results are tabulated below.

Area/Block	OCS-G	Launch Area	Land Segment and/or Resource	Conditional Probability (%) within 10 days
Drilling, Completion, & Testing of Well Location C: GA 298	25536	W13	Kenedy County, TX	1
			Kleberg County, TX	1
			Nueces County, TX	1
			Aransas County, TX	2
			Calhoun County, TX	4
			Matagorda County, TX	**26**
			Brazoria County, TX	17
			Galveston County, TX	18
			Jefferson County, TX	3
			Cameron County, LA	1

WCD Scenario – Exploratory Drilling – BASED ON LOSS OF WELL UNCONTROLLED BLOWOUT
Uncontrolled Blowout, GA 298
1,500 bbls of Condensate, API Gravity 43°

FIGURE F-2 Equipment Response Time to: Galveston 298

	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 4 Spray Aircraft	--	--	2	ASI/HOUMA	HOUMA	0					
	Spotter Plane	--	--	1	ASI/HOUMA	HOUMA	0					
	Spotter Personnel			1	ASI/HOUMA	HOUMA	1	1	1	2	0	4
B	FRU/Expandi	3,400	200	1	CGA/LAKE CHARLES	CAMERON	0					
	Operators			6	STARS*	CAMERON	1					
	Utility Boat			1	Vessel of Opportunity	CAMERON	1					
	Crew Boat			1	Vessel of Opportunity	CAMERON	1	2	1	9.75	1	13.75
C	FRU/Expandi	3,400	200	1	CGA/GALVESTON	GALVESTON	0					
	Operators			6	STARS*	GALVESTON	1					
	Utility Boat			1	Vessel of Opportunity	GALVESTON	1					
	Crew Boat			1	Vessel of Opportunity	GALVESTON	1	2	1	2.5	1	6.5
D	R/V Timbalier Bay	5,000	65	1	CGA/GALVESTON	GALVESTON	.5					
	Operators			3	STARS*	GALVESTON	1	2	1	1.25	1	5.25
E	**INITIAL SUPPORT**											
	Spotter Helo	--	--	1	PHI/GALVESTON	SPILL SITE	1	1	--	1	--	2
	Surveillance Helo	--	--	1	PHI/GALVESTON	SPILL SITE	1	1	--	1	--	2
	Hand Held Radios	--	--	30	STARS*	GALVESTON	1.5	1.5	--	1	--	2.5
	Open Ocean Barge	--	23,000	1	CENAC/HOUMA	HOUMA	2	2	1	32	1	36
	Tugs		--	2	CENAC/HOUMA	HOUMA	2					
	TOTAL	11,800	23,465									

*STARS contractor called out by MSRC

9. POLLUTION PREVENTION MEASURES

Gryphon 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

Screen Procedures for EP'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
Are your proposed exploration activities located east of 87.5° W longitude?		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 for more than 48 continuous hours from any proposed well?		X
Do you propose to burn produced hydrocarbon liquids?		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)
Particular matter (PM)	3.37	732.60	3.37
Sulphur dioxide (SO_2)	15.46	732.60	15.46
Nitrogen oxides (NO_x)	116.17	732.60	116.17
Volatile organic compounds (VOC)	3.78	732.60	3.78
Carbon Monoxide (CO)	27.21	26694.84	27.21

[1]For activities proposed in your EP, 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: Brenda Montalvo
(281) 578-3388
brenda.montalvo@hotmail.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)

Please find enclosed as ***Attachment H-1*** an Environmental Impact Analysis covering the proposed drilling and completion operations in Green Canyon Block 298.

Gryphon Exploration Company (Gryphon)

Supplemental Exploration Plan
Galveston Block 298
OCS-G 25536

(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)			X(7)			
Prehistoric archaeological sites			X(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:
   - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
   - o 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;
   - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
   - o 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 Galveston Block 298

Proposed operations consist of the drilling, completion, and testing of satellite Well Location C and the installation of well protective structure over the well location. These operations will be conducted using a jack-up rig.

1. Designated Topographic Features

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

Physical disturbances to the seafloor: Galveston Block 298 is 50 miles from the closest designated Topographic Features Stipulation Block (Claypile Bank); therefore, no adverse impacts are expected.

Effluents: Galveston Block 298 is 50 miles from the closest designated Topographic Features Stipulation Block (Claypile 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 Gryphon'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: Galveston Block 298 is 385 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: Galveston Block 298 is 385 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 Gryphon'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: Galveston Block 298 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: Galveston Block 298 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 Gryphon'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 66 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters); therefore, Gryphon's proposed operations in Galveston Block 298 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Galveston Block 298 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 Gryphon'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 Galveston Block 298 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 Gryphon'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 Galveston Block 298 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).

Gryphon 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 Gryphon'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 Gryphon'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). Gryphon 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 Gryphon'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

Galveston Block 298 is located 345 miles from the Breton Wilderness Area and 22 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 Galveston Block 298 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 cause impacts to known or unknown shipwreck sites as a result of the proposed operations in Galveston Block 298 are disturbances to the seafloor. Galveston Block 298 is located within the area designated by MMS as high-probability for occurrence of shipwrecks. Gryphon 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 that could cause impacts to shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Galveston Block 298 are physical disturbances to the seafloor and accidents (oil spills).

Physical Disturbances to the seafloor: Galveston Block 298 is located inside the Archaeological Prehistoric high probability lines. Gryphon 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 Gryphon'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 that could cause impacts to 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 Galveston Block 298 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 Gryphon'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 Gryphon'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). Gryphon 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 response capabilities that would be implemented, no

significant adverse impacts are expected. The activities proposed in this plan will be covered by Gryphon'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). Gryphon 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

Salt marshes and seagrass beds fringe the coastal areas of the Gulf of Mexico. Due to the distance from shore (22 miles), accidents (oil spills) represent an IPF which could impact these resources.

Accidents: Level of impact from an oil spill will depend on oil concentrations contacting vegetation, kind of oil spilled, types of vegetation affected, season of the year, pre-existing stress level of the vegetation, soil types, and numerous other factors. Light-oiling impacts will cause plant die-back with recovery within two growing seasons without artificial replanting. However, it is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water quality). If a spill were to occur, response capabilities as outlined in Gryphon's Regional OSRP (refer to information submitted in Appendix F) would be implemented.

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 wetlands.

3. Shore Birds and Coastal Nesting Birds

Galveston Island State Park (24 miles from Galveston Block 298) is a highly productive habitat for wildlife. Thousands of shore birds use the refuge as a wintering area. Also, wading birds nest on the refuge. The Galveston Island State Park provides habitat for colonies of nesting wading birds and seabirds as well as wintering shorebirds and waterfowl. The most abundant nesters are brown pelicans, laughing gulls, and royal, Caspian, and sandwich terns. IPFs from the proposed activities that could cause impacts to shore birds and coastal nesting birds are accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. The birds most vulnerable to direct effects of oiling include those species that spend most of their time swimming on and under the sea surface, and often aggregate in dense flocks (Piatt et al., 1990; Vauk et al., 1989). Coastal birds, including shorebirds, waders, marsh birds, and certain water fowl, may be the hardest hit indirectly through destruction of their feeding habitat and/or food source (Hansen, 1981; Vermeer and Vermeer, 1975). Direct oiling of coastal birds and certain seabirds is usually minor; many of these birds are merely stained as a result of their foraging behaviors. Birds can ingest oil when feeding on contaminated food items or drinking contaminated water.

Oil-spill cleanup operations will result in additional disturbance of coastal birds after a spill. 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 being 22 miles, Gryphon would immediately implement the response capabilities outlined in their 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). Gryphon 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: Galveston Block 298 is approximately 24 miles from the Galveston Island State Park. Management goals of the Galveston Island State Park are waterfowl habitat management, marsh restoration, providing sanctuary for nesting and wintering seabirds, and providing sandy beach habitat for a variety of wildlife species. IPFs from the proposed activities that could cause impacts to this coastal wildlife refuge are accidents (oil spills) and discarded trash and debris.

Impacts to shore birds and coastal nesting birds and to the beach, was covered in previous sections. Other wildlife species found on the refuges include nutria, rabbits, raccoons, alligators, and loggerhead turtles. Impacts to loggerhead turtles were also covered under a previous section.

It is unlikely that an oil spill would occur from the proposed activities (refer to **Item 5**, Water quality). Response capabilities would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Gryphon'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 (345 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 Gryphon'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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Daly, J.M. 1997. Controlling the discharge of synthetic-based drilling fluid contaminated cuttings in waters of the United States. U.S. Environmental Protection Agency, Office of Water. Work Plan, June 24, 1997.

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Laist, D.W. 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In: Coe, J.M. and D.B. Rogers, eds. Marine debris: sources, impacts, and solutions. New York, NY: Springer-Verlag. Pp. 99-139

Majors, A.P. and A.C. Myrick, Jr. 1990. Effects of noise on animals: implications for dolphins exposed to seal bombs in the eastern tropical Pacific purse-seine fishery–an annotated bibliography. NOAA Administrative Report LJ-90-06.

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Piatt, J.F., C.J. Lensink, W. Butler, M. Kendziorek, and D.R. Nysewander. 1990. Immediate impact of the Exxon Valdez oil spill on marine birds. The Auk. 107 (2): 387-397

Vauk , G., E. Hartwig, B. Reineking, and E. Vauk-Hentzelt. 1989. Losses of seabirds by oil pollution at the German North Sea coast. Topics in Marine Biology. Ros, J.D, ed. Scient. Mar. 53 (2-3): 749-754

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 ZONE MANAGEMENT CONSISTENCY INFORMATION

As authorized by the Federal Coastal Zone Management Act (CZMA), the State of Texas developed a Coastal Management Program (CMP) to allow for the review of proposed Federal license and permit activities affecting any coastal use or resource, in or outside of the Texas Coastal Zone.

The OCS related oil and gas exploratory and development activities having potential impact on the Texas Coastal Zone are based on the location of the proposed facilities, access to those sites, best practical techniques for drilling locations, drilling equipment guidelines for the prevention of adverse environmental effects, effective environmental protection, emergency plans and contingency plans.

Below are topics found in other sections of the plan and have been cross referenced for ease in locating:

Topic	Cross Reference	Comments
Construction, Operation and Maintenance of Oil and Gas Exploration and Production Facilities	APPENDIX A and B	
Discharges of Wastewater and Disposal of Waste from Oil and Gas Exploration and Production Activities	APPENDIX E and H	
Construction and Operation of Solid Waster Treatment, Storage, and Disposal Facilities	APPENDIX G	
Prevention, Response, and Remediation of Oil Spills	APPENDIX F	
Discharge of Municipal and Industrial Waste Water to Coastal Waters	APPENDIX B and E	
Development in Critical Areas	APPENDIX H	
Construction of Waterfront Facilities and Other Structures on Submerge lands	APPENDIX B and H	
Dredging and Dredged Material Disposal and Placement	APPENDIX H	
Construction in the Beach / Dune System	APPENDIX H	
Alteration of Coastal Historic Areas	APPENDIX H	
Transportation	APPENDICES B	
Emission of Air Pollutants	APPENDIX G	
Appropriations of Water		There will be no fresh water appropriations as a result of our operations
Marine Fishery Management	APPENDIX B and H	
Administrative Policies		Proposed operations are 22 miles offshore, therefore, not subject to Section 501.15 regarding major actions

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

COASTAL ZONE MANAGEMENT
CONSISTENCY CERTIFICATION
SUPPLEMENTAL EXPLORATION PLAN
GALVESTON BLOCK 298
OCS-G 25536

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

Gryphon Exploration Company
Lessee or Operator

Certifying Official

4/7/05
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:	X	Exploration Plan (EP)		Development Operations Coordination Document (DOCD)
Company Name: Gryphon Exploration Company				MMS Operator Number: 02466
Address: 1200 Smith Street, Suite 1740 Houston, Texas 77002				Contact Person: Valerie Land/ Brenda Montalvo Phone Number: (281) 578-3388
				Email Address: valerie.land@jccteam.com

Lease: 25536	Area: GA	Block: 298	Project Name (If Applicable): Guns 'n Roses

Objective(s):	☐ Oil	☒ Gas	☐ Sulphur	☐ Salt	Onshore Base: Galveston, TX

Distance to Closest Land (Miles): 22

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?	X	Yes		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
Drill and complete Well Location C	05/19/05	06/17/05	30
Installation of well protective structure	06/18/05	06/19/05	2

Description of Drilling Rig

☒ Jackup	☐ Drillship
☐ Gorilla Jackup	☐ Platform rig
☐ Semisubmersible	☐ Submersible
☐ DP Semisubmersible	☐ Other (Attach Description)
☐ Drilling Rig Name (If Known):	

Description of Production Platform

☐ Caisson	☐ Tension leg platform
☒ Well protector	☐ Compliant tower
☐ Fixed platform	☐ Guyed tower
☐ Subsea manifold	☐ Floating production system
☐ Spar	☐ Other (Attach description)

Description of Lease Term Pipelines

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

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): Location C			Subsea Completion
Anchor Radius (if applicable) in feet: Not applicable			☐ Yes ☒ No
	Surface Location		**Bottom-Hole Location (For Wells)**
Lease No.	OCS-G 25536		
Area Name	Galveston		
Block No.	298		
Blockline Departures (in feet)	N/S Departure: 5954' FSL		
	E/W Departure: 6400' FEL		
Lambert X-Y coordinates	X: 3,342,675.81		
	Y: 394,034.00		
Latitude/ Longitude	Latitude: 28° 51' 02.929"		
	Longitude: 94° 48' 16.971"		
	TVD (Feet):	MD (Feet):	Water Depth (Feet): 66

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 applicant's 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.