UNITED STATES GOVERNMENT
MEMORANDUM

February 24, 2005

To: Public Information (MS 5034)

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

Subject: Public Information copy of plan

Control #	-	S-06629
Type	-	Supplemental Exploration Plan
Lease(s)	-	OCS-G24898 Block - 123 Eugene Island Area
Operator	-	Badger Oil Corporation
Description	-	Wells A throgh D
Rig Type	-	SUBMERSIBLE

Attached is a copy of the subject plan.

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

Robert Stringfellow
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WP/A/B		1090 FSL, 6469 FWL	G24898/EI/123
WP/C/D		7443 FNL, 2976 FEL	G24898/EI/123
WELL/A	G24898/EI/123	1090 FSL, 6469 FWL	G24898/EI/123
WELL/B	G24898/EI/123	1090 FSL, 6469 FWL	G24898/EI/123
WELL/C	G24898/EI/123	7443 FNL, 2976 FEL	G24898/EI/123
WELL/D	G24898/EI/123	7443 FNL, 2976 FEL	G24898/EI/123

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NOTED - SCHEXNAILDRE

PUBLIC COPY
February 18, 2005

SUPPLEMENTAL EXPLORATION PLAN

Lease Number (s):	OCS-G 24898
Area/Block:	Eugene Island Block 123
Prospect Name:	Eugene Island Block 123
Offshore:	Louisiana

Submitted by:

Badger Oil Corporation
P.O. Box 54745
Lafayette, Louisiana 70505

David Kelly
(337) 233-9200
d.kelly@badgeroil.com

Estimated start up date: April 1, 2005

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

No. Copies Being Submitted:

Proprietary:	5
Public Info:	4

For MMS:
Plan No. _____
Assigned to: _____

BADGER OIL CORPORATION

SUPPLEMENTAL EXPLORATION PLAN

LEASE OCS-G 24898

EUGENE ISLAND BLOCK 123

APPENDIX A	*Contents of Plan*
APPENDIX B	*General Information*
APPENDIX C	*Geological, Geophysical & H_2S Information*
APPENDIX D	*Biological and Physical Information*
APPENDIX E	*Wastes and Discharge Information*
APPENDIX F	*Oil Spill Information*
APPENDIX G	*Air Emissions Information*
APPENDIX H	*Environmental Impact Analysis*
APPENDIX I	*Coastal Zone Management Consistency Information*
APPENDIX J	*Plan Information Form and Well Information Form*

APPENDIX A
CONTENTS OF PLAN

Badger Oil Corporation (Badger) is in the process of becoming the designated operator of the subject oil and gas lease.

(A) DESCRIPTION, OBJECTIVES AND SCHEDULE

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

This exploration plan provides for the drilling and completion of well locations A through D from two proposed surface locations. Badger will utilize a submersible drilling rig for the proposed wells and drive 48" self supporting multi-well protectors over the surface locations of A/B and C/D.

(B) LOCATION

Included as ***Attachment A-1*** is a map showing the locations of proposed wells. A bathymetry map is included as ***Attachment A-2***. Additional well information is included in Appendix J, on the Well Information Form.

(C) DRILLING UNIT

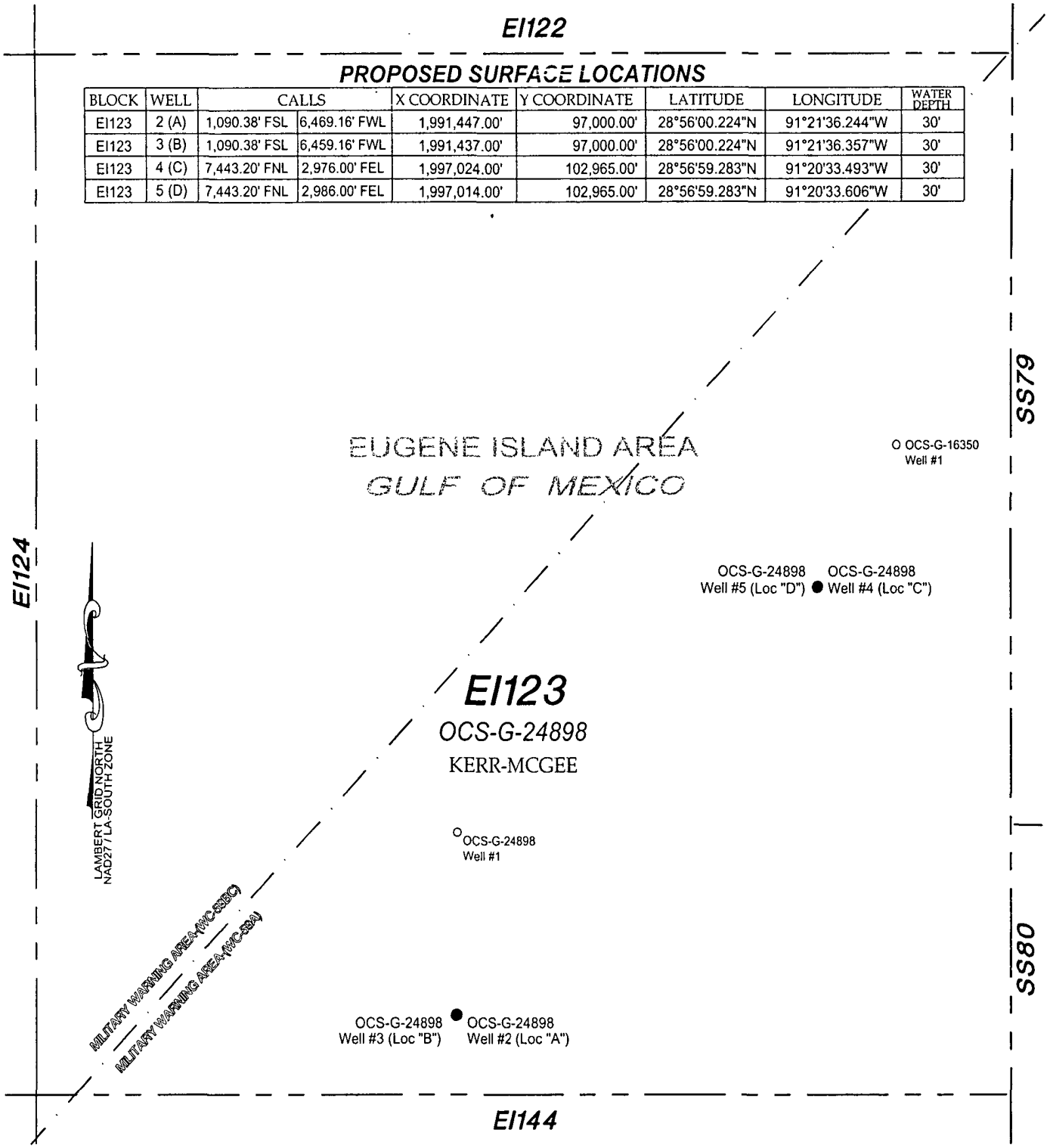
A description of the drilling unit is included in Appendix J, on the Plan Information Form. Rig specifications will be made a part of each Application for Permit to Drill.

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.

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



BLOCK	WELL	CALLS		X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE	WATER DEPTH
EI123	2 (A)	1,090.38' FSL	6,469.16' FWL	1,991,447.00'	97,000.00'	28°56'00.224"N	91°21'36.244"W	30'
EI123	3 (B)	1,090.38' FSL	6,459.16' FWL	1,991,437.00'	97,000.00'	28°56'00.224"N	91°21'36.357"W	30'
EI123	4 (C)	7,443.20' FNL	2,976.00' FEL	1,997,024.00'	102,965.00'	28°56'59.283"N	91°20'33.493"W	30'
EI123	5 (D)	7,443.20' FNL	2,986.00' FEL	1,997,014.00'	102,965.00'	28°56'59.283"N	91°20'33.606"W	30'

PUBLIC INFORMATION

DATE: 01/18/2005 TIME: 17:08 FILENAME: J:\7565-7636\7565POE.DWG

2,000' 0' 2,000'

SCALE IN U.S. SURVEY FEET

Badger Oil Corporation

PLAN OF EXPLORATION

OCS-G-24898 Well Nos. 2, 3, 4, 5

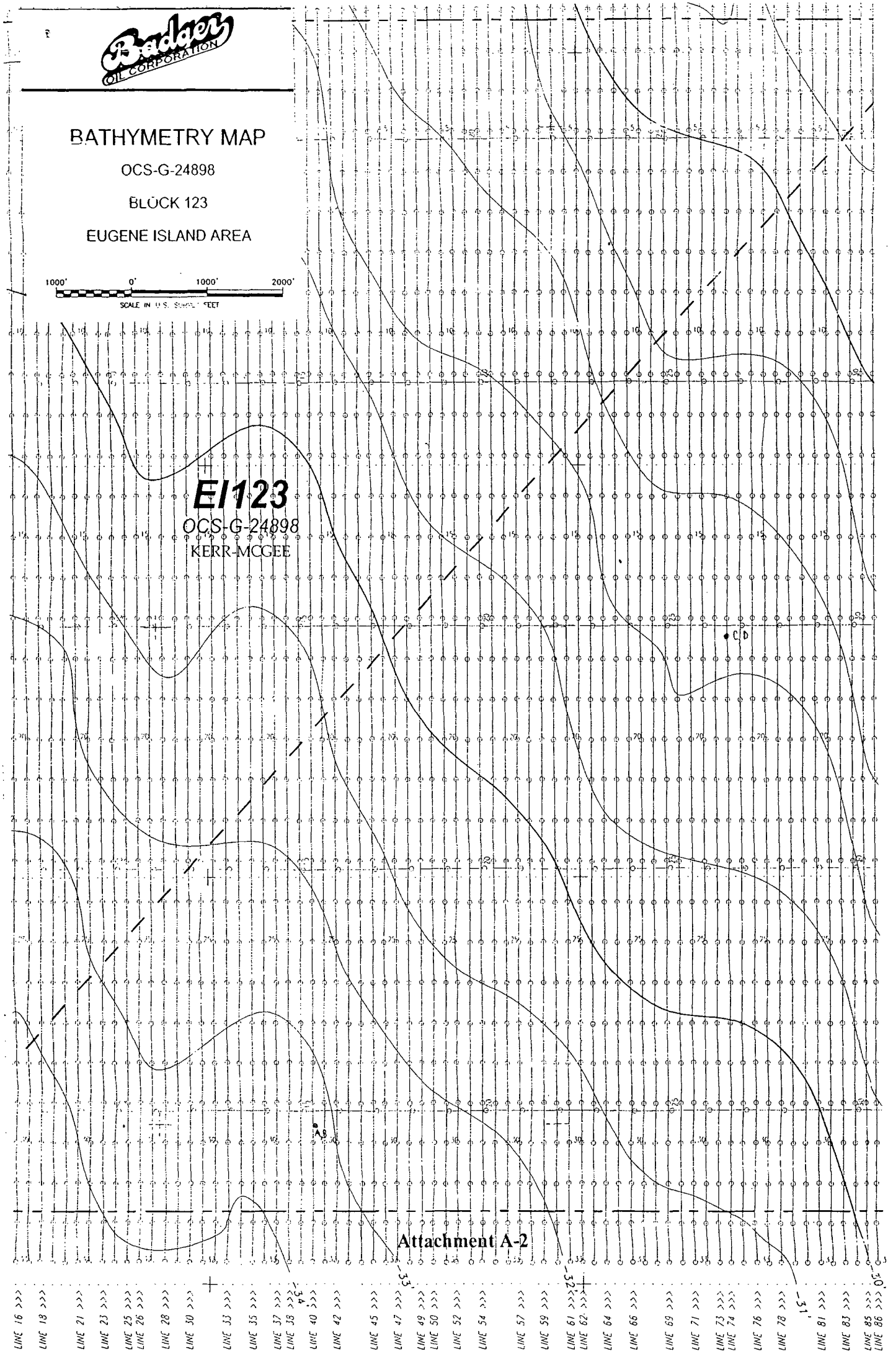
Block 123, Eugene Island Area

PREPARED BY: C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660

JOB No: 7565-7636 | REVISED: 01/25/2005 | DATE: 01/17/2004

FILENAME: 7565POE.DWG | SHEET 1 of 1

Attachment A-1



Attachment A-2

APPENDIX B
GENERAL INFORMATION

(A) CONTACT

Inquiries may be made to the following authorized representative:

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

(B) PROSPECT NAME

Not applicable.

(C) NEW OR UNUSUAL TECHNOLOGY

Badger 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. The bond is held by the current lessee of record, Kerr-McGee Oil and Gas Corporation.

(E) ONSHORE BASE AND SUPPORT VESSELS

A Vicinity Map is included as ***Attachment B-1***, showing Eugene Island Block 123 located approximately 22 miles from the nearest shoreline and approximately 53 miles from the onshore support base in Morgan 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
Crew Boat	7
Supply Boat	3
Helicopter	1

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

(F) LEASE STIPULATIONS

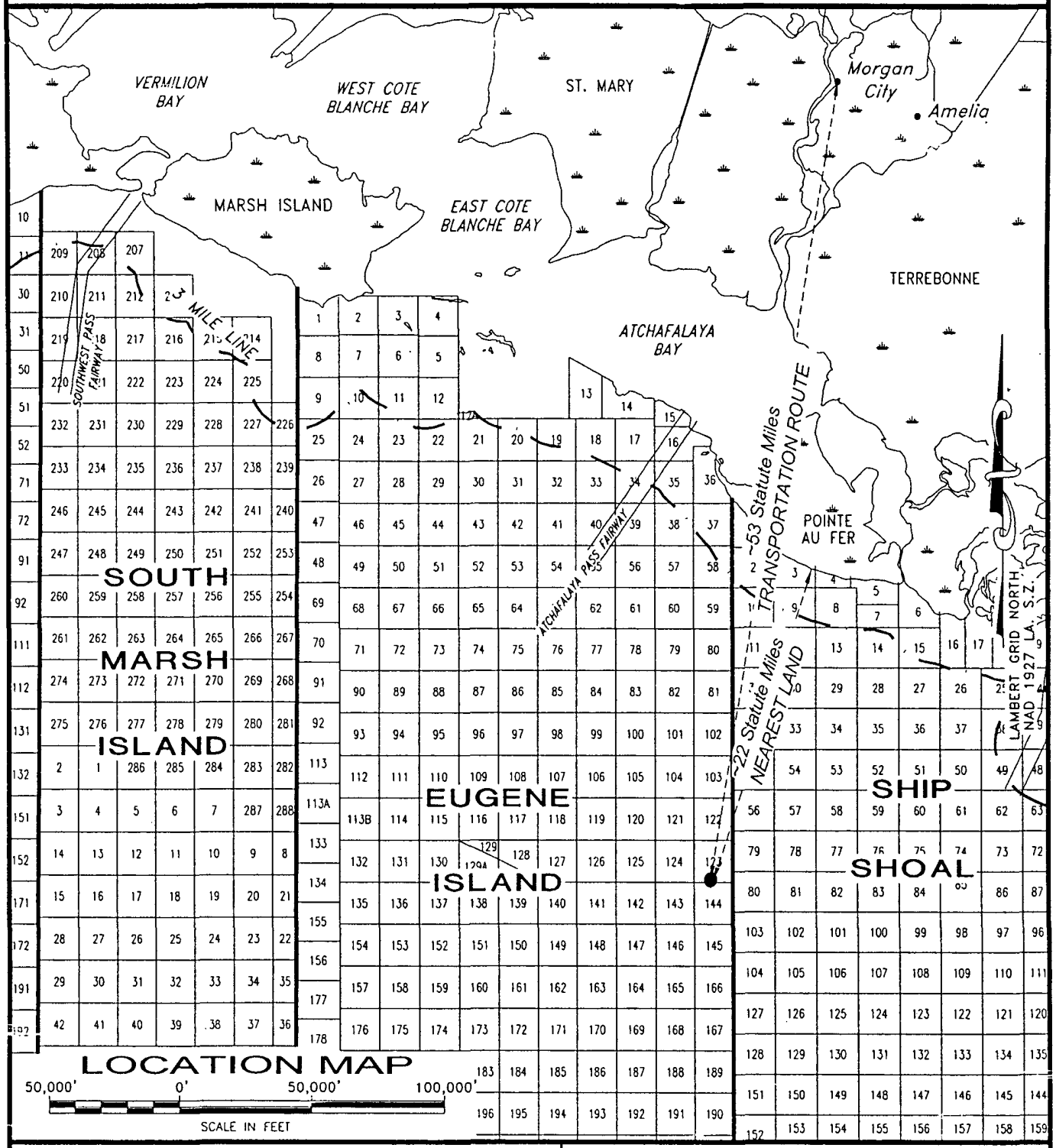
Exploration activities are subject to the following stipulations attached to Lease OCS-G 24898 Eugene Island Block 123.

1. Military Warning Area (MWA)

Eugene Island Block 123 is located within designated MWA W-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.

ARCHAEOLOGY SURVEY BLOCKS

Eugene Island Block 123 has been determined as potentially containing prehistoric archaeological properties, therefore, an Archaeological Survey Report has been prepared in accordance with NTL 2002-G01, and is being submitted under separate cover.



Badger OIL CORPORATION

PROPOSED LOCATIONS
OCS-G-24898 Well Nos. 2, 3, 4, & 5
BLOCK 123, EUGENE ISLAND AREA

PREPARED BY C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA. (337) 261-0660	JOB NO. 7565	DWG: REP	CHK: JRD	REVISED	DATE: 01/17/2005
	FILENAME: J:\7565-7636\V7565.DWG				SHEET 1 OF 1

Attachment B-1

APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H_2S INFORMATION

(A) STRUCTURE CONTOUR MAPS
Proprietary Data

(B) TRAPPING FEATURES
Proprietary Data

(C) DEPTHS OF GEOPRESSURE
Proprietary Data

(D) INTERPRETED 2-D AND/OR 3-D SEISMIC LINE(S)
Proprietary Data

(D) GEOLOGICAL STRUCTURE CROSS-SECTIONS
Proprietary Data

(E) SHALLOW HAZARDS REPORT
A shallow hazards survey was conducted over Eugene Island Block 123. Three copies of a shallow hazard report are being submitted to the MMS under separate cover.

(F) SHALLOW HAZARDS ASSESSMENT
A shallow hazards assessment has been prepared for each proposed surface location, evaluating seafloor and subsurface geological and manmade features and conditions that may adversely affect drilling operations, and is included as ***Attachments C-6 and C-7.***

(G) HIGH-RESOLUTION SEISMIC LINES
Attached to one Proprietary Copy of this Plan are annotated high-resolution seismic lines. These lines are the closest high-resolution seismic lines to the proposed surface locations.

(H) STRATIGRAPHIC COLUMN
Proprietary Data

(I) TIME VS DEPTH TABLES
Appropriate tables providing seismic time versus depth for the proposed well locations in areas where there is no well control is included as ***Attachment C-9.***

(J) HYDROGEN SULFIDE INFORMATION
In accordance with Title 30 CFR 250. 490(c) and NTL No. 2003-G17, Badger requests that Eugene Island Block 123 be classified by the MMS as H_2S absent.

C&C Technologies
SURVEY SERVICES

February 16, 2005

Badger Oil Corporation
3861 Ambassador Caffery
Suite 400
Lafayette, LA, 70503

Attn: Dale Clark

Re: Well Site Clearance Letter
Well #2 Loc. "A" (OCS-G-24898)
Well #3 Loc. "B" (OCS-G-24898)
Block 123, Eugene Island Area

Dear Mr. Clark,

Badger Oil Corporation proposes to drill two wells (Well #2 (Location "A") and Well #3 (Location "B")) in Block 123 (OCS-G-24898), Eugene Island Area. The surface locations for these wells are ten feet apart. C & C Technologies, Inc. (C & C) performed an Archaeological and Hazard Survey in Block 123, Eugene Island Area in January, 2005. The geophysical data collected within 1,000 feet of the proposed well locations has been reviewed. The purpose of this letter is to address the seafloor and subbottom conditions in the vicinity of proposed Well #2 (Location "A") and Well #3 (Location "B").

The field operations were conducted aboard the M/V *Mary Diane McCall* between January 8th and January 11th, 2005. Geophysical instruments utilized for the survey included a 500 kHz Geo Acoustics side scan sonar, 3.5 kHz ORE subbottom profiler system, Odom Echotrac bathymetric system, Geometrics 882 cesium magnetometer, Seabird CTD profiler, and a GI 90 air gun. Horizontal positioning of the survey vessel was accomplished with the C-Nav globally corrected differential GPS system.

The survey grid consisted of ninety-two primary north-south tracklines spaced at a 50-meter interval and five east-west tielines spaced at a 900-meter interval. Coordinates in Louisiana South and blockline calls for the proposed Well #2 (Location "A") and Well #3 (Location "B") are:

Well #2 - X = 1,991,447.00'; Y = 97,000.00'
1,090.38' FSL, 6,469.16' FWL

Well #3 – X = 1,991,437.00', Y = 97,000.00'
1,090.38' FSL, 6,459.16' FWL

Water depth at the proposed well sites is 33 feet Mean Lower Low Water. Bathymetry data indicates the seafloor is flat and is free of obstructions.

Parallel reflectors characterized the pinger data recorded within the survey area. Subbottom penetration and resolution was generally achieved to about 40 feet. Shear strength values for the seafloor soils are reported at ~200 lbs./sq.ft. (soft) and increase to 600 lbs./sq.ft. (firm) at a depth of 80 feet. Regional studies indicate the Holocene sediments in the study area vary between 80 feet and 100 feet in thickness.

Multiple pockets of low-pressure biogenic gas are delineated across the survey area on the subbottom profiler. Three small gas saturated zones are mapped within 1,000 feet of the proposed well sites. The first and second gas saturated zones are mapped approximately 240 feet and 650 feet northwest of the proposed wells, respectively. The third gas saturated zone is located approximately 700 feet south of the proposed wells. There may be other areas of biogenic gas that remained undetected between the survey lines. The presence of low-pressure biogenic gas may reduce sediment shear strength at the seafloor and its position should be taken into account for the placement of bottom-founded construction efforts.

Two amplitude anomalies are mapped in the northeastern quadrant of the study area in excess of 10,000 feet from the proposed well sites.

No channels or faults are mapped within the 1,000 feet of the proposed wells.

No side scan sonar contacts or magnetic anomalies are recorded within 1,000 feet of the proposed drill sites.

Public information indicates two man-made structures occur within the survey bounds: a plugged and abandoned well (Well No. 1 (OCS-G-16350) and a pipeline (Hunt 6-inch pipeline, S-8204). The locations of both the well and the pipeline are confirmed by the geophysical data. The buried Hunt 6-inch pipeline (S-8204) trends west-northwest to east-southeast across the southern portion of the survey area approximately 2,250 feet northeast of the proposed well sites at its closest point. The plugged and abandoned well is located over 10,000 feet northeast of the proposed well sites. The proposed well sites fall within the WC-59A Military Warning Area.

Data reproductions of the two nearest lines to the well sites are included with this letter. The proposed well sites are annotated on each of the records. C & C would like to thank you for this opportunity to be of service, and please do not hesitate to call if additional information is needed.

Sincerely,

M. Samuel

Bruce M. Samuel
Senior Marine Geologist

CORPORATE OFFICE: 730 E. Kaliste Saloom Road, Lafayette, Louisiana 70508 USA
HOUSTON OFFICE: 10615 Shadow Wood Drive, Suite 100, Houston, TX 77043 USA
Lafayette Phone (337) 261-0660 Houston Phone (713) 468-1536
www.cctechnol.com

C&C Technologies
SURVEY SERVICES

February 16, 2005

Badger Oil Corporation
3861 Ambassador Caffery
Suite 400
Lafayette, LA, 70503

Attn: Dale Clark

Re: Well Site Clearance Letter
Well #4/Loc. "C" (OCS-G-24898)
Well #5/Loc. "D" (OCS-G-24898)
Block 123, Eugene Island Area

Dear Mr. Clark,

Badger Oil Corporation proposes to drill two wells (Well #4 (Location "C") and Well #5 (Location "D")), in Block 123 (OCS-G-24898), Eugene Island Area. The surface locations for these two wells are 10 feet apart. C & C Technologies, Inc. (C & C) performed an Archaeological and Hazard Survey in Block 123, Eugene Island Area in January, 2005. The geophysical data collected within 1,000 feet of the proposed well location has been reviewed. The purpose of this letter is to address the seafloor and subbottom conditions in the vicinity of proposed Well #4 (Location "C") and Well #5 (Location "D").

The field operations were conducted aboard the M/V *Mary Diane McCall* between January 8th and January 11th, 2005. Geophysical instruments utilized for the survey included a 500 kHz Geo Acoustics side scan sonar, 3.5 kHz ORE subbottom profiler system, Odom Echotrac bathymetric system, Geometrics 882 cesium magnetometer, Seabird CTD profiler, and a GI 90 air gun. Horizontal positioning of the survey vessel was accomplished with the C-Nav globally corrected differential GPS system.

The survey grid consisted of ninety-two primary north-south tracklines spaced at a 50-meter interval and five east-west tielines spaced at a 900-meter interval. Coordinates in Louisiana South and blockline calls for the proposed Well #4 (Location "C") and Well #5 (Location "D") are:

Well #4 - X = 1,997,024.00'; Y = 102,965.00'
7,443.20' FNL; 2,976.00' FEL

Well #5 - X = 1,997,014.00'; Y = 102,965.00'
7,443.20' FNL; 2,986.00' FEL

Water depth at the proposed well sites is 27 feet Mean Lower Low Water. Bathymetry data indicates the seafloor is flat and is free of obstructions.

CORPORATE OFFICE: 730 E. Kaliste Saloom Road, Lafayette, Louisiana 70508 USA
HOUSTON OFFICE: 10615 Shadow Wood Drive, Suite 100, Houston, TX 77043 USA
Lafayette Phone (337) 261-0660 Houston Phone (713) 468-1536
www.cctechnol.com

Attachment C-7

Parallel reflectors characterized the pinger data recorded within the survey area. Subbottom penetration and resolution was generally achieved to about 40 feet. Shear strength values for the seafloor soils are reported at ~200 lbs./sq.ft. (soft) and increase to 600 lbs./sq.ft. (firm) at a depth of 80 feet. Regional studies indicate the Holocene sediments in the study area vary between 80 feet and 100 feet in thickness.

Multiple pockets of low-pressure biogenic gas were delineated across the survey area on the subbottom profiler. Eight gas saturated zones are mapped within 1,000 feet of the proposed well sites. The closest gas saturated zone is a large zone mapped approximately 160 feet northwest of the proposed well at its closest point. A second small gas saturated zone is located further northeast behind the large zone approximately 850 feet west-northwest of the proposed wells. The third, fourth, and fifth gas saturated zones are mapped approximately 400 feet, 620 feet, 950 feet southwest of the proposed wells, respectively. The three remaining gas saturated zones are very small and are mapped approximately 490 feet north, 590 feet north-northeast, and 920 south-southwest of the proposed wells. There may be other areas of biogenic gas that remained undetected between the survey lines. The presence of low-pressure biogenic gas may reduce sediment shear strength at the seafloor and its position should be taken into account for the placement of bottom-founded construction efforts.

Two amplitude anomalies are mapped in the northeastern quadrant of the study area. The closest of the amplitude anomalies occurs approximately 1,900 feet north-northeast of the proposed well sites 1,235 feet below the seafloor. The second amplitude anomaly occurs more than 4,900 feet north of the proposed wells. Drilling operations should consider the positions of the seismic amplitude anomalies and take proper safety precautions should drilling objectives impact these areas.

No channels, faults, or side scan sonar contacts are mapped within the 1,000 feet of the proposed wells.

Two unidentified magnetic anomalies are mapped approximately 540 feet west-northwest of the proposed well sites. The magnetic anomalies are mapped in very close vicinity to one another from two perpendicular lines and therefore are interpreted to be from the same ferrous source. The magnetic anomalies (Unidentified Magnetic Anomalies Nos. 130 and 167) exhibit lower value magnitudes of 5 and 4 gammas and durations of 66 feet and 98 feet, respectively.

Public information indicates two man-made structures occur within the survey bounds: a plugged and abandoned well (Well No. 1 (OCS-G-16350) and a pipeline (Hunt 6-inch pipeline, S-8204). The locations of both the well and the pipeline are confirmed by the geophysical data. The buried Hunt 6-inch pipeline (S-8204) trends west-northwest to east-southeast across the southern portion of the survey area approximately 4,950 feet south-southeast of the proposed well sites at its closest point. The plugged and abandoned well is located approximately 2,285 feet northeast of the proposed well sites. The proposed well sites fall within the WC-59A Military Warning Area.

Data reproductions of the two nearest lines to the well sites are included with this letter. The proposed well sites are annotated on each of the records. C & C would like to thank you for this opportunity to be of service, and please do not hesitate to call if additional information is needed.

Sincerely,

Bruce M. Samuel
Senior Marine Geologist

CORPORATE OFFICE: 730 E. Kaliste Saloom Road, Lafayette, Louisiana 70508 USA
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Lafayette Phone (337) 261-0660 Houston Phone (713) 468-1536
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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

Eugene Island Block 123 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 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).

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 (Wastes to be disposed of, not discharged)

Type of Waste Approximate Composition	Amount*	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Oil-contaminated produced sand	N/A	N/A	N/A	If encountered in the future, would be stored in cuttings boxes and transported to an onshore land farm.
Waste Oil	Unknown	N/A	To be handled by rig contractor, if any, will send to ASCO Dock in Fouchon, La. for further disposal.	If any, will be stored in drums and transported to Fouchon by boat and then shipped for final disposal to a La. onshore incineration site.
Norm-contaminated wastes	N/A	N/A	N/A	If encountered in the future, transport to an onshore La. transfer station via dedicated barge.
Trash and debris	1650 lbs per well	30 lbs/day	Handled by Rig Contractor, landfill site in Fouchon, La.	Transport in storage bin by work boat to Fouchon, La. and then trucked to landfill site.
Workover fluids	Unknown	N/A	N/A	Excess completion fluids that are not used will be returned to onshore La. vendor for credit.

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

APPENDIX F
OIL SPILL INFORMATION

1. Site-Specific OSRP
Not applicable.

2. Regional OSRP Information
Badger Oil Corporation's Regional Oil Spill Response Plan (OSRP) was approved in September 2003 and most recently updated in August 2003. Activities proposed in this EP will be covered by the Regional OSRP.

3. OSRO Information
Badger'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	EP WCD
Type of Activity	Exploratory	Exploratory
Facility Location (Area/Block)	SS62	EI123
Facility Designation	SS62 Well #1 (location A)	EI123#1 (location A)
Distance to Nearest Shoreline (miles)	6	22
Volume Storage tanks (total) Uncontrolled blowout Total Volume	0 170 bbls 170 bbls total	0 400 400 total
Type of Oil(s) (crude, condensate, diesel)	Condensate	Condensate
API Gravity	45°	45°

Badger has determined that the worst-case scenario from the activities proposed in this EP does supercede the worst-case scenario from our approved regional OSRP.

Since Badger has the capability to respond to the worst-case spill scenario included in our regional OSRP approved in September 2003, 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

Badger 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.

5. 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)	Submersible	1418	2	2836	32.4°

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)	13.23	732.60	13.23
Sulphur dioxide (SO_2)	60.69	732.60	60.69
Nitrogen oxides (NO_x)	454.73	732.60	454.73
Volatile organic compounds (VOC)	13.64	732.60	13.64
Carbon Monoxide (CO)	99.21	26694.84	99.21

[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: Cheryl Powell
(281) 578-3388
cheryl.powell@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)

(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			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:
   - 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 Eugene Island Block 123

Proposed operations consist of the drilling and completion of well locations A through D, and the installation of two well protector structures.

1. Designated Topographic Features

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

Physical disturbances to the seafloor: Eugene Island Block 123 is 60 miles from the closest designated Topographic Features Stipulation Block (Ewing Banks); therefore, no adverse impacts are expected.

Effluents: Eugene Island Block 123 is 60 miles from the closest designated Topographic Features Stipulation Block (Ewing Banks); 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 Badger Oil Corporation'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: Eugene Island Block 123 is 176 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: Eugene Island Block 123 is 176 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 Badger Oil Corporation'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: Eugene Island Block 123 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: Eugene Island Block 123 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 Badger Oil Corporation'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 30 feet. High-density chemosynthetic communities are found only in water depths greater than 1,312 feet (400 meters); therefore, Badger Oil Corporation's proposed operations in Eugene Island Block 123 would not cause impacts to chemosynthetic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in Eugene Island Block 123 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 Badger Oil Corporation'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 Eugene Island Block 123 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 Badger Oil Corporation'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 Eugene Island Block 123 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).

Badger Oil Corporation 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 Badger Oil Corporation'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 Badger Oil Corporation'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). Badger Oil Corporation 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 Badger Oil Corporation'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

Eugene Island Block 123 is located 135 miles from the Breton Wilderness Area and 25 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 Eugene Island Block 123 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 Eugene Island Block 123 include disturbances to the seafloor. Eugene Island Block 123 is not located in or adjacent to an OCS block designated by MMS as having a high probability for occurrence of shipwrecks. Badger Oil Corporation 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 that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Eugene Island Block 123 are physical disturbances to the seafloor and accidents (oil spills).

Physical Disturbances to the seafloor: Eugene Island Block 123 is located inside the Archaeological Prehistoric high probability lines. Badger Oil Corporation 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 Badger Oil Corporation'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 Eugene Island Block 123 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 Badger Oil Corporation'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 Badger Oil Corporation'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). Badger Oil Corporation 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 (25 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 Badger Oil Corporation'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). Badger Oil Corporation 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 (25 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 Badger Oil Corporation'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

Atchafalaya Delta WMA and Isles Dernieries WMA (Both are 26 miles from Eugene Island Block 123) are highly productive habitats for wildlife. Thousands of shore birds use the refuges as a wintering area. Also, wading birds nest on the refuges. The Atchafalaya Delta WMA and Isles Dernieries WMA provide habitats 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 25 miles, Badger Oil Corporation 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). Badger Oil Corporation 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: Eugene Island Block 123 is approximately 26 miles from both the Atchafalaya Delta WMA and Isles Dernieries WMA. Management goals of the Atchafalaya Delta WMA and Isles Dernieries WMA 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 Badger Oil Corporation'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 (135 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 Badger Oil Corporation'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:

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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

Coastal Zone Management Consistency Certification is not required for this Supplemental Exploration Plan.

PLAN INFORMATION FORM

GENERAL INFORMATION

Type of OCS Plan:	X	Exploration Plan (EP)		Development Operations Coordination Document (DOCD)
Company Name:	Badger Oil Corporation		MMS Operator Number:	02605
Address:	P.O. Box 52745 Lafayette, LA 70505		Contact Person:	Cheryl Powell
			Phone Number:	(281) 578-3388
			Email Address:	Cheryl.powell@jccteam.com

Lease: OCS-G 24898	Area: Eugene Island	Block: 123	Project Name (If Applicable): N/A

Objective(s):	☒ Oil	☒ Gas	☐ Sulphur	☐ Salt	Onshore Base: Morgan City, LA	Distance to Closest Land (Miles): 22 miles

Description of Proposed Activities (Mark all that apply)

☒ Exploration drilling	☐ Development drilling
☒ Well completion	☐ Installation of production platform
☐ Well test flaring	☐ Installation of production facilities
☒ Installation of well protection structure	☐ Installation of satellite structure
☐ Installation of subsea wellheads and/or manifolds	☐ Installation of lease term pipelines
☒ Temporary well abandonment	☐ Commence production
☐ Other (specify and describe)	

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

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Drill Location A and drive caisson	04/01/05	05/10/05	40
Drill Location B	05/11/05	06/19/05	40
Complete Locations A and B.	06/20/05	07/17/05	28
Drill Location C and drive caisson	07/19/05	08/27/05	40
Drill Location D	08/28/05	10/06/05	40
Complete Locations C and D	10/07/05	11/03/05	28

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)	T0 (Facility/Area/Block)	Diameter (inches)	Length (Feet)	Product
N/A	N/A			N/A

WELL INFORMATION FORM
(USE SEPARATE FORM FOR EACH LEASE)

PROPOSED WELL/STRUCTURE LOCATIONS

WELL / STRUCTURE NAME	SURFACE LOCATION		BOTTOM-HOLE LOCATION (FOR WELLS)
Platform _ or Well _ Well Name A	CALLS: 1090 F S L and 6469 F W L OF LEASE OCS G24898 , Eugene Island AREA, BLOCK 123		
	X: 1,991,447 Y: 97,000		
	LAT: 28-56-00.224 LONG: -91-21-36.244		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 30
Platform _ or Well _ Well Name B	CALLS: 1090 F S L and 6459 F W L OF LEASE OCS G24898 , Eugene Island AREA, BLOCK 123		
	X: 1,991,437 Y: 97,000		
	LAT: 28-56-00.224 LONG: -91-21-36.357		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 30
Platform _ or Well _ Well Name: C	CALLS: 7443 F N L and 2976 F E L OF LEASE OCS G24898 , Eugene Island AREA, BLOCK 123		
	X: 1,997,024 Y: 102,965		
	LAT: 28-56-59.283 LONG: -91-20-33.493		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 30
Platform _ or Well _ Well Name: D	CALLS: 7443 F N L and 2986 F E L OF LEASE OCS G24898 , Eugene Island AREA, BLOCK 123		
	X: 1,997,014 Y: 102,965		
	LAT: 28-56-59.283 LONG: -91-20-33.606		
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 30