UNITED STATES GOVERNMENT
MEMORANDUM

March 20, 2003

To: Public Information (MS 5034)

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

Subject: Public Information copy of plan

Control #	-	N-07708
Type	-	Initial Exploration Plan
Lease(s)	-	OCS-G23898 Block - 140 Ship Shoal Area
Operator	-	Samson Offshore Company
Description	-	Well A
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
WELL/A	G23898/SS/140	810 FNL, 3000 FWL	G23898/SS/140

NOTED - SCHEXNAILDRE

N-7708

Type	Weekly Estimate (No.) of Roundtrips
Crew Boat	9
Supply Boat	5
Helicopter	As needed

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

(E) Lease Stipulations

Exploration activities are subject to the following stipulation attached to Lease OCS-G 23898, Ship Shoal Block 140.

1. Marine Protected Species

Lease Stipulation No. 6 is meant to reduce the potential taking of marine protected species. Samson will operate in accordance with NTL 2003-G07, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and NTL 2003-G06 to prevent intentional and/or accidental introduction of debris into the marine environment.

ARCHAEOLOGY SURVEY BLOCKS

Ship Shoal Block 140 has been determined to have a high potential for containing archaeological properties, therefore, an Archaeological Survey Report has been prepared in accordance with NTL 2002-G01, and is being submitted under separate cover.

PUBLIC COPY
March 12, 2003

INITIAL EXPLORATION PLAN

Lease Number (s): OCS-G 23898

Area/Block: Ship Shoal Block 140

Prospect Name: N/A

Offshore: Louisiana

Submitted by: Samson Offshore Company
Samson Plaza
Two West Second Street
Tulsa, Oklahoma 74103-3103

Tom Koscelny
(918) 591-1386

Estimated start up date: June 1, 2003

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:

CONTROL No. N-7108
REVIEWER: Karen Dunlap
PHONE (504) 736-2535

SAMSON OFFSHORE COMPANY

INITIAL EXPLORATION PLAN

LEASE OCS-G 23898

SHIP SHOAL BLOCK 140

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

APPENDIX A
CONTENTS OF PLAN

Samson Offshore Company is the designated operator of the subject oil and gas Lease.

(A) Description, Objectives and Schedule
Appendix J contains an OCS Plan Information Form, which provides a description of proposed activities, objectives and a tentative schedule.

Samson is proposing to drill, complete, and test one exploratory well (Well Location A).

(B) Location
Included as ***Attachment A-1*** is a map showing the proposed location of the well. A bathymetry map is included as ***Attachment A-2***. Additional well information is included in Appendix J, on the OCS Plan Information Form.

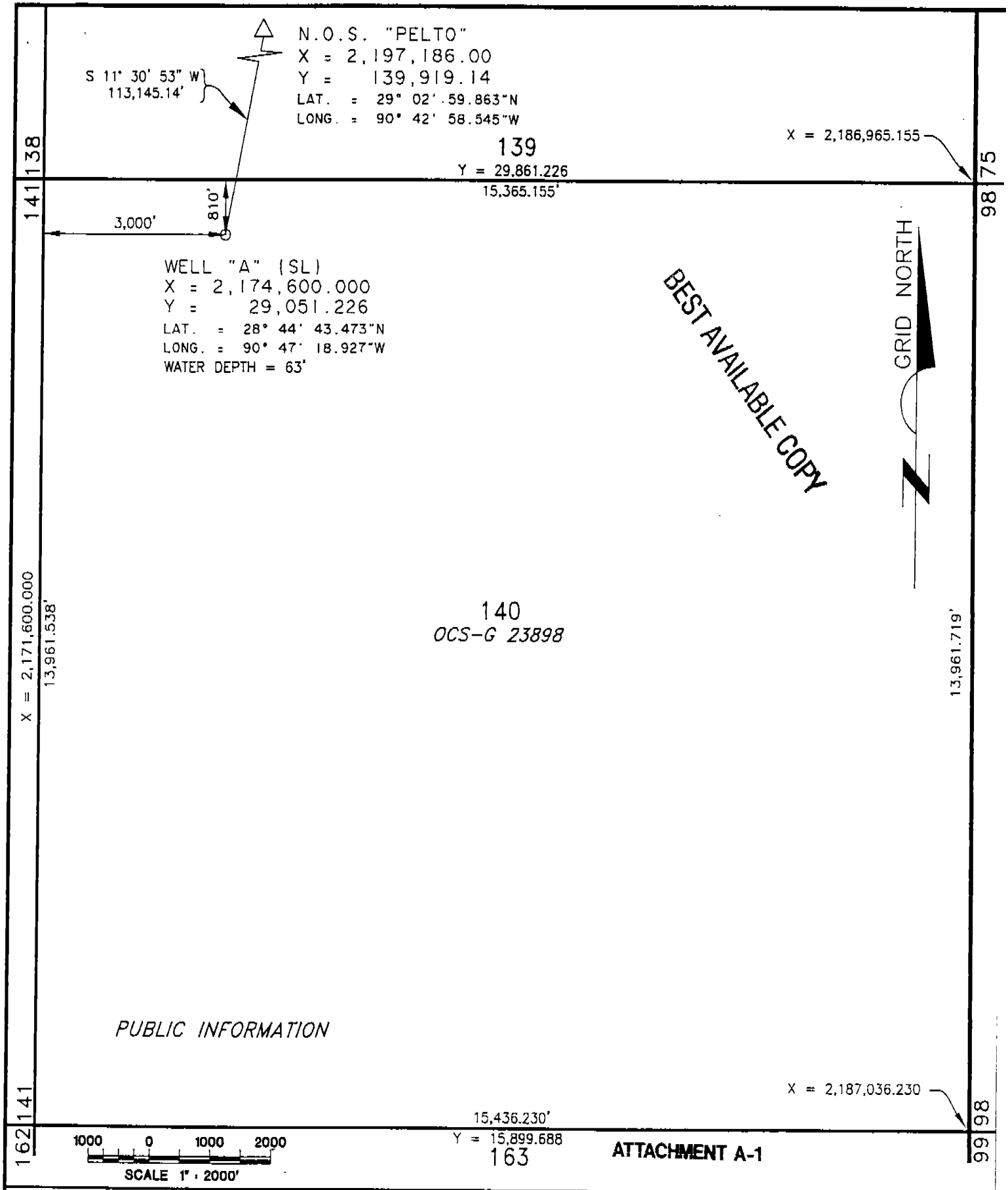
(C) Drilling Unit
A description of the drilling unit is included in Appendix J, on the OCS Plan Information Form. Rig specifications will be made a part of each Application for Permit to Drill.

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.

Well Control Training is provided for personnel engaged in oil and gas operations in accordance with Title 30 CFR Part 250, Subpart O.

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

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



ATTACHMENT A-1

I hereby certify that this proposed well location is correct.

STATE OF LOUISIANA
CURTIS M. CHANEY
REG. No. 4829
REGISTERED PROFESSIONAL LAND SURVEYOR

11/7/2002

Curtis M. Chaney, PLS (La. Reg. No. 4829)

DATUM: NAD 27

SPHEROID: CLARKE 1866

PROJECTION: LAMBERT

ZONE: LOUISIANA SOUTH

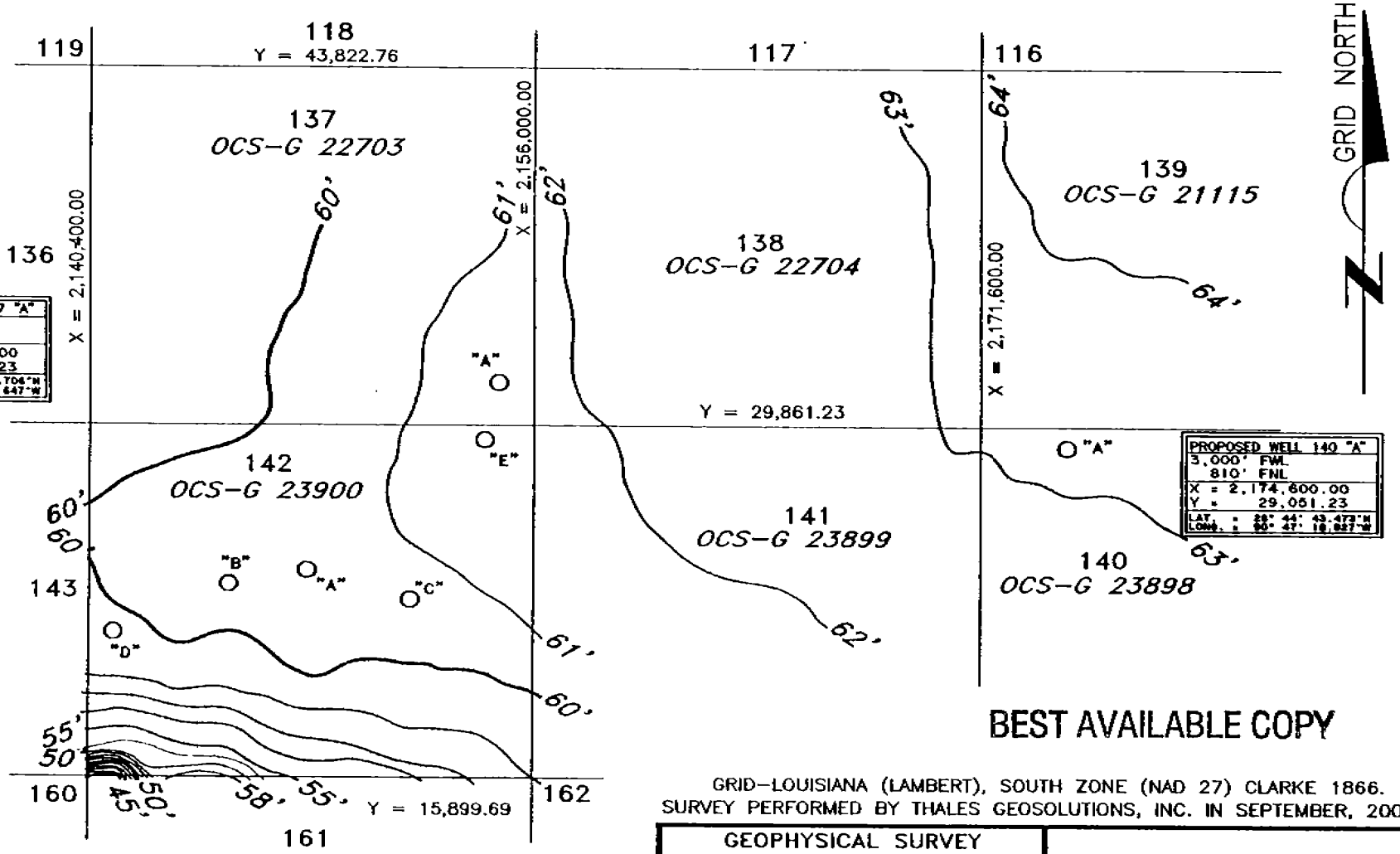
Thales GeoSolutions, Inc.
36499 Perkins Rd.
Prairieville, Louisiana 70769
Tel: 225-673-5881 Fax: 225-673-5877
THALES

SAMSON OFFSHORE COMPANY

PROPOSED WELL LOCATION
WELL "A"
BLOCK 140
SHIP SHOAL AREA

DATE	DRAWN BY:	CHECKED BY:	DRAWING No.
11-7-2002	DLN	jsl cmc	02-1314-PERM
REV. DATE	REV. No.:	SCALE: 1" = 2,000'	JOB No. 02-1314 DP No

ATTACHMENT A-2



BEST AVAILABLE COPY

GRID—LOUISIANA (LAMBERT), SOUTH ZONE (NAD 27) CLARKE 1866.
SURVEY PERFORMED BY THALES GEOSOLUTIONS, INC. IN SEPTEMBER, 2002.

GEOPHYSICAL SURVEY
BATHYMETRY MAP
BLOCK 142
AND PARTS OF BLOCKS
137, 138, 139, 140, AND 141
SHIP SHOAL AREA
OFFSHORE LOUISIANA

SAMSON OFFSHORE COMPANY

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

DRN. DLN	PREP. DLN	CAL. TAO	APP. TAO	FILE NO. 02-1314	
CHK. BSL	CHK. BSL	CHK. BSL	DATE 11-6-2002	FIG. NO.	MAP 1 OF 1

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) New or Unusual Technology

Samson 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.

(C) Bonding Information

The bond requirements for the activities and facilities proposed in this EP are satisfied by a $1,000,000 area wide exploratory bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. N2000-G16, "Guidelines for General Lease Surety Bonds", dated September 7, 2000.

(D) Onshore Base and Support Vessels

A Vicinity Map is included as ***Attachment B-1***, showing Ship Shoal Block 140 located approximately 43 miles from the nearest shoreline and approximately 21 miles from the onshore support base in Fourchon.

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	9
Supply Boat	5
Helicopter	As needed

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

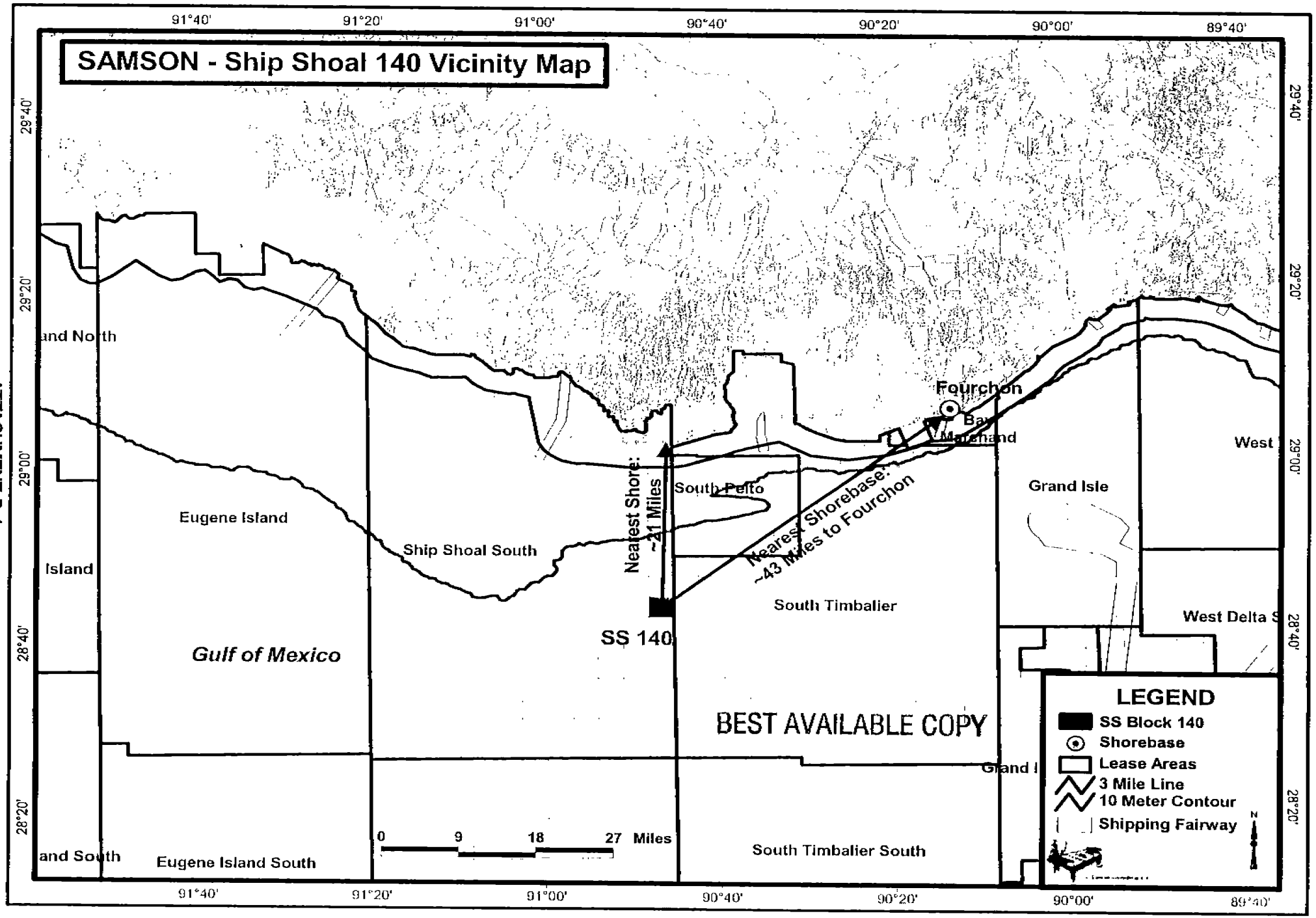
(E) Lease Stipulations

The MMS did not invoke lease stipulations for Lease OCS-G 23898, Ship Shoal Block 140.

ARCHAEOLOGY SURVEY BLOCKS

Ship Shoal Block 140 has been determined to have a high potential for containing archaeological properties, therefore, an Archaeological Survey Report has been prepared in accordance with NTL 2002-G01, and is being submitted under separate cover.

ATTACHMENT B-1



APPENDIX C
GEOLOGICAL, GEOPHYSICAL, AND H_2S INFORMATION

(A) STRUCTURE CONTOUR MAP
PROPRIETARY DATA

(B) INTERPRETED 2-D AND/OR 3-D SEISMIC LINE(S)
Attached to one Proprietary Information copy of this plan is interpreted (2-D and/or 3-D) seismic lines. These lines are migrated, annotated with depth scale, and are within 500' of the surface location of the proposed well.

(C) GEOLOGICAL STRUCTURE CROSS-SECTIONS
PROPRIETARY DATA

(D) SHALLOW HAZARDS REPORT
A shallow hazards survey was conducted over Ship Shoal Blocks 137, 138, 139, 140, and 141.

Three copies of a shallow hazard report are being submitted to the MMS under separate cover.

(E) 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-3.***

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

(G) STRATIGRAPHIC COLUMN
PROPRIETARY DATA

(G) TIME VS DEPTH TABLES
PROPRIETARY DATA

(H) HYDROGEN SULFIDE INFORMATION
In accordance with Title 30 CFR 250.417(c), Samson requests that Ship Shoal Block 140 be classified by the MMS as H_2S absent.

Well Site Assessment

Proposed Well No. 140 "A

The proposed drilling location (3,000 feet FWL / 810 feet FNL, or X =2,174,600.00; Y = 29,051.23, or Lat. = 28° 44' 43.473" N; Long. = 90 ° 47' 18.927" W) in Block 140, Ship Shoal Area, is approximately 21.4 nautical miles south-southeast of Raccoon Point, Louisiana.

The seafloor is almost flat; water depth is about 63 feet.

Side scan sonar data depict an acoustically medium textured seafloor reported to be clayey silt (USDI, MMS, 1983: Visual No. 3).

Sonograms recorded an unidentified target 1,250 feet to the south-southwest; it should be avoided. A 26-inch Trunkline pipeline trends northeastward 800 feet to the northwest.

Unidentified magnetic anomaly numbers 38,37, and 34, respectively, are 1,350 feet south-southeast, 1,450 feet south-southeast, and 1,900 feet south-southwest of the proposed drilling location. They are of low intensity (4 to 11gammas) and short to moderate duration (80 to 175 feet), and should not pose an adverse impact.

The seafloor is underlain by 12 feet of probably normally consolidated Holocene sediments; deeper strata are completely attenuated beneath an at least moderately over pressured gas front. Care should be exercised when the gas front is physically penetrated; expulsion of gas and / or fluidized mud accompanied by localized sediment mobilization is possible.

No fault is in the area of interest.

Areally restricted possible shallow overpressured gas pockets at depths of 0.120 and 0.200 second BSL, respectively, 1,000 feet southwest and 1,800 feet west southwest of the proposed well site should not adversely impact the proposed drilling location, but the drilling engineer should be aware of their presence.

No archaeological resources will be disturbed.

ATTACHMENT C-3

Robert T. Giles
Marine Geologist

THALES

APPENDIX D
BIOLOGICAL 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

Ship Shoal Block 140 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).

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.

Samson Offshore
Ship Shoal 140, OCS-G 23898

Disposal Table (Wastes to be Disposed of, Not Discharged) - EP

Type of Waste Approximate Composition	Amount*	Rate per Day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Waste Oil	1150 gal/well (650 gal/well from rig 500 gal /well from boats)	23 gal/day	Bodin Oil Recovery, Inc. Abbeville LA	Waste oil from rig sent in USCG approved tanks to ASCO Fuel dock at Port Fourchon, LA. Oil is dumped into waste oil storage at fuel dock. Waste oil on boats is pumped into waste oil storage also. Bodin Oil Recovery, Inc. picks up oil from waste oil with tank truck and hauls to Abbeville. At Abbeville oil is chemically treated and recycled as fuel oil and sold.
Produced water	1100 bbl based on 2 casing volumes initial completion flow test only	1100 bbl/day	Newpark Environmental, Fannett, TX	Pumped to workboat. Workboat to Newpark facility at Port Fourchon, LA. Pump workboat to Newpark hopper barge. Full hopper barge sent to Newpark @ Port Arthur, TX. Liquid is decanted off treated and disposed of in disposal well at Fannett, TX.
Trash and debris	5000 ft^3 Based on (3) 30 yd dumpster volumes emptied during 25 day well	100 ft^3 /day	Municipal landfill, Lafouche Parish, Louisiana	Trash collected and compacted into 25 cu-ft trash bags. Trash bags shipped to Fourchon dock and placed in 30 cuyd dumpster. Dumpster hauled to landfill and dumped.
Chemical product wastes	150 Bbl Spent pickle acid and interface	150 bbl/day	Municipal landfill, Beaumont, TX; Newpark Environmental, Fannett, TX	Captured and stored on rig in USCG approved tanks. Loaded on workboat. Workboat to Newpark facility at Port Fourchon, LA. Dump tanks into Newpark hopper barge. Full hopper barge sent to Newpark @ Port Arthur, TX. Liquid is decanted off treated and disposed of in disposal well at Fannett, TX. Un recyclable solids are treated and disposed of at the Municipal Landfill at Beaumont, TX.
Gravel Pack sand	16,000 Lb Based on 2 screen outs at 2ppg sand for 100 bbl tbg cap	16,000 Lb/day	Municipal landfill, Beaumont, TX; Newpark Environmental, Fannett, TX	Sand is captured and stored at rig in USCG cuttings box. Box is sent to Fourchon dock on workboat. Dump boxes into Newpark hopper barge. Full hopper barge sent to Newpark @ Port Arthur, TX. Liquid is decanted off treated and disposed of in disposal well at Fannett, TX. Recyclable solids are processed and sold from Port Arthur facility. Un recyclable solids are treated and disposed of at the Municipal Landfill at Beaumont, TX.

Workover fluids	1100 bbl based on 2 casing volumes initial completion flow test only	1100 bbl/day	Municipal landfill, Beaumont, TX; Newpark Environmental, Fannett, TX	Pumped to workboat. Workboat to Newpark facility at Port Fourchon, LA. Dump tanks into Newpark hopper barge. Full hopper barge sent to Newpark @ Port Arthur, TX. Liquid is decanted off treated and disposed of in disposal well at Fannett, TX. Un recyclable solids are treated and disposed of at the Municipal Landfill at Beaumont, TX.

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

APPENDIX F
OIL SPILL INFORMATION

1. Site-Specific OSRP N/A

2. Regional OSRP Information

Samson Offshore Company is the only entity covered in their Regional Oil Spill Response Plan (OSRP) approved on ~~June 19, 2002.~~ 1/27/03 Activities proposed in this EP will be covered by the Regional OSRP.

3. OSRO Information

Samson'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 Drilling	Exploratory Drilling
Facility Location (Area/Block)	Ship Shoal 137/142	Ship Shoal 140
Facility Designation	JU	JU
Distance to Nearest Shoreline (miles)	20	21
Volume Storage tanks (total) Uncontrolled blowout Total Volume	7500	7500
Type of Oil(s) (crude, condensate, diesel)	Crude	Crude
API Gravity	33°	33°

Samson 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 for far-shore activities.

1/27/03

Since Samson has the capability to respond to the worst-case spill scenario included in our regional OSRP approved on ~~June 19, 2002~~, 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 Samson 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.

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	

Enclosed as Attachment G-1 are the emissions worksheets prepared in accordance with 30 CFR 250.303(d).

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.

EXPLORATION PLAN (EP)
AIR QUALITY SCREENING CHECKLIST

OMB Control No. XXX-XXX
Expiration Date: Pending

COMPANY	SAMSON OFFSHORE COMPANY
AREA	SHIP SHOAL
BLOCK	140
LEASE	OCS-G 23898
RIG	JACK-UP
WELL	A
COMPANY CONTACT	CHERYL POWELL
TELEPHONE NO.	(281) 578-3388
REMARKS	DRILL, COMPLETE & TEST WELL LOCATION A

ATTACHMENT G-1

"Yes"	"No"	Air Quality Screening Questions
	X	1. Is any calculated Complex Total (CT) Emission amount (in tons) associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: CT = $3400D^{2/3}$ for CO, and CT = 33.3D for the other air pollutants (where D = distance to shore in miles)?
	X	2. Do your emission calculations include any emission reduction measures or modified emission factors?
	X	3. Are your proposed exploration activities located east of 87.5° W longitude?
	X	4. Do you expect to encounter H_2S at concentrations greater than 20 parts per million?
X		5. Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?
X		6. Do you propose to burn produced hydrocarbon liquids?

If ALL questions are answered "No":
Submit only this coversheet with your plan; a full set of spreadsheets is not needed.

If ANY of questions 1 through 7 is answered "Yes":
Prepare and submit a full set of **EP** spreadsheets with your plan.

If question number 8 is answered "Yes":
Prepare and submit a full set of **DOCD** spreadsheets showing the cumulative emissions from both the proposed activities and the existing production platform.

Fuel Usage Conversion Factors	Natural Gas Turbines		Natural Gas Engines		Diesel Recip. Engine		REF.	DATE
	SCF/hp-hr	9.524	SCF/hp-hr	7.143	GAL/hp-hr	0.0483	AP42 3.2-1	4/76 & 8/84

Equipment/Emission Factors	units	PM	SOx	NOx	VOC	CO	REF.	DATE
NG Turbines	gms/hp-hr		0.00247	1.3	0.01	0.83	AP42 3.2-1& 3.1-1	10/96
NG 2-cycle lean	gms/hp-hr		0.00185	10.9	0.43	1.5	AP42 3 2-1	10/96
NG 4-cycle lean	gms/hp-hr		0.00185	11.8	0.72	1.6	AP42 3.2-1	10/96
NG 4-cycle rich	gms/hp-hr		0.00185	10	0.14	8.6	AP42 3.2-1	10/96
Diesel Recip. < 600 hp.	gms/hp-hr	1	1.468	14	1.12	3.03	AP42 3.3-1	10/96
Diesel Recip. > 600 hp.	gms/hp-hr	0.32	1.468	11	0.33	2.4	AP42 3.4-1	10/96
Diesel Boiler	lbs/bbl	0.084	2.42	0.84	0.008	0.21	AP42 1.3-12,14	9/98
NG Heaters/Boilers/Burners	lbs/mmscf	7.6	0.593	100	5.5	84	P42 1.4-1, 14-2, & 14	7/98
NG Flares	lbs/mmscf		0.593	71.4	60.3	388.5	AP42 11.5-1	9/91
Liquid Flaring	lbs/bbl	0.42	6.83	2	0.01	0.21	AP42 1.3-1 & 1.3-3	9/98
Tank Vapors	lbs/bbl				0.03		E&P Forum	1/93
Fugitives	lbs/hr/comp.				0.0005		API Study	12/93
Glycol Dehydrator Vent	lbs/mmscf				6.6		La. DEQ	1991
Gas Venting	lbs/scf				0.0034			

Sulfur Content Source	Value	Units
Fuel Gas	3.33	ppm
Diesel Fuel	0.4	% weight
Produced Gas(Flares)	3.33	ppm
Produced Oil (Liquid Flaring)	1	% weight

EMISSIONS CALCULATIONS 1ST YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
SAMSON OFFSHORE C	SHIP SHOAL	140	OCS-G 23898	JACK-UP	A		CHERYL POWELL	(281) 578-3388	

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	16975	819 8925	19677.42	24	50	11 96	54 89	411 29	12 34	89.74	7 18	32 93	246 77	7 40	53 84
	VESSELS>600hp diesel(crew)	2065	99.7395	2393 75	6	64	1 46	6 68	50 03	1 50	10 92	0.28	1 29	9 65	0.29	2.11
	VESSELS>600hp diesel(supply)	2065	99.7395	2393 75	10	36	1 46	6 68	50 03	1.50	10.92	0.26	1.19	8 93	0 27	1 95
	VESSELS>600hp diesel(tugs)	8400	405 72	9737 28	12	2	5 92	27 16	203.52	6.11	44.41	0 07	0 33	2 44	0 07	0 53
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0 00	0	0	0.00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00
	MATERIAL TUG diesel	0	0	0 00	0	0	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0 00	0 00	0.00
	VESSELS>600hp diesel(crew)	0	0	0 00	0	0	0 00	0.00	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0.00
	VESSELS>600hp diesel(supply)	0	0	0 00	0	0	0.00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0.00	0 00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0 00					0 00	
DRILLING WELL TEST	OIL BURN	250			24	2	4 38	71 15	20 83	0 10	2.19	0 11	1.71	0 50	0 00	0 05
	GAS FLARE		208333		24	2		0 12	14 87	12.56	80 94		0 00	0.36	0 30	1 94
2003 YEAR TOTAL							25.17	166.67	750.59	34.11	239.10	7.90	37.45	268.66	8.34	60.42
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											699.30	699.30	699.30	699.30	25879.65
	21 0															

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
SAMSON OFFS	SHIP SHOAL	140	OCS-G 23898	JACK-UP	A

Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2003	7.90	37.45	268.66	8.34	60.42
Allowable	699.30	699.30	699.30	699.30	25879.65

APPENDIX H
ENVIRONMENTAL IMPACT ANALYSIS (EIA)

ENVIRONMENTAL IMPACT ANALYSIS

Included in this section as ***Attachment H-1*** is the Environmental Impact Analysis prepared in accordance with Appendix H of NTL 2002-G08.

Samson Offshore Company
Initial Exploration Plan
Ship Shoal Block 140
OCS-G 23898

(B) Analysis

Site-Specific at Ship Shoal Block 140

1. Designated topographic features

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

Physical disturbances to the seafloor and effluents: Ship Shoal Block 140 is approximately 35 miles from the closest designated topographic feature (Ewing Bank), and 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 paragraph 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 Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPF's (including emissions and wastes sent to shore for disposal) from the proposed activities that could cause impacts to topographic features.

2. Pinnacle trend area live bottoms.

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

Physical disturbances to the seafloor and effluents: Ship Shoal Block 140 is more than 100 miles from the closest live bottom (pinnacle trend) area, and 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 paragraph 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 Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPF's (including emissions and wastes sent to shore for disposal) from the proposed activities that could cause impacts to a live bottom (pinnacle trend) area.

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

Physical disturbances to the seafloor and effluents: Ship Shoal Block 140 is more than 100 miles from the closest Eastern Gulf live bottom stipulated block.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in paragraph 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 Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPF's (including emissions and wastes sent to shore for disposal) from the proposed activities that could cause impacts to an Eastern Gulf live bottom area.

4. Chemosynthetic communities
There are no IPF's (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.

High-density chemosynthetic communities are found only in water depths greater than 400 m, therefore Samson's proposed operations in Ship Shoal Block 140 would not cause impacts.

5. Water quality
IPFs that could result in water quality degradation from the proposed operations in Ship Shoal Block 140 include effluents and accidents.

Effluents – Routine effluent activities related to drilling operations that could result in marine quality degradation include the emplacement and removal of rigs, and the discharge of operational wastes. Bottom area disturbance from rig emplacement and removal would be limited and the disturbance would produce only a localized, temporary resuspension of bottom sediments.

During drilling operations, water-based drilling muds and cuttings, treated sanitary and domestic wastewaters, deck drainage, and miscellaneous wastes such as ballast waters, may be discharged at some point in the operation. All discharges are covered under an EPA NPDES permit, and must meet limitations and requirements set by the EPA. The rate that discharges occur is controlled and restricted. Operational discharges are not expected to cause significant adverse impacts to water quality.

Accidents - Oil spills also have the potential to alter offshore water quality. It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. During the twenty years from 1980 to 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. During the 10 year period from 1976 – 1985, in which data were collected, there were 80 reported diesel spills greater than one barrel associated with drilling activities, compared with 11,944 wells drilled, or 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 or 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 Samson's Regional Oil Spill Response Plan (refer to information submitted in Appendix F).

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

6. Fisheries
IPFs that could cause impacts to fisheries as a result of the proposed operations in Ship Shoal Block 140 include effluents and accidents.

There are no commercial or recreational fisheries located in the immediate or near-vicinity of Ship Shoal Block 140. Effluents such as drilling fluids and

cuttings discharges contain components and properties 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.

An accidental oil spill has the potential to cause some detrimental effects to fisheries. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Paragraph 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 shell fish 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 Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no IPF's from emissions, physical disturbances to the seafloor, or wastes sent to shore for disposal from the proposed activities that could cause impacts to fisheries.

7. Marine mammals

IPFs that could cause impacts to marine mammals as a result of the proposed operations in Ship Shoal Block 140 include emissions, effluents, discarded trash and debris, and accidents. 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.

Emissions (Noise) – 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 (e.g., 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 that may be detrimental to marine mammals. Most operational discharges are diluted and dispersed when released. 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).

Samson 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, "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. Vessel crews are required to report sightings of any injured or dead protected species immediately to the MMS Protected Species Biologist by telephone. 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 sub-lethal 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 Paragraph 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 our 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 Samson's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

There are no other IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to marine mammals.

8. Sea turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations in Ship Shoal Block 140 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).

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 when released. 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). Samson 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, "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 are expected to be unusual events, however such collision could result in death or injury. Contract vessel operators can avoid marine turtles and reduce potential deaths. Vessel crews are required to report sightings of any injured or dead protected species immediately to the MMS Protected Species Biologist by telephone. 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 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 juvenile and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Paragraph 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 Samson's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

There are no other IPF's (including physical disturbances to the seafloor) from the proposed activities that could cause impacts to sea turtles.

9. Air Quality

There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Plan Emissions (Complex Total Emissions are the same as Plan Emissions) for the proposed activities do not exceed the exemption amounts. There are no other IPF's (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities that could cause impacts to air quality.

10. Shipwreck sites (known or potential)

The greatest potential IPF that could cause impacts to known or unknown shipwreck sites as a result of the proposed operations in Ship Shoal Block 140 are disturbances to the seafloor (drilling rig emplacement). Ship Shoal Block 140 is located in an OCS Block designated by MMS as high-probability for occurrence of shipwrecks, and therefore an Archaeological Survey was conducted at 50-m line spacing. Review of the survey data indicates there are no known or potential shipwreck sites located within the survey area. However, Samson 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 IPF's (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

IPF's that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in Ship Shoal Block 140 are disturbances to the seafloor (drilling rig emplacement) and accidents (oil spill). Ship Shoal Block 140 is located inside the Archaeological Prehistoric high probability line; therefore an Archaeological Survey was required. Review of the survey data indicates there are no archaeological resources located within the survey area. However, Samson 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. An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Paragraph 5, Water Quality). The activities proposed in this plan will be covered by Samson's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix F).

There are no other IPF's (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

IPFs that could cause impacts to essential fish habitat as a result of the proposed operations in Ship Shoal Block 140 include effluents, physical disturbances to the seafloor, and accidents. Essential fish habitat includes all estuarine and marine waters and substrates in the Gulf of Mexico.

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 (drilling muds and cuttings and produced waters). 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.

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 (anchoring, structure emplacement and removal, pipeline trenching),

Accident - 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 Paragraph 5, Water quality). The activities proposed in this plan will be covered by Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPF's (including emissions, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to essential fish habitat.

2. Marine and pelagic birds
IPF's 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 drilling rig.

Emissions - Emissions of pollutants into the atmosphere from these activities are far below concentrations that 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 Paragraph 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 Samson'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). Samson 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, "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, and therefore, the effects will be negligible.

There are no other IPF's (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to marine and pelagic birds.

3. Public health and safety due to accidents.
There are no IPF's (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal, or accidents, including an

accidental H_2S releases) from the proposed activities that could cause impacts to public health and safety. In accordance with 30 CFR 250.417(c) and 2002-G08, 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

IPF's from the proposed activities that could cause impacts to beaches are accidents (oil spills) and discarded trash and debris.

Accidents – Oil spills and subsequent clean up operations would likely disturb and remove a significant amount of sand, which could result in short-term (up to 2 years), landward adjustments in beach configuration if the sand is not replaced and regarded as a mitigation measure. Because of the inaccessibility of most of the Central Gulf barrier coast to humans, recreational use is not expected to result in significant impacts to most beaches. Due to the distance from shore (21 miles) and the response capabilities that would be implemented, significant adverse impacts are not expected. The activities proposed in this plan will be covered by Samson'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 should 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). Samson 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, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPF's (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 beaches.

2. Wetlands
IPF's that could affect wetlands and seagrass beds associated with the proposed operations are accidents (oil spills).

Accidents – Oil slicks that contact land are expected to come ashore on barrier islands. Flood tides may bring some oil through tidal inlets into areas landward of barrier beaches. Light oiling of vegetated wetlands may occur. Any adverse impacts that may occur to wetland plants would be very short lived, less than a year. Major oil spills contacting wetlands would cause die-back of wetland vegetation. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Paragraph 5, Water quality). If a spill were to occur, response capabilities as outlined in Samson's Regional OSRP (refer to information submitted in Appendix F) would be implemented.

There are no other IPF's (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
IPF's from the proposed activities that could cause impacts to shore birds and coastal nesting birds are accidents (oil spills) and discarded trash and debris. Environmental Sensitivity Index maps of Louisiana indicate diving birds (including white and brown pelicans) are common throughout the area.

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, 198l; 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 Paragraph 5, Water quality). Due to the distance from shore being 18 miles. Samson 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). Samson 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, "All Washed Up: The Beach Litter Problem". Thereafter, all personnel will view the marine trash and debris training video annually.

There are no other IPF's (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

IPF's from the proposed activities that could cause impacts to coastal wildlife refuges are accidents (oil spills) and discarded trash and debris. Due to the distance from the Terrebonne Barrier Island Refuge (approximately 18 miles), an accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. This refuge is home to resident and migratory waterfowl. Impacts to shore birds and coastal nesting birds was covered in the above Section. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Paragraph 5, Water quality). Response capabilities would be implemented, no impacts are expected. The activities proposed in this plan will be covered by Samson's Regional OSRP (refer to information submitted in Appendix F).

There are no other IPF's (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

The only federal lands in coastal Louisiana managed as designated wilderness areas are Breton Wilderness Area, on the eastern side of Louisiana, and Lacassine National Wildlife Refuge, located in Cameron Parish in southwestern

Louisiana. Lacassine is inland of the coastline and is primarily a freshwater marsh. Operations proposed in this Plan are more than 100 miles from the Breton Wilderness Area; therefore no adverse impacts are expected.

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.

A Shallow Hazards Report is being submitted in accordance with NTL 2002-G08, Appendix C, and NTL 98-20. A Shallow Hazards Assessment of any seafloor and subsurface geological and man-made features and conditions that may adversely affect operations is being submitted in accordance with NTL 2002_G08 and NTL 98-20.

(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.

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Although not cited, the following were utilized in preparing the 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

Samson Offshore Company
Initial Exploration Plan
Ship Shoal Block 140

ENVIRONMENTAL IMPACT ANYLYSIS 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	
Fisheries		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	X
Wilderness areas						
Other Resources You Identify						

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:
   a. 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
   b. 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;
   c. Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
   d. Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
2. Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
3. Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
4. Activities on blocks designated by the MMS as being in water depths 400 meters or greater.
5. Exploration or production activities where H_2S 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.

APPENDIX I

COASTAL ZONE MANAGEMENT CONSISTENCY INFORMATION

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

COASTAL MANAGEMENT CONSISTENCY CERTIFICATION

INITIAL EXPLORATION PLAN

SHIP SHOAL BLOCK 140

OCS-G 23898

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

Samson Offshore Company
Lessee or Operator

Tom Kescely, Environmental Supervisor
Certifying Official

March 13, 2003
Date

BEST AVAILABLE COPY

PLAN INFORMATION FORM

GENERAL INFORMATION					
Type of OCS Plan:	X	Exploration Plan (EP)		Development Operations Coordination Document (DOCD)	
Company Name:	**Samson Offshore Company**			MMS Operator Number:	**02397**
Address:	**Samson Plaza**		Contact Person:	**Cheryl Powell**	
	Two West Second Street		Phone Number:	**(281) 578-3388**	
	Tulsa, OK 74103		Email Address:	**cheryl.powell@jccteam.com**	
Lease: **G 23898**	Area: **Ship Shoal**	Block: **140**	Project Name (If Applicable):	**N/A**	
Objective(s): ☒Oil	☐Gas	☐Sulphur	☐Salt	Onshore Base: **Fourchon, LA**	Distance to Closest Land (Miles): **21**

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?	x	Yes		No

Tentative Schedule of Proposed Activities

Proposed Activity	Start Date	End Date	No. of Days
Drill, Complete, and Test Well Location A	**06/01/03**	**07/15/03**	**45**
Install Caisson	**07/15/03**	**07/20/03**	**5**

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				

OCS PLAN 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 x Name: A	CALLS: 810' F N L and 3000' F W L OF LEASE OCS G 23898 , SHIP SHOAL AREA, BLOCK 140		CALLS: F N L and F W L OF LEASE OCS G 23898 , SHIP SHOAL AREA, BLOCK 140	
	X: 2,174,600.000' Y: 29,051.226'		X: Y:	
	LAT: 28° 44' 43.473" LONG: 90° 47' 18.927"		LAT: LONG:	
	TVD (IN FEET):	MD (IN FEET):		WATER DEPTH (IN FEET): 63'