

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MARINE HIGH RESOLUTION GEOPHYSICAL SURVEY,
LOWER COOK INLET, ALASKA

By
Petty-Ray Geophysical Division
Geosource, Inc.

Open-File Report 77-358

1977

This report has not been edited for conformity
with Geological Survey editorial standards or
stratigraphic nomenclature.

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	I
INDEX MAP, FIG. I	
SUMMARY	I
GENERAL DISCUSSION	4
TIDE TABLES, FIG. 2	
GEOLOGICAL BACKGROUND	4
FIELD PROCEDURES and RECORDING EQUIPMENT	4
INTERPRETIVE MAPS	6

INTRODUCTION

Petty-Ray Geophysical Division of Geosource, Inc. contracted with the United States Geological Survey to perform a high resolution study of the bottom and shallow sub-bottom in an area known as the Lower Cook Inlet, Alaska (Fig. 1). The work included both gathering and interpretation of data to be used by the USGS in conjunction with previous data in evaluating potential hazardous conditions in the vicinity of the forthcoming Bureau of Land Management OCS Sale.

Petty-Ray Division performed the onsite gathering of the data and sub-contracted with McGarity & Associates, Houston, Texas, for the interpretation and preparation of the final maps and report.

The data gathered and interpreted included 2,937.9 Km of side scan sonar, 3,149.1 Km of sub-bottom profiler, and 1453.2 Km of Sparker records over areas designated by the USGS.

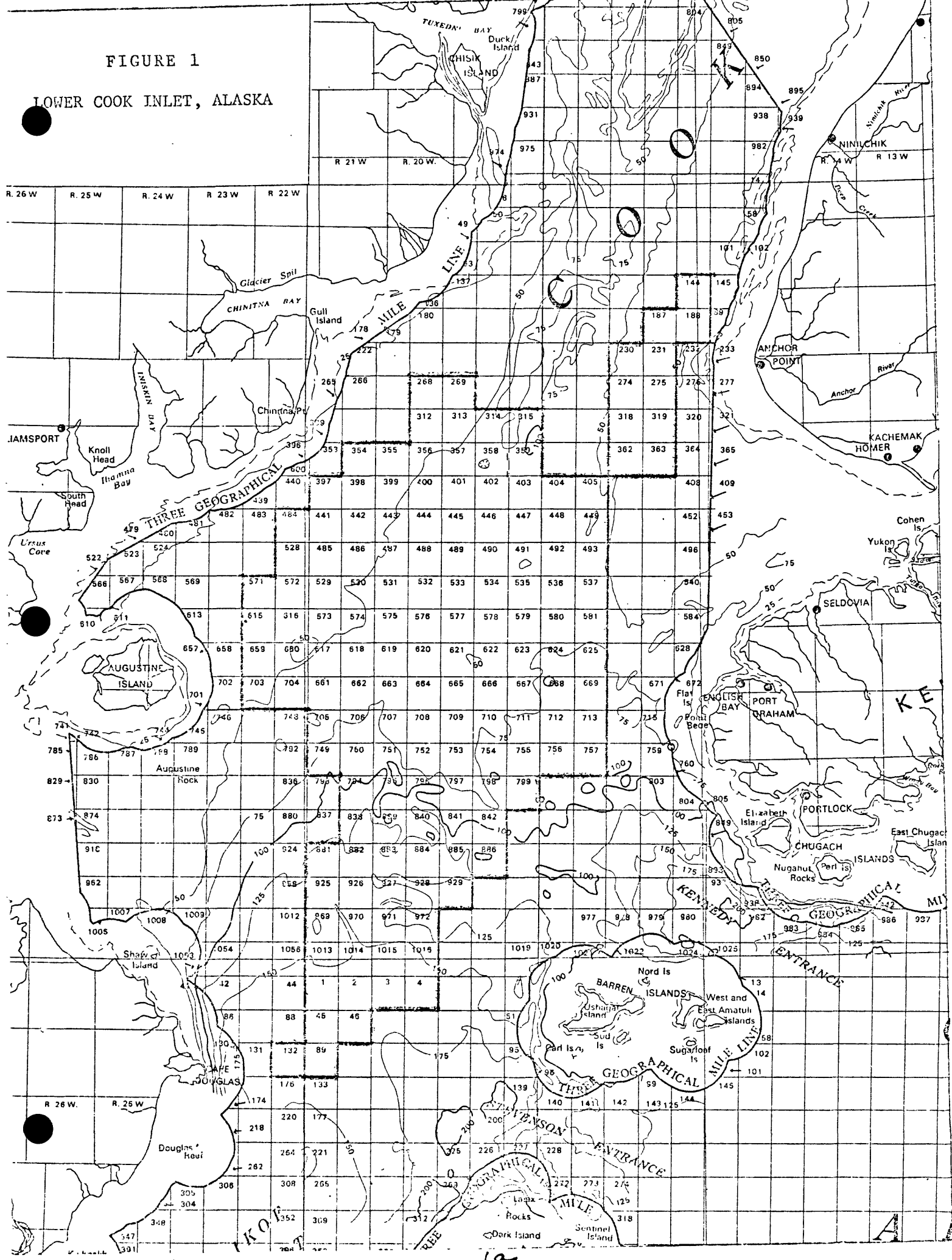
SUMMARY

The data gathering was accomplished by utilizing two boats, the M/V "GREBE" and the M/V "SITKIN". Each boat was equipped with multi-sensor recording systems to be utilized simultaneously, thus assuring precise integration of information from all sensors.

FIGURE 1

LOWER COOK INLET, ALASKA

R. 26 W. R. 25 W. R. 24 W. R. 23 W. R. 22 W.



Data gathering began September 7, 1976, and was completed October 6, 1976. Twelve days were lost due to weather conditions in the area.

Data Coverage:

A comprehensive study of all 152 blocks covered by this survey could not be made due to the limited coverage by the deep penetrating sparker sensor. Since essentially all of the blocks contained a water bottom sediment of sand, the lower powered transducer profiler could not get penetration; therefore, most of this report is limited to waterbottom conditions.

Data Quality:

The data from all the sensors, while weak in certain areas, was interpretable for the purposes of this survey, especially over the blocks to be evaluated.

Types of Maps:

Several considerations were used in the interpretation of the data. Tides in the Lower Cook Inlet were such that tide corrections were necessary in order to properly tie the data, especially the bathymetry. Charts were constructed (Fig. 2) around the periphery of the survey area in order to facilitate this correction across the Inlet. The Quaternary sedimentary cover was broken down into two isopachs to try and define the recent sandy sediments. This could only be accomplished in the areas where sparker data was available.

Five maps were constructed over the survey area:

- (1) Hazard Map: Showing potential hazards as observed from the data;
- (2) Bathymetry: Constructed from data recorded by the sub-bottom profiler mounted on the side of the vessels;
- (3) Isopach 1: Constructed from data recorded by the sparker sensor system, showing approximate thickness of recent sand sediments;

TIDE TABLE NO. 1

<u>A</u>			<u>B</u>		
<u>CAPE NINILCHIK</u>			<u>SNUG HARBOR</u>		
<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>	<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>
9-15-76	1155	2.0	9-15-76	1214	2.0
	1752	5.1		1823	4.0
9-16-76	0142	1.4	9-16-76	0206	1.3
	0722	4.3		0741	3.3
9-29-76	1803	5.9	9-29-76	1829	4.8
9-30-76	0153	0.4	9-30-76	0217	0.3
	0729	5.1		0755	4.0
	1317	1.7		1341	1.7
	1916	5.3		1942	4.3

FIGURE 2

TIDE TABLE NO. 2

<u>A</u>			<u>B</u>		
<u>PORT GRAHAM</u>			<u>ILIAMNA BAY</u>		
<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>	<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>
9-6-76	1806	0.4	9-6-76	1834	0.4
9-7-76	0026	5.4	9-7-76	0044	4.7
	0628	-0.3		0656	-0.2
	1300	5.5		1320	4.8
	1845	0.1		1913	0.1
9-10-76	0213	5.6	9-10-76	0233	4.8
	0804	-0.1		0832	0.0
	1427	5.7		1447	4.9
	2027	-0.2		2055	-0.1
9-11-76	0248	5.4	9-11-76	0308	4.7
	0836	0.2		0904	0.2
	1456	5.5		1516	4.8
	2059	0.0		2127	0.1
9-12-76	0322	5.2	9-12-76	0342	4.5
	0908	0.6		0936	0.5
9-30-76	1218	1.6	9-30-76	0653	3.8
	1834	4.5		1246	1.4
				1854	4.0
10-1-76	0113	0.6	10-1-76	0141	0.6
	0813	4.2		0833	3.7
10-6-76	1226	5.5	10-6-76	1246	4.8
	1824	-0.1		1852	0.0

FIGURE 2 (continued)

TIDE TABLE NO. 3

<u>A</u>			<u>B</u>		
<u>USHAGAT ISLAND</u>			<u>NORDYKE ISLAND</u>		
<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>	<u>DATE</u>	<u>TIME</u>	<u>TIDE (M)</u>
10-1-76	0116	1.0	10-1-76	0149	1.2
	0808	3.1		0833	3.7
	1348	1.8		1421	2.3
	1956	3.5		2021	3.8
10-2-76	0242	0.6	10-2-76	0315	1.3
	0929	3.5		0954	3.9
10-4-76	0449	0.4	10-4-76	0522	0.5
	1117	4.1		1142	4.5
	1713	0.5		1746	0.7
	2325	4.0		2350	4.5
10-5-76	0529	0.3	10-5-76	0602	0.4
	1152	4.3		1217	4.8
	1752	0.2		1825	0.3

FIGURE 2 (continued)

- (4) Isopach 2: Constructed from data recorded by the sparker sensor system, showing the thickness between the recent sand cover and the bottom of the Quaternary sedimentary unit;
- (5) Tertiary Structure: Constructed from data recorded by the sparker sensor system, showing the apparent dips, anticlinal and synclinal axis of the folded tertiary sedimentary unit.

GENERAL DISCUSSION:

Geological Background:

The Cook Inlet basin of South-Central Alaska is an intermontane structural basin approximately 35,000 sq. km in an area encompassing almost 325,000 cubic km of sedimentary rocks ranging in age from upper Triassic to Recent. About 30% of the basin area is occupied by shallow waters and bordering mud flats of the Cook Inlet.

The basin is bordered on the west by the Alaska Range, and on the east by the Kenai and Chugack mountains. These mountains consist of complex Mesozoic sediments, volcanics and intrusive rocks. The basin is partly closed on the north by the Talkeetna Mountains, a southward salient of the Alaska Range and is open on the south where the waters of Cook Inlet join the Gulf of Alaska.

The Cook Inlet sedimentary trough, in contrast to the structural basin, is defined as a Paleozoic-early Mesozoic eugeosyncline that received sediments from emergent volcanic islands which were part of the volcanic belt bordering the Pacific Coast of North America. Middle Jurassic epeirogeny transformed southern Alaska into arcuate geanticlinal and geosynclinal belts with the Cook Inlet basin beginning as a half-graben created by complex faulting on the east flank of the Talkeetna geanticline.

Field Procedures and Recording Equipment:

Four types of surveys were conducted simultaneously:

1. Bathymetric (Depth of Water): A hull mounted ORE Model 140 transducer using 10 KW of power and a frequency range of 1-12 KHz;
2. Seafloor Imaging: The M/V "SITKIN" used an E. G. & G. Mark 1B Side Scan Sonar System including a Model 259-3 recorder and a Model 272 Tow Fish. The M/V "GREBE" used a Klein Model 400 Dual Side Scan Sonar System including a Model 401 recorder and a Model 402A Tow Fish;

These systems acquire images similar to a photograph within a range of 200 meters on each side of the traverse;

3. Sub-bottom Profiler: A hull mounted ORE Model 140 transducer using 10 KW of power and a frequency range of 1-12 KHz. (Same as 1.)

This system could not record the shallow strata due to the cover of sand on the bottom.

4. Reflection Sparker System: An E. G. & G. Model 402-7 (9 electrode) Spark array with a modified Model 265 Hydrophone. This system generates a frequency spectrum of 40-400 Hz at 8000 watt-seconds.

This system provides deeper penetration than the sub-bottom profiler. This information is useful for mapping at depths investigated by foundation borings.

Field positioning was done by Navigation Services, Inc. using Ray dist and Loran C.

All fixes on accompanying maps and profiles are referenced to the antenna position of the recording boats. Nominal fix interval is 300 meters.

Horizontal corrections are required to align the data from the several instruments. To find the true depth point of a fix mark on the map, the reading must be made forward of the fix mark on the recording.

	Offset	
	<u>Meters</u>	<u>Correction To Fix Mark</u>
Sparker		
(Grebe)	36.8	12%
(Sitkin)	35.4	12%
Subbottom Profiles		
(Grebe)	8.2	3%
(Sitkin)	10.7	4%
Side Scan Sonar		
(Grebe)	(1)	(2)
(Sitkin)	(1)	(2)

- (1) See record label for length of cable deployed
- (2) Divide corrected offset by the fix interval (300 meters)

Interpretive Maps:

Five maps at a scale of 1 = 96000 have been prepared:

1. Bathymetry Map: The side-mounted subbottom Profiler was used to construct the water depth map. Contours are based on values at each fix mark. Every fifth value was annotated on final map. Contour interval is two meters to 100 meters depth and five meters for depths greater than 100 meters. Detailed discussion of the water bottom is presented in the block by block analysis in the appendix of this report;
2. Isopach (Seafloor to Horizon 1): The sparker records were used to construct this map. Contours are based on values at each fix mark. Every fifth value was annotated on the final map. Contour interval is 50 feet. This isopach interval was chosen because it seemed to represent the approximate thickness of the sand cover. Detailed discussion of this zone is presented in the block by block analysis in the appendix of this report;
3. Isopach (horizon 1 to horizon 2): The sparker records were used to construct this map. Contours are based on values at each fix mark. Every fifth value was annotated on the final map. Contour interval is 50 feet. This interval was chosen to complete the isopach of the Quaternary section. Detailed discussion of this zone is presented in the block by block analysis in the appendix of this report;
4. Tertiary apparent Dip Map: The sparker records were used to construct this map. Since the strata in the Tertiary is highly folded and lies unconformably beneath the Quaternary overburden, a continuous structure map

was not possible; therefore, apparent dips were recorded at the appropriate fix mark in degrees. Also an attempt was made to align the anticlinal and synclinal axis of the folded beds. Detailed discussion of this strata section is presented in the block by block analysis in the appendix of this report;

5. Hazard Map: All recorded data was used to construct this map. This included the side scan sonar, subbottom profiler and sparker records. Potential hazards such as large sand dunes, scattered boulder fields, steep dip escarpments were noted. There were no apparent hazards observed in the blocks of interest that would present any problems to the placement of drilling rigs, platforms, pipelines, etc. if ordinary precautions are followed.

Gene E. McHarty

APPENDIX

Individual Block Analysis

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	34 meters
Slope:	1:138 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	34 meters
Slope:	1:1138 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	15-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	34 meters
Slope:	1:1138 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	15-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO 5-I-572

Water Bottom Conditions:

Water depth - Maximum:	42 meters
Minimum:	40 meters
Slope:	1:34 1/4 Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	15-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-I-615

Water Bottom Conditions:

Water depth - Maximum:	44 meters
Minimum:	36 meters
Slope:	1:853 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	15-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-I-616

Water Bottom Conditions:

Water depth - Maximum:	46 meters
Minimum:	40 meters
Slope:	1:1138 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-I-659

Water Bottom Conditions:

Water depth	- Maximum:	48 meters
	Minimum:	40 meters
	Slope:	1:853 Southeast
	Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	15-30 meters
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-I-660

Water Bottom Conditions:

Water depth - Maximum:	52 meters
Minimum:	44 meters
Slope:	1:853 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO 5-I-703

Water Bottom Conditions:

Water depth - Maximum:	54 meters
Minimum:	44 meters
Slope:	1:683 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	15-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	58 meters
Minimum:	48 meters
Slope:	1:683 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-144

Water Bottom Conditions:

Water depth - Maximum:	36 meters
Minimum:	32 meters
Slope:	1:1707 Northwest
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	3.1
Dip Directions -	Northwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-187

Water Bottom Conditions:

Water depth	-	Maximum:	42 meters
		Minimum:	34 meters
		Slope:	1:264 Maximum - Northwest-Southeast
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-188

Water Bottom Conditions:

Water depth	-	Maximum:	54 meters
		Minimum:	30 meters
		Slope:	1:122 Maximum Southeast-Northwest
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	2.3
Dip Directions	-	Northwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	54 meters
		Minimum:	28 meters
		Slope:	1:263 Northwest
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-231

Water Bottom Conditions:

Water depth	-	Maximum:	46 meters
		Minimum:	28 meters
		Slope:	1:379 Irregular
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-268

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	30 meters
Slope:	1:683 Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	34 meters
Minimum:	28 meters
Slope:	1:138
Sand dunes:	Southwest

Subbottom Conditions:

Sand Cover Thickness -	None
Sand Cover to Tertiary Thickness -	46 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	No Data

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	50 meters
Minimum:	28 meters
Slope:	1:310 West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	42 meters
Minimum:	28 meters
Slope:	1:174 Maximum - East
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-312

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	34 meters
Slope:	1:122 Maximum - Irregular
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-313

Water Bottom Conditions:

Water depth	- Maximum:	70 meters
	Minimum:	32 meters
	Slope:	1:81 Maximum - Southeast
	Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-314

Water Bottom Conditions:

Water depth - Maximum:	78 meters
Minimum:	34 meters
Slope:	1:88 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-315

Water Bottom Conditions:

Water depth - Maximum:	78 meters
Minimum:	70 meters
Slope:	1:305 Maximum - Southeast-Northwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-318

Water Bottom Conditions:

Water depth - Maximum:	42 meters
Minimum:	36 meters
Slope:	1:293 Maximum - Irregular
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	36 meters
Minimum:	32 meters
Slope:	Irregular - Southeast--Northwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-354

Water Bottom Conditions:

Water depth - Maximum:	38 meters
Minimum:	36 meters
Slope:	Rate - Relatively Flat
	Direction - Relatively Flat
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	25-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	36 meters
Slope:	1:610 Maximum - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	24-34 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-356

Water Bottom Conditions:

Water depth	-	Maximum:	50 meters
		Minimum:	38 meters
		Slope:	1:569 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	42 meters
Slope:	1:73 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-358

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	62 meters
Slope:	1:195 Maximum - Southeast-Northwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	58 meters
Slope:	1:310 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	48 meters
Minimum:	36 meters
Slope:	1:569 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	- Maximum:	38 meters
	Minimum:	32 meters
	Slope:	1:1138 - West
	Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	40 meters
Minimum:	38 meters
Slope:	1:Relatively Flat - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-398

Water Bottom Conditions:

Water depth - Maximum:	38 meters
Minimum:	36 meters
Slope:	1:1219 Maximum - South
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	23-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-399

Water Bottom Conditions:

Water depth	-	Maximum:	48 meters
		Minimum:	36 meters
		Slope:	1:569 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-400

Water Bottom Conditions:

Water depth - Maximum:	58 meters
Minimum:	40 meters
Slope:	1:379 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	76 meters
Minimum:	50 meters
Slope:	1:49 Maximum - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-402

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	50 meters
Slope:	1:73 Maximum - Southeast-Northwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-403

Water Bottom Conditions:

Water depth	-	Maximum:	72 meters
		Minimum:	50 meters
		Slope:	1:310 - Northwest
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-404

Water Bottom Conditions:

Water depth - Maximum:	56 meters
Minimum:	52 meters
Slope:	1:1707 - Northwest
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	58 meters
		Minimum:	52 meters
		Slope:	1:244 Maximum - West
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-442

Water Bottom Conditions:

Water depth - Maximum:	44 meters
Minimum:	38 meters
Slope:	1:366 Maximum - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	13-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-443

Water Bottom Conditions:

Water depth - Maximum:	52 meters
Minimum:	40 meters
Slope:	1:569 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-444

Water Bottom Conditions:

Water depth - Maximum:	60 meters
Minimum:	50 meters
Slope:	1:219 Maximum - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-445

Water Bottom Conditions:

Water depth - Maximum:	82 meters
Minimum:	60 meters
Slope:	1:37 Maximum - East
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-446

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	54 meters
Slope:	1:73 Maximum - West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	58 meters
Minimum:	50 meters
Slope:	1:203 Maximum - West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-448

Water Bottom Conditions:

Water depth	-	Maximum:	56 meters
		Minimum:	50 meters
		Slope:	1:366 Maximum - East
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	46 meters
Slope:	1:79 Maximum - Irregular
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-485

Water Bottom Conditions:

Water depth - Maximum:	42 meters
Minimum:	38 meters
Slope:	1:305 Maximum - Irregular
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-486

Water Bottom Conditions:

Water depth - Maximum:	50 meters
Minimum:	42 meters
Slope:	1:1138 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	23-30 Meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-487

Water Bottom Conditions:

Water depth	-	Maximum:	64 meters
		Minimum:	44 meters
		Slope:	1:341 - Southeast
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-488

Water Bottom Conditions:

Water depth - Maximum:	64 meters
Minimum:	54 meters
Slope:	1:683 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	66 meters
Minimum:	58 meters
Slope:	1:73 Maximum - Southeast-Northwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	64 meters
Minimum:	54 meters
Slope:	1:683 - Northwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-491

Water Bottom Conditions:

Water depth	-	Maximum:	56 meters
		Minimum:	52 meters
		Slope:	1:366 Maximum - Northwest-Southeast
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	13-17 meters
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	68 meters
Minimum:	52 meters
Slope:	1:427 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-529

Water Bottom Conditions:

Water depth	- Maximum:	52 meters
	Minimum:	40 meters
	Slope:	1:569 - Southeast
	Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	21 meters
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-530

Water Bottom Conditions:

Water depth - Maximum:	58 meters
Minimum:	44 meters
Slope:	1:488 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-493

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	46 meters
Slope:	1:49 Maximum - Southeast-West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	11-27 meters
Sand Cover to Tertiary Thickness -	51-55 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	60 meters
Minimum:	48 meters
Slope:	1:569 - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-532

Water Bottom Conditions:

Water depth	-	Maximum:	64 meters
		Minimum:	56 meters
		Slope:	1:244 Maximum - Irregular
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-533

Water Bottom Conditions:

Water depth - Maximum:	64 meters
Minimum:	52 meters
Slope:	1:152 Maximum - West-East
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	31-48 meters
Sand Cover to Tertiary Thickness -	25-36 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	60 meters
Minimum:	54 meters
Slope:	1:244 Maximum - Irregular
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-535

Water Bottom Conditions:

Water depth	-	Maximum:	62 meters
		Minimum:	50 meters
		Slope:	1:122 Maximum - West-Southeast
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	14-19 Meters
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	2.9
Dip Directions	-	Northeast

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	68 meters
		Minimum:	56 meters
		Slope:	1:146 Maximum - Southeast
		Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	12-15 meters
Sand Cover to Tertiary Thickness	-	57-65 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	5.0
Dip Directions	-	Northeast

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-537

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	46 meters
Slope:	1:146 Maximum - West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	12-16 meters
Sand Cover to Tertiary Thickness -	65 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	52 meters
Minimum:	44 meters
Slope:	1:853 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	21-50 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	66 meters
Minimum:	50 meters
Slope:	1:427 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-575

Water Bottom Conditions:

Water depth	-	Maximum:	68 meters
		Minimum:	58 meters
		Slope:	1:213 Maximum - Southeast-West
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-576

Water Bottom Conditions:

Water depth - Maximum:	64 meters
Minimum:	56 meters
Slope:	1:274 - West-East
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	28-48 meters
Sand Cover to Tertiary Thickness -	27-45 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block N05-2-577

Water Bottom Conditions:

Water depth	-	Maximum:	66 meters
		Minimum:	52 meters
		Slope:	1:157 Maximum - Irregular
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	45 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-578

Water Bottom Conditions:

Water depth - Maximum:	62 meters
Minimum:	52 meters
Slope:	1:268 Maximum - Southeast-Northwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	22-27 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	52 meters
Slope:	1:209 Maximum - West-East
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	15-23 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	- Maximum:	76 meters
	Minimum:	64 meters
	Slope:	1:569 - Southeast
	Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	12-18 meters
Sand Cover to Tertiary Thickness	-	46-70 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	58 meters
Slope:	1:203 Maximum - South
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	11-14 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	62 meters
Minimum:	48 meters
Slope:	1:488 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-618

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	54 meters
Slope:	1:427 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	70 meters
		Minimum:	62 meters
		Slope:	1:427 - Maximum - East--West
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-620

Water Bottom Conditions:

Water depth - Maximum:	66 meters
Minimum:	58 meters
Slope:	1:244 Maximum - Irregular
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	60-70 meters
Sand Cover to Tertiary Thickness -	17-18 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.9
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-621

Water Bottom Conditions:

Water depth - Maximum:	66 meters
Minimum:	58 meters
Slope:	1:325 Maximum - Northeast-Southw
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-622

Water Bottom Conditions:

Water depth - Maximum:	64 meters
Minimum:	54 meters
Slope:	1:163 Maximum - East-West
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	24-36 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	76 meters
Minimum:	54 meters
Slope:	1:310 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	11-28 meters
Sand Cover to Tertiary Thickness -	41-46 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	82 meters
Minimum:	68 meters
Slope:	1:488 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	12-15 meters
Sand Cover to Tertiary Thickness -	40 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-625

Water Bottom Conditions:

Water depth	-	Maximum:	88 meters
		Minimum:	70 meters
		Slope:	1:135 Maximum - Southeast-West
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	15 meters
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-661

Water Bottom Conditions:

Water depth - Maximum:	72 meters
Minimum:	64 meters
Slope:	1:853 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	72 meters
		Minimum:	62 meters
		Slope:	1:122 Maximum - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:		
Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-663

Water Bottom Conditions:

Water depth - Maximum:	76 meters
Minimum:	66 meters
Slope:	1:203 Maximum - Irregular
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	75-83 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-664

Water Bottom Conditions:

Water depth - Maximum:	68 meters
Minimum:	62 meters
Slope:	1:488 Maximum - West-East
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	46-61 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	70 meters
Minimum:	62 meters
Slope:	1:853 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	18-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-666

Water Bottom Conditions:

Water depth - Maximum:	72 meters
Minimum:	58 meters
Slope:	1:195 Maximum - South
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	27-39 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
--------------------------	---------

Dip Directions -	
------------------	--

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	76 meters
Minimum:	60 meters
Slope:	1:427 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	10-20 meters
Sand Cover to Tertiary Thickness -	37-55 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-668

Water Bottom Conditions:

Water depth - Maximum:	88 meters
Minimum:	74 meters
Slope:	1:195 - Maximum - East
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	14-21 meters
Sand Cover to Tertiary Thickness -	31-34 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	88 meters
Minimum:	70 meters
Slope:	1:149 - Maximum West
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	18-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	84 meters
Minimum:	56 meters
Slope:	1:244 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	90 meters
		Minimum:	74 meters
		Slope:	1:427 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	96 meters
Minimum:	62 meters
Slope:	1:79 - Irregular
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	33-75 meters
Sand Cover to Tertiary Thickness -	28-53 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	3.1
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	66 meters
Minimum:	62 meters
Slope:	1:190 Maximum - Southeast
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	- Maximum:	70 meters
	Minimum:	66 meters
	Slope:	1:1707 - Southeast
	Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness	-	7-37 meters
Sand Cover to Tertiary Thickness	-	67 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-710

Water Bottom Conditions:

Water depth - Maximum:	80 meters
Minimum:	70 meters
Slope:	1:683 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	7-36 meters
Sand Cover to Tertiary Thickness -	35-67 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-711

Water Bottom Conditions:

Water depth	- Maximum:	86 meters
	Minimum:	68 meters
	Slope:	1:379 - Southeast
	Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	20-28 meters
Sand Cover to Tertiary Thickness	-	37-46 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-712

Water Bottom Conditions:

Water depth - Maximum:	94 meters
Minimum:	78 meters
Slope:	1:427 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	18-39 meters
Sand Cover to Tertiary Thickness -	31-37 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-713

Water Bottom Conditions:

Water depth - Maximum:	92 meters
Minimum:	76 meters
Slope:	1:427 - Southwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	37-41 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	94 meters
Minimum:	64 meters
Slope:	1:228 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-750

Water Bottom Conditions:

Water depth	-	Maximum:	110 meters
		Minimum:	84 meters
		Slope:	1:263 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	43-50 meters
Sand Cover to Tertiary Thickness	-	38-43 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-751

Water Bottom Conditions:

Water depth - Maximum:	110 meters
Minimum:	90 meters
Slope:	1:110 Maximum - South
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	33-50 meters
Sand Cover to Tertiary Thickness -	43-50 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.9-2.7
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	105 meters
Minimum:	66 meters
Slope:	1:175 - Southwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	30-46 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.7
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-753

Water Bottom Conditions:

Water depth - Maximum:	78 meters
Minimum:	66 meters
Slope:	1:146 - Irregular
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	25-57 meters
Sand Cover to Tertiary Thickness -	58-70 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.1
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-754

Water Bottom Conditions:

Water depth - Maximum:	84 meters
Minimum:	70 meters
Slope:	1:295 - Maximum - East
Sand dunes:	Small

Subbottom Conditions:

Sand Cover Thickness -	14-34 meters
Sand Cover to Tertiary Thickness -	41-61 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.1
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-755

Water Bottom Conditions:

Water depth - Maximum:	92 meters
Minimum:	80 meters
Slope:	1:569 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	23-28 meters
Sand Cover to Tertiary Thickness -	40-48 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	100 meters
Minimum:	87 meters
Slope:	1:525 - Southeast
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	15-30 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	105 meters
Minimum:	84 meters
Slope:	1:325 - South
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	105 meters
Minimum:	94 meters
Slope:	1:621 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	23-41 meters
Sand Cover to Tertiary Thickness -	41-50 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.5
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-795

Water Bottom Conditions:

Water depth	- Maximum:	125 meters
	Minimum:	110 meters
	Slope:	1:260 - South
	Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	No Data
Sand Cover to Tertiary Thickness	-	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	125 meters
Minimum:	78 meters
Slope:	1:145 - Southwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	10-37 meters
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	110 meters
Minimum:	66 meters
Slope:	1:155 - Southwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	32-56 meters
Sand Cover to Tertiary Thickness -	37-52 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	94 meters
Minimum:	70 meters
Slope:	1:111 Maximum - Northeast-Sout
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	41-45 meters
Sand Cover to Tertiary Thickness -	34 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	94 meters
Minimum:	76 meters
Slope:	1:244 Maximum - East
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	26-45 meters
Sand Cover to Tertiary Thickness -	24-40 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	- Maximum:	135 meters
	Minimum:	120 meters
	Slope:	1:455 - Southeast
	Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	11-21 meters
Sand Cover to Tertiary Thickness	-	48-56 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	1.5-4.3
Dip Directions	-	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-839

Water Bottom Conditions:

Water depth - Maximum:	140 meters
Minimum:	125 meters
Slope:	1:463 - South
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	7-12 meters
Sand Cover to Tertiary Thickness -	32-47 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.4
Dip Directions -	Southeast

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	130 meters
Minimum:	94 meters
Slope:	1:190 - Southwest
Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness -	10-40 meters
Sand Cover to Tertiary Thickness -	29-36 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.9-7.9
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-840

Water Bottom Conditions:

Water depth - Maximum:	140 meters
Minimum:	110 meters
Slope:	1:228 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	10-25 meters
Sand Cover to Tertiary Thickness -	24-44 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.0
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-842

Water Bottom Conditions:

Water depth	-	Maximum:	115 meters
		Minimum:	84 meters
		Slope:	1:103 Maximum South
		Sand dunes:	Medium

Subbottom Conditions:

Sand Cover Thickness	-	27-48 meters
Sand Cover to Tertiary Thickness	-	18-25 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	No Data
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-881

Water Bottom Conditions:

Water depth	- Maximum:	140 meters
	Minimum:	120 meters
	Slope:	1:341 - Southeast
	Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	15-20 meters
Sand Cover to Tertiary Thickness	-	56-67 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	1.3
Dip Directions	-	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-882

Water Bottom Conditions:

Water depth - Maximum:	143 meters
Minimum:	137 meters
Slope:	1:585 Maximum - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	No Data
Sand Cover to Tertiary Thickness -	No Data

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	147 meters
Minimum:	137 meters
Slope:	1:1138 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	7-11 meters
Sand Cover to Tertiary Thickness -	41-50 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-884

Water Bottom Conditions:

Water depth - Maximum:	145 meters
Minimum:	130 meters
Slope:	1:366 Maximum - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	9-12 meters
Sand Cover to Tertiary Thickness -	22-36 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.7-5.6
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-885

Water Bottom Conditions:

Water depth - Maximum:	138 meters
Minimum:	115 meters
Slope:	1:297 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	9-10 meters
Sand Cover to Tertiary Thickness -	21-37 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.7
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	125 meters
Minimum:	110 meters
Slope:	1:122 Maximum - South
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	14-24 meters
Sand Cover to Tertiary Thickness -	25-44 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-925

Water Bottom Conditions:

Water depth - Maximum:	145 meters
Minimum:	132 meters
Slope:	1:525 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	12-15 meters
Sand Cover to Tertiary Thickness -	58-77 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.5-2.7
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-926

Water Bottom Conditions:

Water depth	-	Maximum:	148 meters
		Minimum:	142 meters
		Slope:	1:138 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	11-14 meters
Sand Cover to Tertiary Thickness	-	44-57 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	1.0
Dip Directions	-	Northwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	155 meters
Minimum:	142 meters
Slope:	1:525 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	11-13 meters
Sand Cover to Tertiary Thickness -	18-43 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	0.8-4.3
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-928

Water Bottom Conditions:

Water depth - Maximum:	154 meters
Minimum:	140 meters
Slope:	1:488 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	8-11 meters
Sand Cover to Tertiary Thickness -	18-28 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	Conformable
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	140 meters
Minimum:	125 meters
Slope:	1:455 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	10-17 meters
Sand Cover to Tertiary Thickness -	16-31 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	6.2
Dip Directions -	Southwest

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	153 meters
Minimum:	142 meters
Slope:	1:621 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	11-12 meters
Sand Cover to Tertiary Thickness -	59-72 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.4
Dip Directions -	Southeast

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth	-	Maximum:	160 meters
		Minimum:	145 meters
		Slope:	1:455 - Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	11-12 meters
Sand Cover to Tertiary Thickness	-	55-60 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	Conformable
Dip Directions	-	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-97I

Water Bottom Conditions:

Water depth - Maximum:	160 meters
Minimum:	150 meters
Slope:	1:366 Maximum - South
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	14-16 meters
Sand Cover to Tertiary Thickness -	18-37 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	Conformable
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-972

Water Bottom Conditions:

Water depth - Maximum:	160 meters
Minimum:	143 meters
Slope:	1:402 - Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	9-17 meters
Sand Cover to Tertiary Thickness -	17-30 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	Conformable
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-1013

Water Bottom Conditions:

Water depth - Maximum:	160 meters
Minimum:	155 meters
Slope:	1:1366 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	11-14 meters
Sand Cover to Tertiary Thickness -	54-70 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	3.3-5.8
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-1014

Water Bottom Conditions:

Water depth - Maximum:	170 meters
Minimum:	155 meters
Slope:	1:455 - Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	12-15 meters
Sand Cover to Tertiary Thickness -	34-55 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	2.3-5.8
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	170 meters
Minimum:	160 meters
Slope:	1:195 Maximum - South
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	11-16 meters
Sand Cover to Tertiary Thickness -	21-37 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	5.6-7.1
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-2-1016

Water Bottom Conditions:

Water depth - Maximum:	170 meters
Minimum:	150 meters
Slope:	1:341-Southwest
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	9-11 meters
Sand Cover to Tertiary Thickness -	21-48 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	162 meters
Minimum:	155 meters
Slope:	1:439 Maximum
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	11-16 meters
Sand Cover to Tertiary Thickness -	79-98 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	0.6-3.7
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-1

Water Bottom Conditions:

Water depth	-	Maximum:	165 meters
		Minimum:	155 meters
		Slope:	1:683 Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	12-16 meters
Sand Cover to Tertiary Thickness	-	56-73 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	0.8-10.5
Dip Directions	-	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-2

Water Bottom Conditions:

Water depth	-	Maximum:	175 meters
		Minimum:	160 meters
		Slope:	1:455 Southeast
		Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness	-	15-16 meters
Sand Cover to Tertiary Thickness	-	25-55 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees)	-	2.6-3.3
Dip Directions	-	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-3

Water Bottom Conditions:

Water depth - Maximum:	171 meters
Minimum:	170 meters
Slope:	Rate - Relatively Flat
	Direction - Relatively Flat
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	12-17 meters
Sand Cover to Tertiary Thickness -	25-34 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.0-2.9
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-4

Water Bottom Conditions:

Water depth - Maximum:	170 meters
Minimum:	160 meters
Slope:	1:195 Maximum Southeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	10-14 meters
Sand Cover to Tertiary Thickness -	37-55 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.9-5.6
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-45

Water Bottom Conditions:

Water depth - Maximum:	165 meters
Minimum:	160 meters
Slope:	1:878 Maximum East
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	13-15 meters
Sand Cover to Tertiary Thickness -	55-77 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	1.9-4.4
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Block NO5-4-46

Water Bottom Conditions:

Water depth - Maximum:	175 meters
Minimum:	165 meters
Slope:	1:366 Maximum East
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	13-15 meters
Sand Cover to Tertiary Thickness -	41-56 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	3.0-4.3
Dip Directions -	Various

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.

Water Bottom Conditions:

Water depth - Maximum:	163 meters
Minimum:	155 meters
Slope:	1:780 Northeast
Sand dunes:	None

Subbottom Conditions:

Sand Cover Thickness -	12-15 meters
Sand Cover to Tertiary Thickness -	70-77 meters

Structural Foundation Conditions:

Tertiary:

Apparent Dip (degrees) -	No Data
Dip Directions -	

Geophysical Appraisal:

There are no apparent hazards to the placement of drilling rigs, platforms, pipelines, etc. in this block from observation of the data available; however, since the data is scattered and penetration limited, further investigations should be instigated and ordinary precautions observed before actual drilling operations begin.