UNITED STATES GOVERNMENT
MEMORANDUM

March 13, 2001

To: Public Information (MS 5034)

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

Subject: Public Information copy of plan

- Control # - S-05588
- Type - Supplemental Exploration Plan
- Lease(s) - OCS-G16283 Block - 49 Vermilion Area
- Operator - Hunt Oil Company
- Description - Wells D and E
- Rig Type - JACKUP

Attached is a copy of the subject plan.

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

Elmo Cooper
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/D	G16283/VR/49	6389 FSL, 766 FWL	G16283/VR/49
WELL/E	G16283/VR/49	4455 FSL, 2972 FWL	G16283/VR/49

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NOTED - SCHEXNAILDRE

S-5588

HUNT OIL COMPANY
Fountain Place
1445 Ross at Field
Dallas, Texas 75202-2785
(214) 978-8000
Fax: (214) 978-8888
Telex: 6829258

March 9, 2001

Mr. Don Howard
Regional Supervisor
U. S. Department of the Interior - GOM Region
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123

Re: Supplemental Exploration Plan, Block 49, OCS-G-16283, Vermilion Area

Dear Sir:

Enclosed are five proprietary and four public information copies of a Supplemental Exploration Plan addressing our proposed activity in Vermilion Area Block 49. Also enclosed is a copy of the Designation of Operator that will be filed with the appropriate MMS office shortly. It will be accompanied by the El Paso lease assignment to Hunt of record title.

Should additional information be required, please contact Joe Morton, Tim Morton & Associates, Inc., 730 E. Kaliste Saloom Road, Lafayette, LA 70508, 337/234-5124.

Very truly yours,

HUNT OIL COMPANY

Don Butler
Sr. Regulatory Affairs Representative

CONTROL No. S-5588
REVIEWER: Elmo Cooper
PHONE: (504) 731-3083

DB/JM/
enclosures (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

DESIGNATION OF OPERATOR

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require approval by the Office of Management and Budget

The lessee identified below is, on the records of the Minerals Management Service, a leaseholder of:

Lease Number: OCS-G 16283

Regional Office: New Orleans, Louisiana

and hereby designates

Name: Hunt Oil Company

Address: Fountain Place 1445 Ross at Field
Dallas, Texas 75202-2785

64
Company Number of Designated Operator

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the Regional Director or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe block or aliquot portion to which this designation is applicable):

All of Block 49, Vermilion Area, OCS Leasing Map, Louisiana Map No. 3, containing approximately 5,000.00 acres.

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the ease, laws, and regulations applicable to the area. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

n case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, ease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees to notify the Regional Director promptly of any change in the designated operator.

1138
Company Number of Lessee

El Paso Production GOM Inc.
(Name of Lessee)

(Authorized Signature of Lessee)
J. A. Mills
Vice President
January 24, 2001
(Date)

Form MMS-1123 (June 1998)
(Supersedes all previous editions of Form MMS-1123 which will not be used)

SUPPLEMENTAL EXPLORATION PLAN

HUNT OIL COMPANY

VERMILION AREA BLOCK 49

OCS-G-16283

OFFSHORE LOUISIANA

LIST OF ATTACHMENTS

A. Vicinity Plat, Location Plat

B. BOP and Diverter Schematics

C. Shallow Hazard Analysis, Structure Map, Cross-Section Map, Stratigraphic Column and Bathymetry Map

D. Drilling Fluids List

E. Air Quality Report

SUPPLEMENTAL EXPLORATION PLAN

VERMILION AREA BLOCK 49

OCS-G-16283

OFFSHORE LOUISIANA

Pursuant to the requirements of 30 CFR 250.33, Hunt Oil Company submits the following Supplemental Exploration Plan for activities proposed in Vermilion Area Block 49.

I. DESCRIPTION OF ACTIVITIES

Hunt proposes to use a jackup rig to drill two wells in Vermilion Area Block 49. Information regarding this well is as follows:

Well Name	Surface Location	Bottomhole Location	TVD/ MD	Lambert Coordinates	Water Depth
D	766' FWL 6389' FSL	PROP. INFO.	PROP. INFO.	X = 1,707,180' Y = 264,940'	22'
E	2972' FWL 4455' FSL	PROP. INFO.	PROP. INFO.	X = 1,709,386' Y= 263,006'	21'

Attachment A contains a vicinity map that depicts the location of Vermilion Area Block 49 in relation to the Louisiana coast and a location plat that depicts the well locations in relation to the lease lines. The anticipated spud date for Well D is April 1, 2001, and the anticipated spud date for Well E is January 1, 2002. Hunt estimates that it will take approximately 35 days to drill and 30 days to complete each well. If commercial quantities of hydrocarbons are discovered, a Development Operations Coordination Document will be submitted for approval.

II. DRILLING RIG, SAFETY, AND POLLUTION PREVENTION INFORMATION

Hunt proposes to utilize a jack-up rig to drill the proposed wells. Schematics for a typical BOP and diverter are included in Attachment B. The actual rig specifications for the rig to be used will be submitted with the application for Permit to Drill for the wells.

Safety and pollution prevention will be accomplished during drilling operations through the use of adequately designed casing programs; blowout preventers, diverters, and other associated well equipment of adequate pressure rating to control anticipated pressures; mud monitoring equipment and sufficient mud volumes to insure well control; and properly trained supervisory personnel. Pursuant to Coast Guard regulations, fire drills and abandon ship drills will be conducted, and navigational aids, lifesaving equipment, and all other shipboard safety equipment will be installed and maintained.

III. GEOPHYSICAL AND GEOLOGIC INFORMATION

A Shallow Hazards Analysis is included in Attachment C of this document. As stated in that document, no shallow drilling hazards are anticipated during the drilling of the proposed wells. A structure map, cross-section map, stratigraphic column map and a bathymetry map are also included in Attachment C. The water depth at the proposed surface location of Well D and Well E is 22 feet and 23 feet, respectively.

IV. OIL SPILL INFORMATION

Hunt Oil Comany is a member of Clean Gulf Associates (CGA), and would utilize CGA equipment in the event of an oil spill in Vermilion Area Block 49. CGA is an oil spill cooperative which owns a large inventory of oil spill clean-up equipment which is supported by Marine Spill Response Corporation (MSRC). MSRC is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. An inventory of spill response equipment suitable for spills in the Gulf of Mexico is identified in Hunt's Oil Spill Contingency Plan which was approved on April 12, 2000. Hunt requests that the activities proposed in this Exploration Plan be covered by the Oil Spill Contingency Plan.

In the event of a spill, the primary location for the procurement of clean-up equipment would be the CGA stockpile at Lake Charles, Louisiana. Additional cleanup equipment could be mobilized from the Houma and Fort Jackson, Louisiana and the Galveston and Ingleside, Texas CGA stockpile areas. The Lake Charles, Louisiana stockpile area is located approximately 79 miles from the block.

Worst Case Discharge = Daily volume from uncontrolled blowout = 10 Barrels

Following is a comparison of the worst case scenario from Hunt's approved regional Oil Spill Contingency Plan to the worst case scenario from the proposed activities in this Exploration Plan.

Category	**Regional OSCP**	**EP**
Type of Activity	Well Blowout	Well Blowout
Spill Location (area/block)	Eugene Island Block 63	Vermilion Area Blk 49
Facility Designation		Well D
Distance to Nearest Shoreline (miles)	12 miles	8.3 miles
Volume	1,001 barrels	10 barrels
Type of Oil(s) (crude oil, condensate, diesel)	Condensate	Condensate
API° Gravity(s)	54	52

Since Hunt Oil Company has the capability to respond to the worst-case spill scenario included in its regional Oil Spill Contingency Plan approved on April 12, 2000, and since the worst-case scenario determined for their Exploration Plan does not replace the worst-case scenario in their regional OSRP, Hunt hereby certifies that they have the capability to respond, to the maximum extent practicable, to a

worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in their Exploration Plan.

V. LEASE STIPULATIONS

There are no operational lease stipulations.

VI. SOLID AND LIQUID WASTES AND POLLUTANTS

Discharges generated at the proposed well locations by the drilling activities associated with this EP will be discharged as per NPDES discharge guidelines. Bioassay tests will be performed on the discharge effluents. Discharge rates will not exceed permit specifications.

All drill cuttings will be brought to the surface by the mud system and will be separated from the drilling fluid by shaker screens and centrifugal separators prior to discharging overboard. This discharge is composed of the cuttings, shaker washwater, and adhered drilling fluids. The projected amounts of this discharge are based on the size of the hole at each drilling interval, and are computed at 25 percent over the gauge hole at that interval. Drill cuttings are assumed to comprise 50 percent of the discharge, washwater is assumed to comprise 42.5 percent, and adhered drilling fluids are assumed to comprise 7.5 percent. A list of drilling fluids to be utilized during the drilling operation is included as Attachment D.

Drilled solids and liquids discharge volumes for a typical well are listed below:

		Volumes/Well		
Drilling Interval	Hole Size	Drilled Solids	Shaker Washwater	Adhered Drilling Fluids
0 - 1000'	20.00"	486 bbls	413 bbls	73 bbls
1000 - 4500'	13.50"	775 bbls	658 bbls	116 bbls
4500 - 12000'	9.875"	888 bbls	755 bbls	133 bbls

Batch discharges of drilling fluids will be limited to 1000 barrels per hour. This limitation should only need to be imposed upon the completion of drilling operations.

Solids wastes; typically paper, plastic, cloth, and metal, will be collected and transported to shore for disposal at an approved disposal facility. Solid wastes generated from the transportation vessels, normally just garbage, will be collected and returned to shore for disposal with the drilling rig refuse. Scrap metal and other metal wastes will be recycled or sold as scrap and will not be shipped to a disposal facility with the other refuse.

Sanitary wastes will be treated in approved marine sanitation devices as required by the Clean Water Act. All biodegradable wastes, such as kitchen food scraps, will be comminuted or ground and discharged in accordance with Annex V of MARPOL 73/78.

Hazardous wastes from the drilling rig, such as paint, or paint thinner, will be collected in sealed metal containers and transported to an approved disposal site in accordance with RCRA guidelines.

VII. H_2S AREA CLASSIFICATION

This area is not known to contain any H_2S. Hunt, therefore, requests that Vermilion Area Block 49 be classified as a "Zone where the absence of H_2S has been confirmed".

VIII. NEW OR UNUSUAL TECHNOLOGY

Exploration and production activities in Vermilion Area Block 49 will not warrant utilizing any new or unusual technology that may affect coastal waters.

IX. BIOLOGICAL INFORMATION

Activities proposed in this Exploration Plan will not impact any deepwater chemosynthetic communities as the water depths at the proposed surface locations of Well D and Well E are 22 feet and 23 feet, respectively. The proposed surface locations are not within the 3-mile zone of any identified topographic feature or within 100 feet of any pinnacle trend feature; therefore, no impacts to these features are anticipated.

X. CALCULATION OF AIR EMISSIONS

Projected air emissions resulting from activities described in this document have been calculated and are included as Attachment E.

XI. SUPPORT BASE

Vermilion Area Block 49 is located approximately 8 miles from the coast of Vermilion Parish, Louisiana. An existing facility in Intracoastal City, Louisiana will serve as the operations base for the Vermilion Area Block 49 exploration activities. This shore base is located approximately 25 miles from Vermilion Area Block 49. Hunt proposes to utilize one helicopter, one supply boat, and one crew boat to support the activities in this block. The helicopter will travel to the location as needed. The supply boat and crew boat will travel to the location a total of three and five times per week, respectively. The shore base will serve the following functions: loading point for tools, equipment and machinery to be delivered to the drilling rig, transportation base, and temporary storage area for materials and equipment. The base is equipped with cranes and loading docks necessary for safe operations. Twenty-four hour a day contact with offshore personnel is maintained by full time dispatchers at the shore base. The existing onshore facilities and support personnel are sufficient to support the proposed operations without modification or expansion.

XII. SURETY BOND REQUIREMENTS

In accordance with the amendment of 30 CFR Part 256 surety bond requirements applicable to OCS lessees and operators, Hunt submitted an area-wide bond in the amount of $3,000,000.00 to the Minerals Management Service, New Orleans, Louisiana.

XIII. COMPANY CONTACT

Any inquiries regarding this plan may be addressed to Mr. Don Butler, Hunt Oil Company, 1445 Ross at Field, Dallas, Texas 75202-2785, telephone number 214/978-8673.

LITERATURE CITED

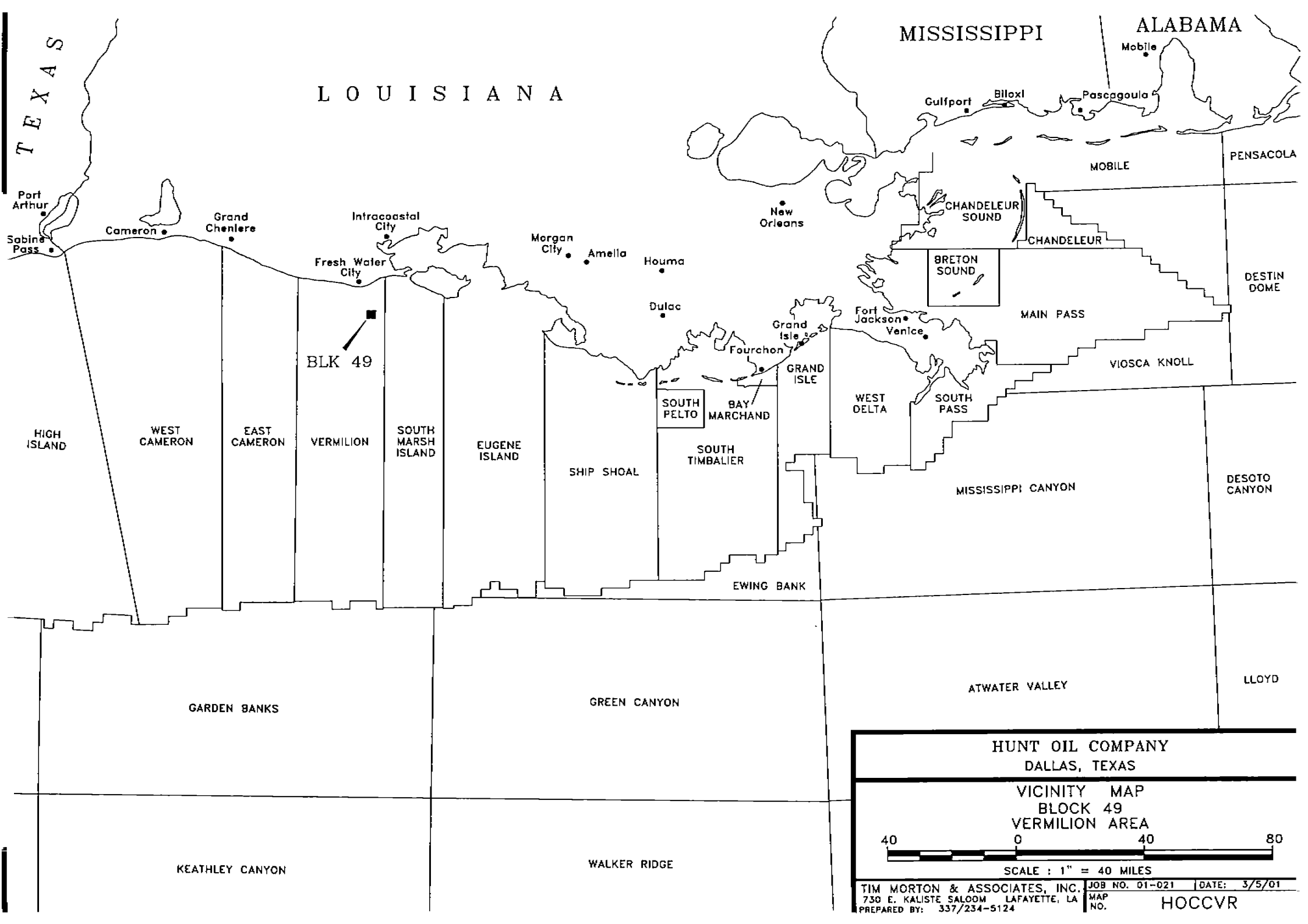
U. S. Department of Interior, Minerals Management Service

1995 Oil-Spill Risk Analysis: Central and Western Gulf of Mexico, Outer Continental Shelf, Lease Sales 157 and 161. Prepared by Minerals Management Service, Branch of Environmental Operations and Analysis. OCS Report, MMS 95-0026.

ATTACHMENT A

VICINITY PLAT

LOCATION PLAT



HUNT OIL COMPANY
DALLAS, TEXAS

VICINITY MAP
BLOCK 49
VERMILION AREA

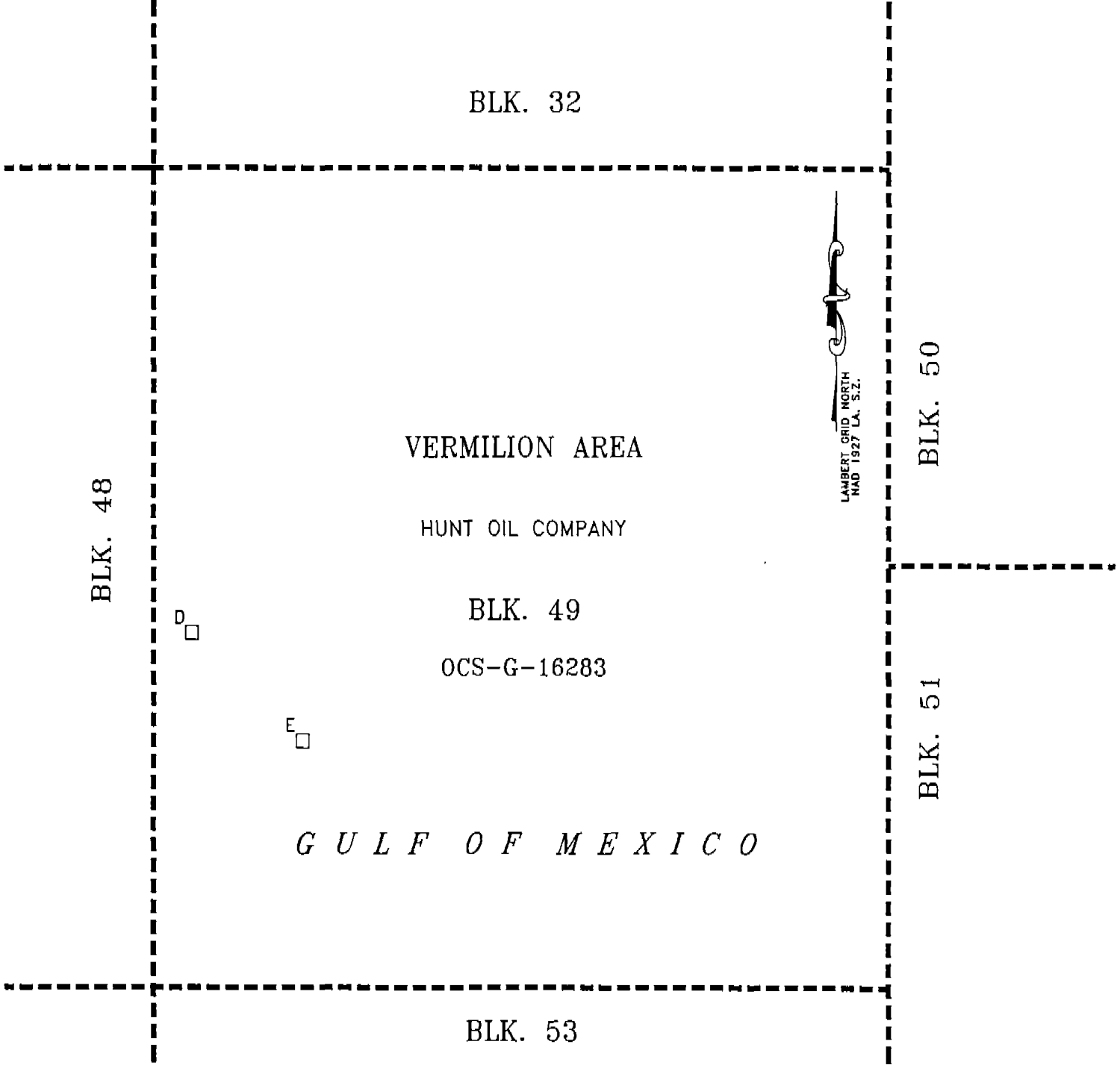
40 0 40 80

SCALE : 1" = 40 MILES

TIM MORTON & ASSOCIATES, INC.
730 E. KALISTE SALOOM LAFAYETTE, LA
PREPARED BY: 337/234-5124

JOB NO. 01-021 | DATE: 3/5/01

MAP NO. HOCCVR



PROPOSED SURFACE LOCATION

BLK.	WELL NO.	CALLS		X	Y	LATITUDE	LONGITUDE
49	D	766' FWL	6389' FSL	1,707,180'	264,940'	29°23'31.2"	92°15'10.1"
49	E	2972' FWL	4455' FSL	1,709,386'	263,006'	29°23'12.2"	92°14'45.0"

HUNT OIL COMPANY

1445 ROSS AT FIELD

DALLAS, TEXAS 75202-2785

SUPPLEMENTAL EP

VERMILION AREA – BLOCK 49

3000' 0' 3000' 6000'

SCALE IN FEET

PREPARED BY TIM MORTON & ASSOCIATES, INC.
730 E. KALISTE SALOOM RD. LAFAYETTE, LA
337 / 234-5124

JOB # 01-021

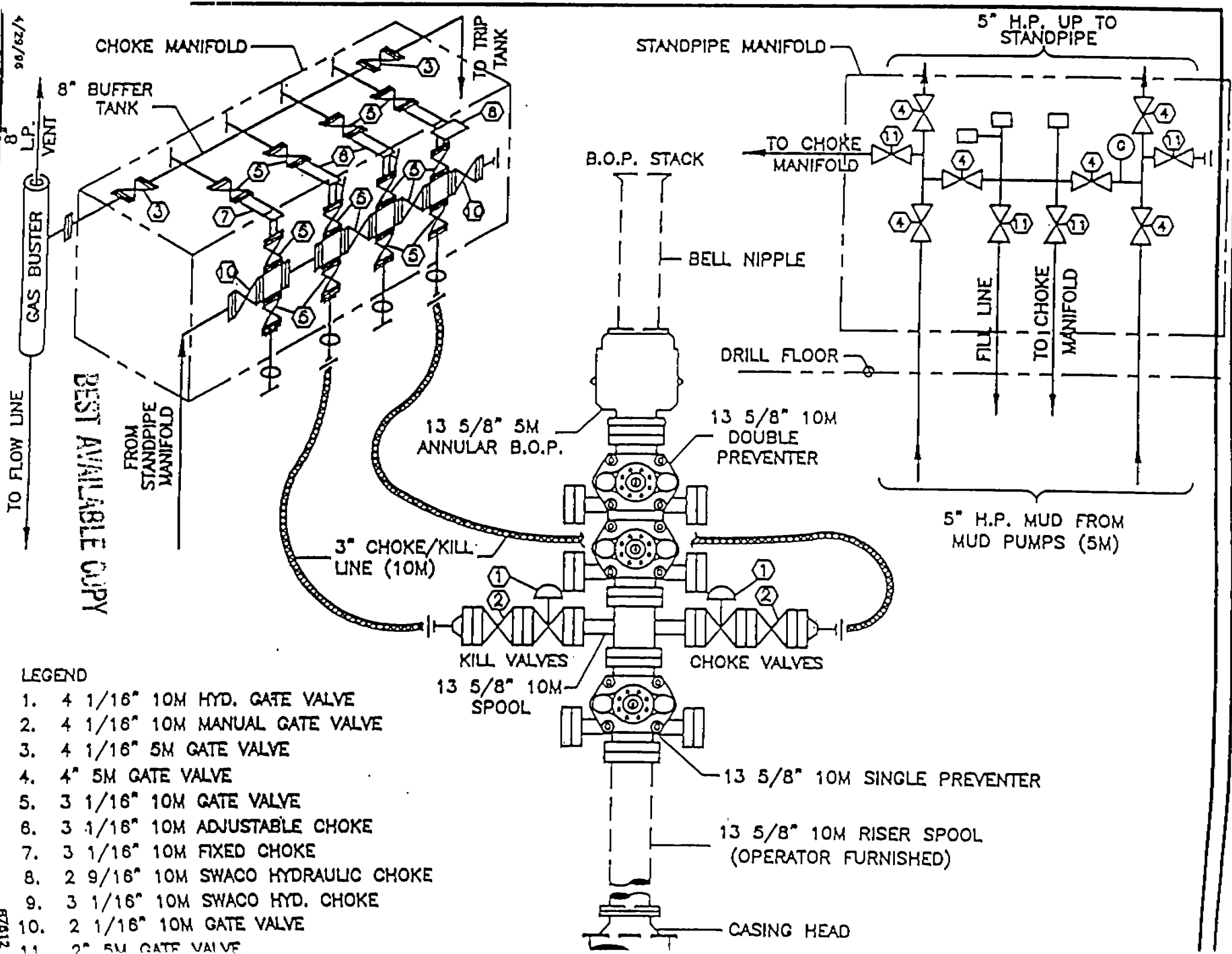
MAP NO. VR49

REVISED

DATE 2/8/01

ATTACHMENT B

RIG BOP AND DIVERTER SCHEMATICS



LEGEND

1. 4 1/16" 10M HYD. GATE VALVE
2. 4 1/16" 10M MANUAL GATE VALVE
3. 4 1/16" 5M GATE VALVE
4. 4" 5M GATE VALVE
5. 3 1/16" 10M GATE VALVE
6. 3 1/16" 10M ADJUSTABLE CHOKE
7. 3 1/16" 10M FIXED CHOKE
8. 2 9/16" 10M SWACO HYDRAULIC CHOKE
9. 3 1/16" 10M SWACO HYD. CHOKE
10. 2 1/16" 10M GATE VALVE
11. 2" 5M GATE VALVE

ATTACHMENT C

SHALLOW HAZARD ANALYSIS

GEOLOGIC STRUCTURES MAP

CROSS-SECTION MAP

STRATIGRAPHIC COLUMN

BATHYMETRY MAP

C&C Technologies
SURVEY SERVICES

Hunt Oil Company
1445 Ross at Field
Dallas, Texas 75202 - 2785

March 9, 2001

Attn: Mr. Don Butler

Re: Proposed Well "D"
Block 49 (OCS-G-16283)
Vermilion Area

Dear Mr. Butler,

Hunt Oil Company proposes to drill the Well "D" in Block 49 (OCS-G-16283), Vermilion Area. This letter addresses the seafloor and subbottom conditions as interpreted from geophysical survey data collected in a 1,000 foot radius around the location of the proposed well site.

C & C Technologies, Inc. performed a high-resolution geophysical Site Specific survey in Blocks 49 and 48, Vermilion Area on February 17 – 18, 2001. The field operations were conducted aboard the R/V *Ocean Surveyor*. Geophysical instruments utilized for the survey included an Echotrac fathometer, EdgeTech 260 side scan sonar, Geometrics 880 Cesium Magnetometer, Geopulse Subbottom Profiler (pinger), and an SSI 15 cubic inch Watergun system. Horizontal positioning of the survey vessel was accomplished using the SATLOC® differential GPS system.

The Site Specific survey grid consisted of eighteen (18) north-south primary lines. The tracklines (Lines 1 – 4) were spaced at 300-meter intervals in the portion of the survey that was run in Block 49, Vermilion Area. The tracklines (Lines 5 – 18) were spaced at 50-meter intervals in the portion of the survey that was run in Block 48, Vermilion Area. Three east-west tie lines (Lines 19, 21, and 23) were spaced at 885 meters (2903 feet). Line No. 20 and Line No. 22 are short sections of lines run for a bathymetry survey and are spaced 300 meters (984 feet) on each side of Line No. 21. Lines 4 (primary line) and 21 (tie line) intersect at the proposed well site. Coordinates in Louisiana South and blockline calls for the proposed Well "D" are:

X = 1,707,180.00′ Y = 264,940.00′
765.64′ FWL; 6,389.38′ FSL

Water depth at the proposed well location is 22 feet Mean Lower Low Water and the seafloor slope is to the west at an average gradient of 1 foot/mile or 0.01°. Bathymetry data indicate there are no obstructions at the proposed location.

Regional studies in the Gulf of Mexico indicate seafloor soils in the survey area to consist of silty clays (Frazier, 1974) and/or silty sand (MMS Visual No. 3, 1983). Values extrapolated from regional studies indicate soft sediment (<600 lbs./ft²) exists from the seafloor to a depth of 40 feet. Stiff sediments (>1,000 lbs./ft²) are reported at depths from 40 feet to 100 feet below the seafloor. Granular soils across the survey area are indicated at a depth of 150 feet below the seafloor. The Holocene/Pleistocene Unconformity (Beaumont Clay) is reported at a depth of 40 feet below the seafloor and firm to stiff sediments may be encountered along this interface. The data used for the soil shear strengths is from regional information, therefore variations may exist at the specific well location.

730 E. Kaliste Saloom Road • Lafayette, Louisiana 70508 USA • Phone 337-261-0660 • Fax 337-261-0192

Pinger profiles at the well site penetrated to a depth of approximately 45 feet below the seafloor and show high-amplitude, discontinuous reflectors. At approximately 15 to 22 feet below the seafloor a change in the acoustic strata, indicates a short-lived reversal of rising sea level. Two faults are indicated on the seismic data within the survey grid. The proposed well location is greater than 1,700 feet west-southwest of the nearest fault and should not be adversely affected by this feature. Numerous zones of gas saturation, which caused seismic signal attenuation and acoustic voids, have been noted in the survey area at 9 to 15 feet below the seafloor. The nearest acoustic void zone to the proposed well location is approximately 850 feet to the northwest and will not be impacted by a drill rig at the proposed well location.

The Watergun Seismic profiles collected nearest the well site were reviewed for the presence of seismic amplitude anomalies, which could represent accumulations of shallow, high-pressure gas. There are no areas of seismic amplitude anomalies or high-pressure gas accumulations indicated on the records collected during the C & C survey. · A review of exploration seismic data and previous drilling history of wells in the lease should be done to identify areas where potential high-pressure gas zones may be encountered.

Side scan sonar indicates no debris exists in the vicinity of the proposed well location. The sonograms collected during the survey indicate a mottled texture seafloor with numerous seafloor drag scars in the survey area. There are no unidentified sonar contacts detected within 1,000 feet of the proposed well location.

Magnetometer data did not reveal any unidentified magnetic anomalies within 1,000 feet of the proposed well. There are no man-made features such as wells, pipelines, or platforms located within 1,000 feet of the proposed well location.

Geophysical data reproductions of the two tracklines nearest to the well site are included with this letter. The proposed well site is annotated on each of the records. C & C would like to thank you for this opportunity to be of service, and please do not hesitate to call (337) 261-0660 if additional information is needed.

Sincerely,

Paul K. Monier

Paul K. Monier
Geophysicist

Enclosures

J:\2104\VR49-WellD

C&C Technologies
SURVEY SERVICES

Hunt Oil Company
1445 Ross at Field
Dallas, Texas 75202 - 2785

March 9, 2001

Attn: Mr. Don Butler

Re: Proposed Well "E"
Block 49 (OCS-G-16283)
Vermilion Area

Dear Mr. Butler,

Hunt Oil Company proposes to drill the Well "E" in Block 49 (OCS-G-16283), Vermilion Area. This letter addresses the seafloor and subbottom conditions as interpreted from geophysical survey data collected in a 1,000 foot radius around the location of the proposed well site.

A high-resolution geophysical Site Specific survey in Block 49, Vermilion Area was performed by John E. Chance and Associates, Inc. (JECA) on September 27, 1997. The field operations were conducted aboard the M/V *David McCall II*. Geophysical instruments utilized for the survey included an Innerspace fathometer, Klein 521 side scan sonar, Geometrics 801 Proton Magnetometer, Edo Western Subbottom Profiler (pinger), and an EG&G Sparker seismic system. Horizontal positioning of the survey vessel was accomplished using a Trimble model 4000DL differential GPS system. Data from a C & C Technologies, Inc. Site Specific survey in Blocks 49 and 48, Vermilion Area conducted on February 17 – 18, 2001, were also assessed for hazards at the well location. The proposed well location is within the limits of the C & C survey.

The Site Specific survey grid for the JECA survey consisted of five (5) north-south primary lines (Line Nos. 1 – 5) spaced at 300-meter intervals. Three east-west tie lines (Line Nos. 6 – 8) were spaced at 595 meters (1,950 feet). Line Nos. 4 and 5 are the survey lines closest to the proposed well site. Coordinates in Louisiana South and blockline calls for the proposed Well "E" are:

X = 1,709,386.00′ Y = 263,006.00′
2,971.64′ FWL; 4,455.38′ FSL

Water depth at the proposed well location is 21 feet Mean Lower Low Water and the seafloor slope is to the west at an average gradient of 1 foot/mile or 0.01°. Bathymetry data indicate there are no obstructions at the proposed location.

Regional studies in the Gulf of Mexico indicate seafloor soils in the survey area to consist of silty clays (Frazier, 1974) and/or silty sand (MMS Visual No. 3, 1983). Values extrapolated from regional studies indicate soft sediment (<600 lbs./ft²) exists from the seafloor to a depth of 40 feet. Stiff sediments (>1,000 lbs./ft²) are reported at depths from 40 feet to 100 feet below the seafloor. Granular soils across the survey area are indicated at a depth of 150 feet below the seafloor. The Holocene/Pleistocene Unconformity (Beaumont Clay) is reported at a depth of 40 feet below the seafloor and firm to stiff sediments may be encountered along this interface. The data used for the soil shear strengths is from regional information, therefore variations may exist at the specific well location.

Pinger profiles at the well site penetrated to a depth of approximately 45 feet below the seafloor and show high-amplitude, discontinuous reflectors. At approximately 15 to 22 feet below the seafloor a change in the acoustic strata, indicates a short-lived reversal of rising sea level. Two faults are indicated on the seismic data within the C & C survey grid. The proposed well location is greater than 2,300 feet south-southwest of the nearest fault and should not be adversely affected by this feature. Numerous zones of gas saturation, which caused seismic signal attenuation and acoustic voids, have been noted in the survey area at 9 to 15 feet below the seafloor. There may be as many as nine (9) acoustic void zones within 1,000 feet of the proposed well location. The nearest acoustic void zone to the proposed well location is approximately 150 feet to the west. The acoustic void zones represent areas of potential variation in sediment shear strength therefore bottom supported drill rigs should avoid straddling the margins of these features.

The Sparker Seismic profiles collected nearest the well site were reviewed for the presence of seismic amplitude anomalies, which could represent accumulations of shallow, high-pressure gas. There are no areas of seismic amplitude anomalies or high-pressure gas accumulations indicated on the data. A review of exploration seismic data and previous drilling history of wells in the lease should be done to identify areas where potential high-pressure gas zones may be encountered.

Side scan sonar indicates no debris exists in the vicinity of the proposed well location. The sonograms collected during the survey indicate a mottled texture seafloor with numerous seafloor drag scars in the survey area. There are no unidentified sonar contacts detected within 1,000 feet of the proposed well location.

Magnetometer data did not reveal any unidentified magnetic anomalies within 1,000 feet of the proposed well. There are no man-made features such as wells, pipelines, or platforms located within 1,000 feet of the proposed well location.

Geophysical data reproductions of the two tracklines nearest to the well site are included with this letter. The proposed well site is annotated on each of the records. C & C would like to thank you for this opportunity to be of service, and please do not hesitate to call (337) 261-0660 if additional information is needed.

Sincerely,

Paul K. Monier

Paul K. Monier
Geophysicist

Enclosures

J:\2104\VR49-WellE

GEOLOGIC STRUCTURES MAP

PROPRIETARY INFORMATION

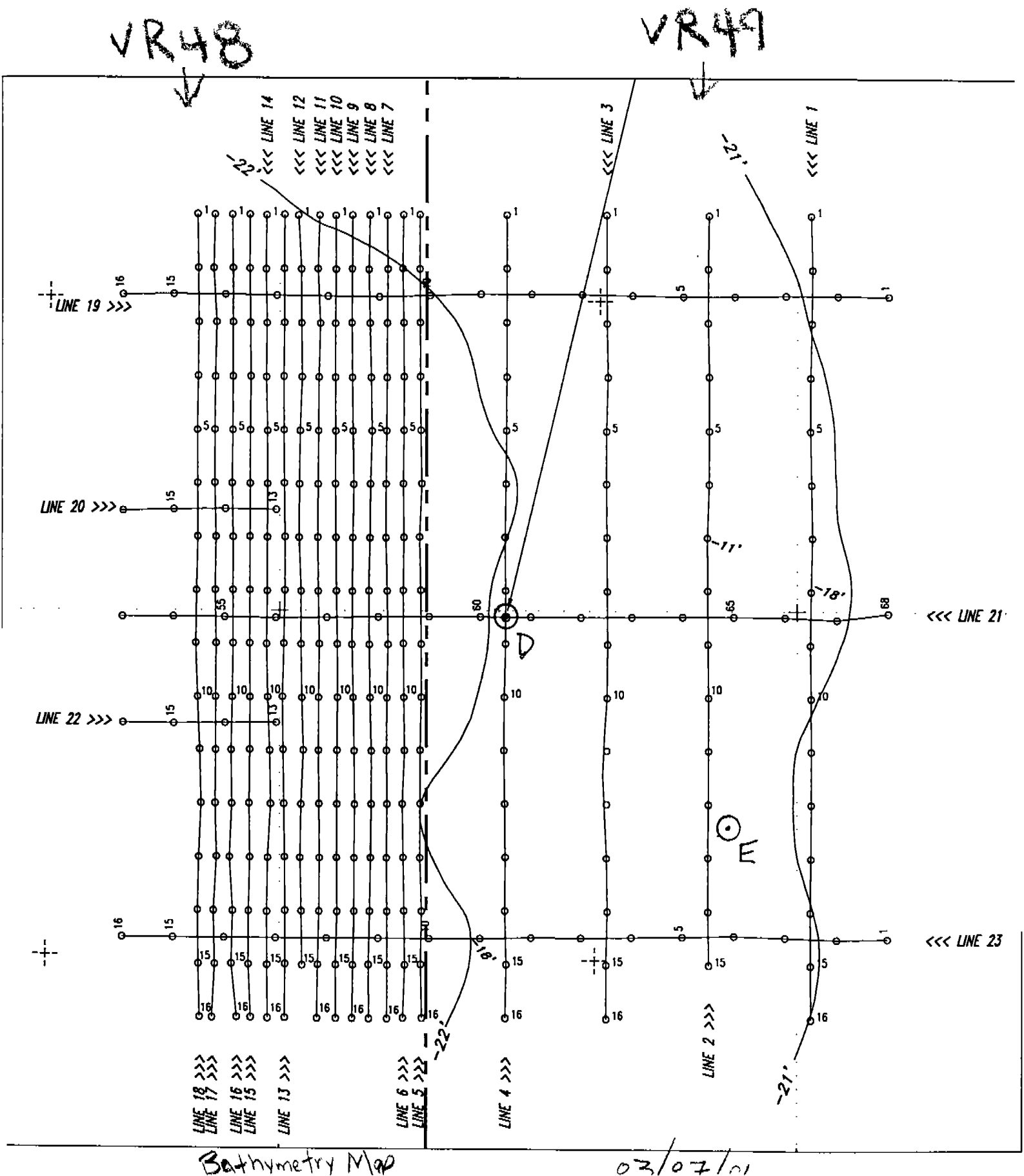
CROSS-SECTION MAP

PROPRIETARY INFORMATION

STRATIGRAPHIC COLUMN

PROPRIETARY INFORMATION

Hunt Oil Co.
Site Specific Survey
Block 49, Vermilion Area
C&C Technologies (Job No. 2104)



Bathymetry Map

03/07/01

ATTACHMENT D

DRILLING FLUIDS LIST

MUD SYSTEM COMPONENT LISTING

PRODUCT NAME	APPLICATION	DESCRIPTION
Aluminum Stearate	Defoamer	Aluminum Stearate $Al(C_{18}H_{35}O_2)_3$
Bac Ban	Preservative	Isothiazolin mixture
Barabuf	PH control	Magnesium oxide
Calcium Chloride	Weighting Agent	Calcium Chloride $CaCl_2$
Cane Fiber	Loss Circulation	Sugar cane fiber (bagasse)
Caustic Potash	PH control	Potassium hydroxide (KOH)
Caustic Soda	PH control	Sodium hydroxide (NaOH)
Caustilig	Thinner	Causticized lignite
Cedar Fiber	Loss Circulation	Shredded cedar, cellulose
Congor 101	Corrosion Inhibitor	Blend of tall oil and alcohol
Congor 202	Corrosion Inhibitor	Blend of amines and alcohol
Congor 303	Corrosion Inhibitor	Blend of alkyl diamines
Congor 404	Corrosion Inhibitor	Salt of phosphate ester
Cottonseed Hulls	Loss Circulation	Cotton seed hulls
Defoam X	Defoamer	Blend of glycols and stearate
Desco	Thinner	Sulfomethylated tannin/dichromate
Diaseal M	Loss Circulation	Diatomaceous earth
Drillaid Selec Floc	Flocculant	Anionic polymer
Drispac	Fluid Loss Control	Cellulose Gum
Durogel	Viscosifier	Sepiolite clay
Fer-Ox	Weighting Agent	Iron oxide; hematite ($Fe_2 O_3$)
Flakes	Loss Circulation	Cellophane $(C_6 H_{10} O_5)_n$
Floxit	Flocculant	Polyacrylamide $(C_3 H_5 NO)_x$
Gelex	Viscosifier	Sodium polyacrylate
Gelite	Viscosifier	Saponite ($Al_2 MgO_8Si_2$)

Gypsum	Shale Control	Calcium sulfate ($CaSO_4.2H_2O$)
Ironite Sponge	Corrosion Inhibitor	Iron oxide ($Fe_2\ O_4$)
K-17	Thinner	Metal salt of lignite with potassium hydroxide
Kleen Up	Surfactant	Blend of surfactants
Kwik Seal	Loss Circulation	Blend of nut shells, cellophane and wood fibers
Kwik-Thik	Viscosifier	Bentonite, polyacryl-amide blend
Lime	PH Control	Calcium hydroxide [$Ca(OH)_2$]
Liquid $CaCl_2$	Weighting Agent	Calcium chloride, liquid ($CaCl_2$)
Lo-Wato	Weighting Agent	Calcium carbonate ($CaCO_3$)
Lube-106	Lubricant	Blend of alcohol and esters
Lube-153	Lubricant	
M-I Bar	Weighting Agent	Barium sulfate ($BaSO_4$)
M-I CMC	Fluid Loss Control	Sodium carboxymethy-cellulose
M-I Cal	Viscosifier	Sodiummontmorillonite (bentonite)
M-I Mica	Loss Circulation	Mica
Melanex-T	Thinner	Melanin polymer derivative
My-Lo-Jel	Fluid Loss Control	Pregelatinized starch
N-DRL HT	Viscosifier and Fluid Loss Control	Biopolymer
N-VIS P	Fluid Loss Control	Hyperproperlated starch
Nut Plug - All Grades	Loss Circulation	Ground nut shells
Oxygen Scavenger	Corrosion Inhibitor	Ammonium bisulfite solution
Pheno-seal	Loss Circulation	Chipped formica
Phos	Thinner	Sodium tetraphosphate
Pipelax	Spotting Fluid	Blend of surfactants dispersed in an aromatic process oil
Pipelax SF	Spotting Fluid	Blend of surfactants and low toxicity hydrocarbons
Polypac	Fluid Loss Control	A high grade carboxy-methyl cellulose

Poly-Plus (liquid)	Polymer	A liquid anionic polyelectrolyte with mineral oil
Polysal	Fluid Loss Control	A modified potato starch
Polyseal	Loss Circulation	A blend of mixed fibers and cellophane
Quebracho 60/40	Thinner	Tannin
Resinex	Fluid Loss Control	Copolymer of a lignite and a sulfonated phenol, formaldehyde urea resin
Safe Link	Viscosifier	A blend of salt, polymer and lignosulfonate
Salt	Weighting Agent	Sodium chloride (NaCl)
Salt Gel	Viscosifier	Attapulgite clay
SAPP	Thinner	Sodium acid pyrophosphate ($Na_2 H_2 P_2 O_7$)
Shale Chek	Shale Control	A blend of amines and glycol
Soda Ash	PH Control	Sodium carbonate ($Na_2 CO_3$)
Sodium Bicarbonate	PH Control	Sodium bicarbonate ($NaHCO_3$)
Soltex	Lubricant	Sodium asphalt sulfonate
SP-101	Fluid Loss Control	Sodium polyacrylate
Spersene	Thinner	Chrome lignosulfonate
Spersene CF	Thinner	Chrome free lignosulfonate
Sulf-X Plus	Corrosion Inhibitor	Zinc oxide blend
Tackle	Thinner	A polyacrylamide blend
Tannathin	Thinner	Oxidized lignite (naturally occurring)
Thermpac UL	Fluid Loss Control	Sodium carboxymethyl starch
XP-20	Thinner	Oxidized chrome lignite

NOTE:

The product names are from M-I Drilling Fluids. These product names may differ depending on the actual company selected to provide drilling fluid products.

ATTACHMENT E

AIR QUALITY REPORT

AIR QUALITY REVIEW

FOR

VERMILION AREA BLOCK 49

OCS-G-16283

HUNT OIL COMPANY

1445 ROSS AT FIELD

DALLAS, TEXAS 75202

PREPARED BY:

TIM MORTON & ASSOCIATES, INC.

REGULATORY & ENVIRONMENTAL CONSULTANTS

JOB NO. 01-021

MARCH 2, 2001

GULF OF MEXICO AIR EMISSION CALCULATIONS

INSTRUCTIONS

General

This document (EP_AQ.XLS) was prepared through the cooperative efforts of those professionals in the oil industry including the API/OOC Gulf of Mexico Air Quality Task Force, and the Minerals Management Service (MMS), who deal with air emission issues. This document is intended to standardize the way we estimate our potential air emissions for Exploration Plans (EP) approved by the MMS. It is intended to be thorough but flexible to meet the needs of different operators. This first file gives the basis for the emission factors used in the emission spreadsheet as well as some general instructions. The following files, Title Sheet, Factors Sheet, Emissions Spreadsheet, and Summary Sheet will describe and calculate emissions from an activity.

Title Sheet

1. The Title Sheet requires input of the company's name, area, block, OCS-G number, platform well(s) in the necessary lines. This data will automatically be transferred to the spreadsheet and/or and summary sheet.
2. Answer the screening questions by indicating yes or no in the correct column. If all of the questions are answered no, just submit the title sheet with your EP, you do not need to complete the rest of the spreadsheets. If you answer yes to any of the screening questions, you need to prepare and submit a full set of spreadsheets. In either case you do not need to print and submit these instructions.

Factor Sheet

The emission factors were compiled from the latest AP-42 references or from industry studies if no AP-42 reference was available. Factors can be revised as more data becomes available. A change to this Factor Sheet will be automatically changed in Emission Spreadsheet. A sulfur content table was added in 1996. A change in this table will automatically revise the SOx factor which will revise emissions.

The basis for the factors is as follows:

1. NG Turbines — Fuel usage scf/hr = HP X 9.524 (10,000 btu/HP-hr / 1050 btu/scf)
2. NG Engines — Fuel usage scf/hr = HP X 7.143 (7,500 btu/HP-hr / 1050 btu/scf)
3. Diesel — Fuel usage gals/hr = HP X 0.0483 (7,000 btu/HP-hr / 145,000 btu/gal)

Emission Factors

Natural Gas Prime Movers

1. TNMOC refers to total non-methane organic carbon emissions and these can be assumed equivalent to VOC emissions.

3. The sulfur content assumed is 2000 grains /mmscf (3.33 ppm). If your concentration is different then revise the ppm in the sulfur table immediately below the factors table.

Diesel-Fired Prime Movers

1. Diesel sulfur level 0.4% by wt. If your sulfur content is different change % wt. in the sulfur table.

2. For boats use > 600 HP factors based on AP-42 Vol. II, Table II-3-3.
Include the emissions from all vessels associated with your activities for their time of operation within a 25 mile radius of your facility.

3. For diesel engines <600 HP VOC emissions equal total HC emissions; for diesel engines>600 HP VOC emissions equal non-methane HC emissions.

Gas Flares

1. It is assumed that the flare is non-smoking.

2. A heating value of 1050 btu/cu. ft. for NG is assumed.

3. The sulfur content assumed is 2000 grains /mmscf (3.33 ppm). If your concentration is different then revise the ppm in the sulfur table or you may use the following formula:

H2S flared (lbs/hr) = Gas flared (cu ft/hr) X ppm H2S X 34/(379X1000000)

SOx emis (lbs/hr) = H2S flared (lbs/hr) X 64/34

Liquid Flares

1. Assumes 1% by wt Sulfur maximum in the crude oil.Revise the percent sulfurin the sulfur table if your value is different.

2. VOC equals non-methane HCs

3. Particulate emissions assumes Grade 5 oil.

Tanks

1. Tank emissions assumes uncontrolled fixed roof tank.

2. The EPA TANKS model is an acceptable alternate. If you choose to use TANKS, you must

provide MMS with sufficent information to verify your results.

Emissions Spreadsheets (EMISSIONS1 through EMISSIONS5)

The emissions from an operation should be presented for a calendar year (1999, 2000, etc.). The operation may include drilling only or drilling in conjunction with other activities such as well testing or caisson installation. For additional years the Emissions1is renamed Emissions 2, 3, etc. The different operating parameters for each year should entered to calculate revised emissions for that year. The spreadsheet will calculate maximum fuel usage (UNIT/HR) using the known horsepower. It will assume maximum fuel usage is equal to actual fuel (UNIT/DAY) usage unless the actual fuel usage is known. If so, insert actual fuel usage in appropriate column. The emissions will be calculated as follows:

Emission rate (lb/hr) = (HP or fuel rate) X Emission Factor (Potential to emit)

Emissions (tpy)=Emission rate (lb/hr) X load factor(Act Fuel/Max Fuel) X hrsX daysX ton/2000 lbs

(Actual emissions)

To customize the spreadsheet for your application it is possible to delete lines for non-applicable equipment/activities or copy/insert an entire line if more than one similiar type of equipment is present.

Summary Sheet

The Summary Sheet is designed to show a proposed estimate of emissions from an activity over a future period of time. In this example ten years was chosen. The first line (Row 7) of the

summary sheet is linked to the yearly totals in the Emissions Spreadsheet. The second line (Row 8)

is referenced to Emissions2 Spreadsheet. The third line (Row 9) is referenced to Emissions3, Row 10 to Emissions 4, Row 11 to Emissions 5. If more years of calculations are necessary to reach a constant then a spreadsheet can be copied and linked to the summary sheet for future years. Once emissions are constant the values are carried to the end of the ten year period.

EXPLORATION PLAN (EP)
AIR QUALITY SCREENING CHECKLIST

OMB Control No. XXX-XXX
Expiration Date: Pending

COMPANY	Hunt Oil Company
AREA	Vermilion
BLOCK	49
LEASE	OCS-G-16283
PLATFORM	
WELL	D & E
COMPANY CONTACT	Don Butler
TELEPHONE NO.	214/978-8673
REMARKS	

"Yes"	"No"	Air Quality Screening Questions
	No	1. Are the proposed activities east of 87.5° W longitude?
	No	2. Are H_2S concentrations greater than 20 ppm expected?
	No	3. Is gas flaring proposed for greater than 48 continuous hours per well?
	No	4. Is produced liquid burning proposed?
Yes		5. Is the exploratory activity within 25 miles of shore?
	No	6. Are semi-submersible activities involved and is the facility within 50 miles of shore?
	No	7. Are drillship operations involved and is the facility within 120 miles of shore?
	No	8. Will the exploratory activity be collocated (same surface location) on a production facility?

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

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

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

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

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

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

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	LOC	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
Hunt Oil Company	Vermilion	49	OCS-G-16283		D & E		Don Butler	214/978-8673	

OPERATIONS	EQUIPMENT	RATING	MAX USE/ACTUAL	ACT USE/ACTUAL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATE TONS				
	EQUIPMENT		MAX USE/ACTUAL	ACT USE/ACTUAL												
	NAME	MMBTU/HR	SCR	SCC	HRS/DAY	DAYS	PM	SOX	NOX	VOC	CO	PM	SOX	NOX	VOC	CO
DRILLING	WORST IN CLASS - JACKUP															
	TOTAL RIG>600hp diesel	11400	550.62	13214.88	24	50	6.04	36.86	276.21	8.29	60.26	4.82	22.12	165.73	4.97	36.16
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	24	36	1.41	6.47	48.46	1.45	10.57	0.61	2.79	20.93	0.63	4.57
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	24	22	1.76	8.08	60.57	1.82	13.22	0.47	2.13	15.99	0.48	3.49
	VESSELS>600hp diesel(tugs)	7200	347.76	8346.24	24	6	5.07	23.28	174.45	5.23	38.06	0.37	1.68	12.56	0.38	2.74
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC		SCR	COUNT												
	TANK-	0			0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
1	YEAR TOTAL						1			1	1 11			1 1		
EMISSION CALCULATION	DISTANCE FROM LAND IN MILES															1 1
	8.3															

EMISSIONS CALCULATIONS 2ND YEAR

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT	PHONE	REMARKS
Hunt Oil Company	Vermilion	49	OCS-G-16263		D & E		Don Butler	214/978-8673	

OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	WORST IN CLASS - JACKUP															
	TOTAL RIG>600hp diesel	11400	550.62	13214.88	24	50	8.04	36.86	276.21	8.29	60.26	4.82	22.12	165.73	4.97	36.16
	VESSELS>600hp diesel(crew)	2000	96.6	2318.40	24	36	1.41	6.47	48.46	1.45	10.57	0.61	2.79	20.93	0.63	4.57
	VESSELS>600hp diesel(supply)	2500	120.75	2898.00	24	22	1.76	8.08	60.57	1.82	13.22	0.47	2.13	15.99	0.48	3.49
	VESSELS>600hp diesel(tugs)	7200	347.76	8346.24	24	6	5.07	23.28	174.45	5.23	38.06	0.37	1.68	12.56	0.38	2.74
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00		0.00	0.00	0 00	0.00
2002 YEAR TOTAL							16.28	74.69	559.69	16.79	122.11	6.26	28.72	215.21	6.46	46.96
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											276.39	276.39	276.39	276.39	13937.91
	8.3															

SUMMARY

OMB Control No. xxxx-xxxx
Expiration Date: Pending

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Hunt Oil Company	Vermilion	49	OCS-G-16283		D & E

Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2001	6.26	28.72	215.21	6.46	46.96
2002	6.26	28.72	215.21	6.46	46.96
Allowable	276.39	276.39	276.39	276.39	13937.91