1 4 DEC 2005

In Reply To: MS 5232

Mr. David A. Kerstein Helis Oil & Gas Company, L.L.C. 228 St Charles Avenue Suite 912 New Orleans, Louisiana 70130

Dear Mr. Kerstein:

Reference is made to the following application that has been reviewed by the Minerals Management Service:

Application Type: New Right-of-Way Pipeline

Application Date: July 28, 2005

Supplemental Data Date(s): November 2, 2005, November 7, 2005, November 17,

2005, December 12, 2005

Work Description: Create 200-foot wide right-of-way and install, operate, and

maintain the following:

One 4-inch pipeline 2.73 miles in length with associated umbilical to transport bulk gas from Vermilion Block 338 Well No. 1 to Vermilion Block 329 A.

Assigned Right-of-Way Number: OCS-G26914

Assigned Segment Number: 15252 Umbilical Segment Number: 15486

Pursuant to 43 U.S.C. 1334(e) and 30 CFR 250.1000(d), your application is hereby approved.

The approval is subject to the following:

Our review indicates that the routes to be taken by boats and aircraft in support of your proposed activities are located in or could traverse the Military Warning Area W-59. Therefore, please be advised that you will contact the Naval Air Station-JRB 159 Fighter Wing, 400 Russell Avenue, Building 285, New Orleans, Louisiana 70143-0027 [(504) 391-8696 or (504) 391-8697; fax (504) 391-8671] concerning the control of electromagnetic emissions and use of boats and aircraft in Military Warning Area W-59.

Your request to use navigational positioning equipment to comply with Notice to Lessees and Operators No. 98-20, Section IV.B, is hereby approved.

Assigned MAOP (psi): 10000

MAOP Determination : Valves, Flanges, Hydrostatic Test Pressure

Please be reminded that, in accordance with 30 CFR 250.1008(a), you must notify the Regional Supervisor at least 48 hours prior to commencing the installation or relocation of a pipeline or conducting a pressure test on the pipeline. Commencement notification(s) should be faxed to (504) 736-2408. In accordance with 30 CFR 250.1008 (b), you are reminded to submit a report to the Regional Supervisor within 90 days after completion of any pipeline construction. Also in accordance with a Letter to Lessees dated April 18, 1991, a copy of the asbuilt plat(s) must be submitted to the National Ocean Service, N/CS26 Room 7317, 1315 E-W Highway, Silver Spring, MD 20910-3282

Sincerely,

Dry sqn E. Komiskey
Donald C. Howard

Regional Supervisor Field Operations

bcc: 1502-01 Segment No. 15252, 15486 ROW OCS-G26914 (MS 5232)

1502-01 ROW OCS-G26914 (Microfilm) (MS 5033)

MS 5271 Lake Charles District w/flow schematic

MS 5232 Cartography

J. Connor Consulting, Inc.



Amrs 4



DOCUMENT TRANSMITTAL

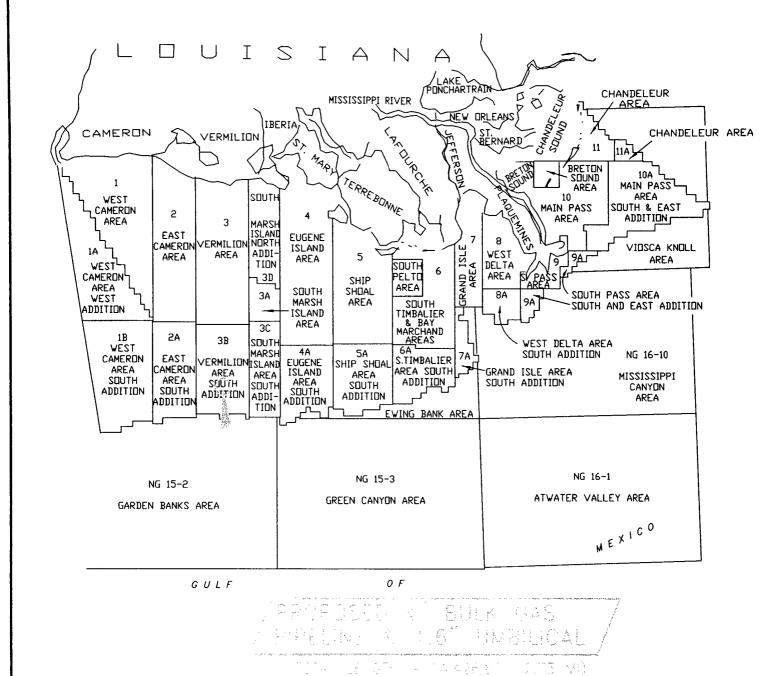
TO:	Minerals Management Service 1201 Elmwood Park Blvd.	DATE: December 12, 2005
	1201 EIIIWOOD Park Divu.	
	New Orleans, LA 70123-2394	
	MS 5232	Minnes
		R C Management Service
ATTENTION:	Manny Gagliano	RECEIVEL
REGARDING:	Helis Oil & Gas Company, L.L.C.	DECTO
	VR 338 #3 to VR 329 A 4" Bulk Gas RC	DEC 1 3 2005
	Segment 15252, ROW OCS-G 26914	Office of Field Operations Pipeline Section

(X) We are sending you the following document(s)

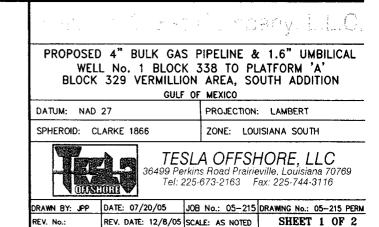
NO. OF COPIES	DESCRIPTION
1	Revised Safety Flow Schematic/Location Plats
1	Revised Safety Flow Schematic/ Location 1 lats
THESE ARE FOR	THE PURPOSE INDICATED BELOW:
() For Signatur	e and Forwarding () For Revision as Needed
	and Handling () For Execution
REMARKS:	Manny, Per your request, please find attached a revised safety flow schematic, revised location plat and diskette. The safety flow schematic has been revised to show the flow direction of the pipeline and the FSV and the location plat has been revised to show the pipeline and umbilical being laid together. Due to the water depth being greater than 200′, the pipeline will not be buried 3 feet below the mudline. If you have any questions or need any additional information, please call me at 281/578-3388. Thank you for your help in this matter.

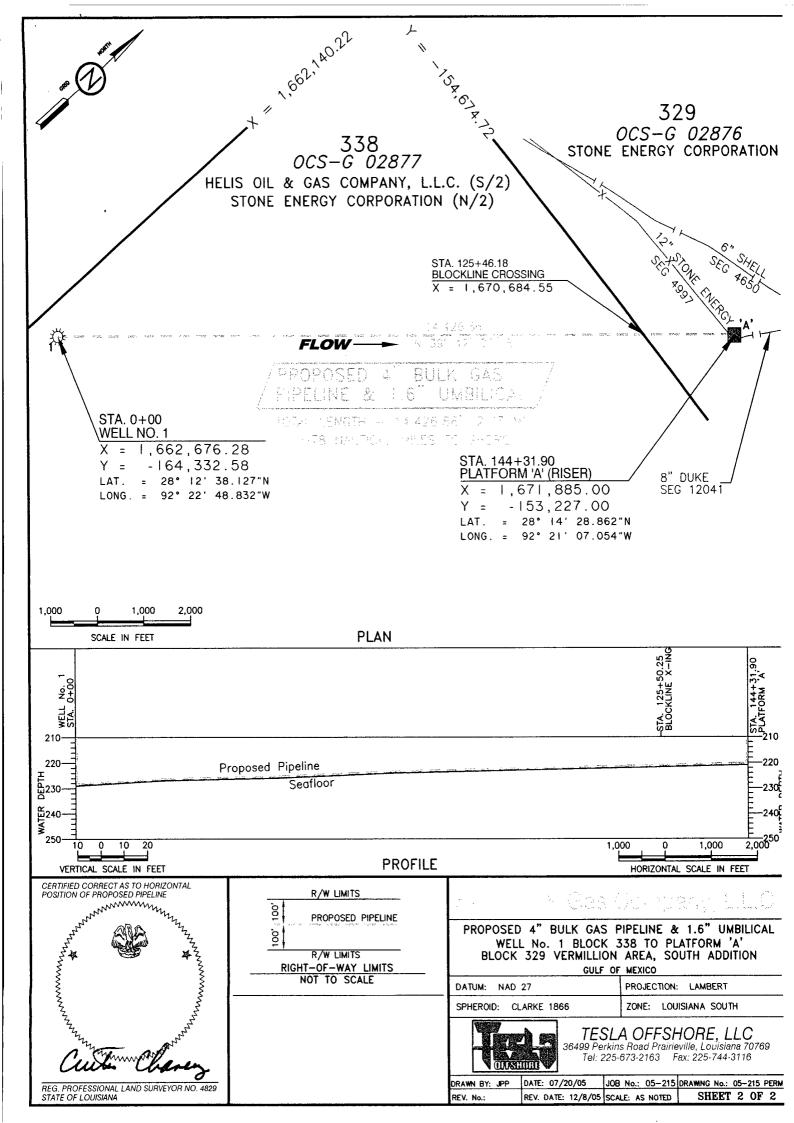
15252 M1Cho

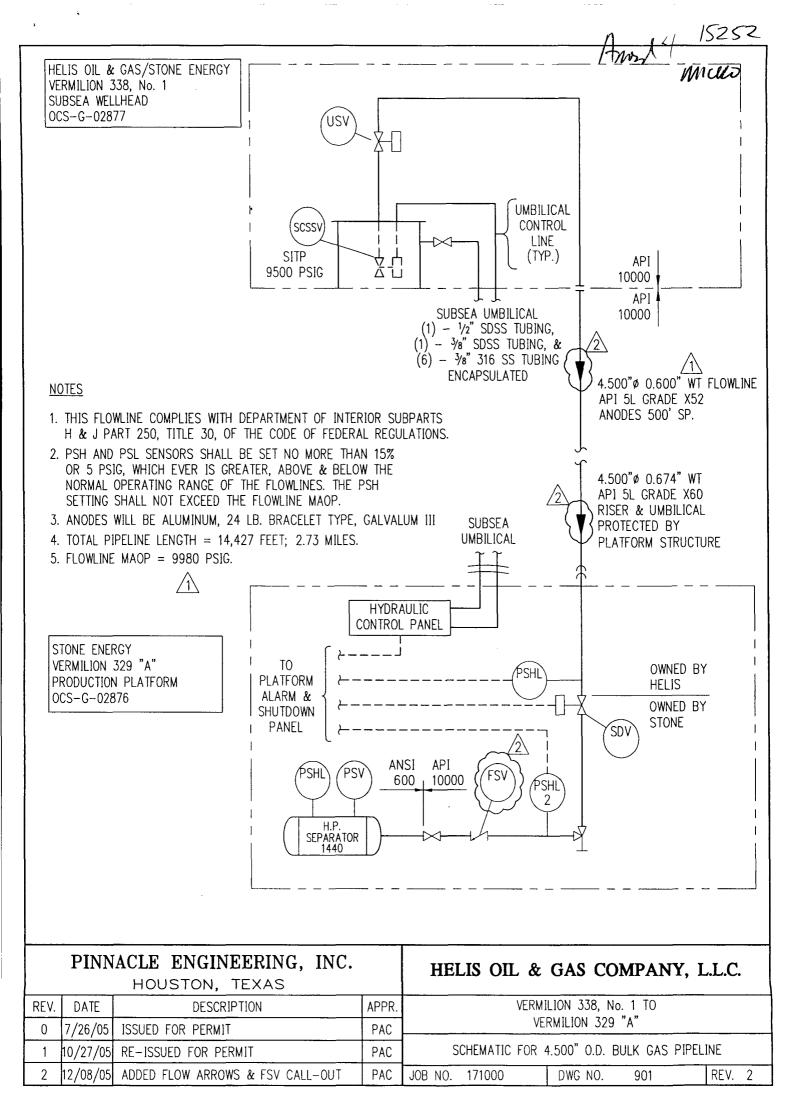
LOUISIANA GULF COAST INDEX M.M.S. O.C.S. LEASING AREAS



VICINITY MAP







DOCUMENT TRANSMITTAL

TO:	Minerals Management Service 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394 MS 5232 DATE: November 17, 2005
ATTENTION: REGARDING:	Manny Gagliano Helis Oil & Gas Company, L.L.C. VR 338 #3 to VR 329 A 4" Bulk Gas ROW Segment 15252, ROW OCS-G 26914
(X) We are sending	g you the following document(s)
NO. OF COPIES	DESCRIPTION
1	Replacement Check for Application Fee
() For Signatur	THE PURPOSE INDICATED BELOW: The and Forwarding () For Revision as Needed () For Execution () For
REMARKS:	Manny, Per your request, please find attached a replacement check for the subject pipeline application submitted to MMS July 28, 2005. Subsequently, by letter dated November 2, 2005, Helis submitted an amendment to this application. If you have any questions or need any additional information, please call me at 281/578-3388.
	Thank you for your help in this matter.

CK# 030496 11/17/05 Minerals Management Service

RECEIVE

Signed

Patty Brewer NOV 1 8 2005

Office of Field Operations
Pipeline Section

J. CONNOR	CONSULTING,	INC.
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REFERENCE NO.	DESCRIP	PTION	INVOICE DATE	INVOICE AMOUNT	DISCOU	NT TAKEN	AMOUNT PAID
08700/VR33			11/17/05	2,395.00			2,395.00
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CHECK DATE	CHECK NO.		PAYEE		DISCOU	NTS TAKEN	CHECK AMOUNT
11/17/05	30496	MINERALS MA	NAGEMENT SER	v.			\$2,395.00

J. CONNOR CONSULTING, INC. 16225 PARK TEN PLACE, SUITE 700

HOUSTON, TEXAS 77084-5152 (281) 578-3388

STERLING BANK 3100 RICHMOND AVENUE HOUSTON, TEXAS 77098

Memo:

CHECK NO. 30496

DATE

Nov 17, 2005

AMOUNT ******\$2,395.00

030496

PAY TO THE ORDER

Two Thousand Three Hundred Ninety-Five and 00/100 Dollars

MINERALS MANAGEMENT SERV. 1201 ELMWOOD PARK BLVD

NEW ORLEANS, LA 70123-2394

#113001271#

Junery No. 1

5N 15252

And 2

DOCUMENT TRANSMITTAL

NOV. 7,2005

TO:

Minerals Management Service

DATE: November 3, 2005

1201 Elmwood Park Blvd. New Orleans, LA 70123-2394

MS 5232

ATTENTION: **REGARDING:** Manny Gagliano

Helis Oil & Gas Company, L.L.C.

VR 338 #3 to VR 329 A 4" Bulk Gas ROW

Minerals Management

NOV 1 4 2005

(X) We are sending you the following document(s)

Office of Field Operations Pipeline Section

NO. OF COPIES DESCRIPTION Copy of Subject pipeline application

THESE ARE FOR THE PURPOSE INDICATED BELOW:

•)	For Signature and Forwarding
	,	

For Revision as Needed

For Review and Handling

For Execution

() For Your Files

REMARKS:

Manny,

Per your request today, please find attached three copies of Helis' subject pipeline application submitted to MMS July 28, 2005. Subsequently, by letter dated November 2, 2005, Helis submitted an amendment to this application.

Also, as requested, Pinnacle Enginneering is ordering 2 CD's of the Hazard Survey (including all maps) which will be submitted under separate cover as soon as I receive them.

If you have any questions or need any additional information, please call me at 281/578-3388.

Thank you for your help in this matter.

Ref: 08700/VR338/ROW Date: 11/03/2005 Dep: CATHY THORNTON Wgt: 0.9 LBS

ANDLING:

Sves: STANDARD OVERNIGHT TRCK: 6629 0284 0214

PINNACLE ENGINEERING, INC.

7660 WOODWAY, SUITE 350 HOUSTON, TEXAS 77063 PHONE (713) 784-1005 FAX (713) 784-0455

Minerals Management Service RECEIVED

NOV 1 4 2005

DOCUMENT TRANSMITTAL

Office of Field Operations
Pipeline Section

J. CONNOR CONSULTING 16225 PARK TEN PLACE, SUITE 700 HOUSTON, TEXAS 77084

ATTN: PATTY BREWER

CLIENT: HELIS OIL & GAS COMPANY

PROJECT: VR 338, NO. 1 TO VR 329 "A"

PROJECT NO: 171000

PAGE: 1 of 1

FROM: Po	ete Cruz	16		DOCUMENT TRANSMITTAL NO.: 003
D		<u>, </u>		DATE: 11/04/05
Purpose:				Method transmitted:
Pipeline Per				Courier
COPIES	SIZE/ TYPE	DWG. #	REV.	TITLE AND / OR DESCRIPTION
2	CD			VR 338 Pipeline Shallow Hazard Survey
				
			- -	
REMARKS	:	L	<u> </u>	<u></u>
COPY:	PAC t/o,			/kmc File: 171000-1.1, 4.4



MC SN15252

> SCOTT A. ANGELLE SECRETARY

KATHLEEN BABINEAUX BLANCO GOVERNOR

DEPARTMENT OF NATURAL RESOURCES OFFICE OF COASTAL RESTORATION AND MANAGEMENT August 24, 2005

Bart. J. Walker Helis Oil & Gas Company LLC 228 St. Charles Ave, Suite 912 New Orleans, LA 70130

RE: C20050420, Coastal Zone Consistency

Helis Oil & Gas Company LLC

Minerals Management Service Federal License or Permit

Installation of an 4-inch Bulk Gas Right-of-Way pipeline from Vermilion 338 Well No. 1 to Vermilion 329 Platform A, Gulf of Mexico, **Offshore Louisiana**

Dear Mr. Walker:

The above referenced project has been reviewed for consistency with the approved Louisiana Coastal Resources Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. The project, as proposed in the application, is consistent with the LCRP.

If you have any questions concerning this determination please contact Brian Marcks of the Consistency Section at (225)342-7939 or 1-800-267-4019.

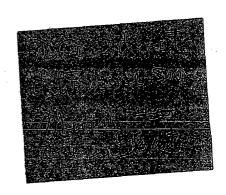
Sincerely,

David W. Frugé

Administrator

DWF/JDH/bgm

cc: Alex Alvarado; MMS Pipeline Section
Cathy Thornton, J. Connor Consulting
Bonnie Johnson, MMS 5412
Ronnie Duke, NOD-COE



15252 G26914 MICHO

HELIS OIL & GAS COMPANY, L.L.C.

228 ST. CHARLES AVENUE, SUITE 912 NEW ORLEANS, LOUISIANA 70130

Telephone: (504) 523-1831

Facsimile: (504) 522-6486

July 28, 2005

RECEIVED

NOV 0 8 2005

Office of Field Operations

Mr. Donald C. Howard Regional Supervisor U. S. Department of the Interior Minerals Management Service 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

Pipeline Section

Attention: Mr. Alex Alvarado

RE: Application for 4-inch Bulk Gas Right-of-Way Pipeline with Associated Umbilical To Be Installed In and/or Through Blocks 338 and 329, Vermilion Area, OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

Pursuant to the authority granted in Section 5 (e) of the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq, P.L. 212, 67 Stat. 462), as amended (P.L. 95-372, 92 Stat. 629), and in compliance with the regulations contained in Title 30 CFR, Part 250, Subpart J, Helis Oil & Gas Company, L.L.C. (Helis) is filing this application in quadruplicate (original and three copies) for a right-of-way easement two hundred feet (200') in width for the construction, maintenance and operation of an 4-inch bulk gas right-of-way pipeline to be installed in and/or through Blocks 338 and 329, Vermilion Area, Offshore, Louisiana. Helis agrees that said right-of-way and umbilical, if approved, will be subject to the terms and conditions of said regulations.

The proposed 4-inch bulk gas right-of-way pipeline will originate at Helis' existing Subsea Well No. 001, Vermilion Block 338, Lease OCS-G 02877 and proceed in a northeasterly direction approximately 14,427' feet (2.73 statute miles) to Stone Energy Corporation's (Stone's) existing Platform A located in Vermilion Block 329, Lease OCS-G 02876.

The subject pipeline has a calculated worst case discharge of less than 1000 barrels, therefore, Oil Spill Financial Responsibility coverage is not required.

Minerals Management Service 4-inch Bulk Gas ROW Pipeline Blocks 338 and 329, Vermilion Area July 28, 2005

Page Two

Helis will review our Regional Oil Spill Response Plan to determine if installation of the subject right-of-way pipeline affects the current worst case discharge, and, if applicable, will modify the plan to include the pipeline at the next scheduled update.

Installation of the proposed pipeline will be accomplished by utilizing a typical lay/bury barge(s). The pipeline will be jetted to a minimum of 3 feet below the mudline. There are no pipeline crossings along the proposed route.

Helis hereby requests a waiver from NTL 98-20, Section IV.B, which requires the buoying of all existing pipeline(s) and other potential hazards located within 150 meters (490) feet of the proposed operations. Utilizing the on-board graphic system during construction operations, Helis will comply with the recommended avoidance criteria of the magnetic anomalies identified in Tesla Offshore's Proposed Pipeline Route Survey dated July, 2005.

Side scan sonar depict an acoustically fine-textured seafloor with multiple rig and anchor scars around the well and platform. Sonograms recorded several important seafloor installations (well, platform and pipelines) that should be carefully observed during construction. Magnetometer data confirmed the location of the well, platform, and pipelines. Nine (9) magnetic anomalies did not correlate directly to those identified sources. Sonograms did not record seafloor targets in the vicinity of any of the unidentified anomalies; therefore, none can be positively identified from these survey data. All of the anomalies probably represent point-source ferromagnetic debris lying on or buried immediately beneath the seafloor.

The proposed construction operations will be supported by a crewboat and tug, each making approximately three (3) trips per week, respectively, from an onshore facility located in Fourchon, Louisiana.

Helis anticipates commencing installation on approximately December 15, 2005, with an overall completion of project time being estimated at fifteen days.

Helis Oil & Gas Company, L.L.C. will be the operator of the subject right-of-way pipeline.

This application (and any amendments made hereto) is made with our full knowledge and concurrence with the OCS Lands Act (43 U.S.C. 1331 et. seq.), as amended (P.L. 95-372), including the following: Sec. 5(e) addressing pipeline rights-of-way, requirements of the Federal Energy Regulatory Commission relating to notice of hearing, transportation and purchase of oil and gas without discrimination; Sec. 5(f)(1) addressing operation of

Minerals Management Service 4-inch Bulk Gas ROW Pipeline Blocks 338 and 329, Vermilion Area July 28, 2005

Page Three

pipelines in accordance with competitive principles, including open and nondiscriminatory access to both owner and non-owner shippers; Sec. 5(f)(2) which may allow exemption of the requirements in Sec. 5(f)(1); Sec. 5(e) addressing the assuring of maximum environmental protection, including the safest practices for pipeline installation; and Sec. 5(f)(1)(B) which may require expansion of throughput capacity of any pipeline except for the Gulf of Mexico or the Santa Barbara Channel.

Additionally, we expressly agree that if any site, structure, or object of historical or archaeological significance should be discovered during the conduct of any operations within the permitted right-of-way, we shall report immediately such findings to the Director, Gulf of Mexico OCS Region, and make every reasonable effort to preserve and protect the cultural resource from damage until said Director has given directions as to its preservation.

In accordance with applicable regulations, we have forwarded information regarding the proposed project by certified mail, return receipt requested, to each designated oil and gas lease operator, right-of-way or easement holder whose lease, right-of-way or easement is so affected. A list of such designated operators, right-of-way or easement holders is included as Attachment A and copies of the return receipts showing date and signature as evidence of service upon such operators, right-of-way or easement holders will be forwarded to your office when received.

In order to expedite the permit process, we have requested a letter from the operator, right-of-way or easement holder expressing no objection to the proposed project. When obtained, these letters will be forwarded to your office. The proposed right-of-way does not adjoin or subsequently cross state submerged lands.

Applicant agrees to be bound by the foregoing regulations, and further agrees to comply with the applicable stipulations as set forth in Title 30 CFR 250 (Subpart J) and that certain Letter to Lessees dated April 18, 1991.

The risers at the respective platforms will be protected by riser guards or inside the jacket framing.

In support of our application and for your review and use, the following maps, drawings and documents have been enclosed herewith and made a part hereof:

Minerals Management Service 4-inch Bulk Gas ROW Pipeline Blocks 338 and 329, Vermilion Area July 28, 2005

Page Four

- 1. Originally signed copy of Nondiscrimination in Employment Stipulation is attached to each copy of the application.
- 2. Designated Oil & Gas Lease Operators and Right-of-Way Holders (Attachment A)
- 3. General Information and Calculations for Design and Construction of 4-inch Bulk Gas Pipeline
- 4. Coastal Zone Management Consistency Certification and copy of pipeline application submittal letter to CZM for each affected Gulf state
- 5. Calculations for Regional Oil Spill Response Plan/Oil Spill Financial Responsibility
- 6. Vicinity and Route Map
- 7. Pipeline Safety Flow Schematic
- 8. Riser Elevation Detail
- 9. MMS Right-of-Way pipeline application spreadsheet
- 10. 4 copies plus diskette of the High Resolution Geophysical Survey Report prepared by Tesla Offshore, LLC dated July, 2005
- 11. Check in the amount of \$2395.00 covers the application fee of \$2350 plus \$15 for the first year rental on 2.73 miles of right-of-way

Contact on technical points or other information:

Cathy Thornton or Patty Brewer J. Connor Consulting, Inc. 16225 Park Ten Place, Suite 700 Houston, Texas 77084 (281) 578-3388 Minerals Management Service 4-inch Bulk Cas ROW Pipeline Blocks 338 and 329, Vermilion Area July 28, 2005

Page Five

Helis Oil & Gas Company, L.L.C. hereby agrees to keep open at all reasonable times for inspection by the Minerals Management Service, the area covered by this right-of-way and all improvements, structures, and fixtures thereon and all records relative to the design, construction, operation, maintenance, and repairs, or investigations on or with regard to such area."

Please refer to your New Orleans Miscellaneous File No. 01978 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of Helis Oil & Gas Company, L.L.C. Additionally, the Helis Oil & Gas Company, L.L.C. has an approved \$300,000 Right-of-Way Grant Bond on file with MMS, covering installation of right-of-way pipelines in Federal Waters, Gulf of Mexico.

Sincerely,

Helis Oil & Gas Company, L.L.C.

David A. Kerstein

President and Treasurer of Helis Energy, Inc., Manager of Helis Oil & Gas Company, L.L.C.

DAK:pb

Attachments and Enclosures

cc: Stone Energy Corporation
Attention: Bill Claibourne
625 East Kaliste Saloom Road
Lafayette, Louisiana 70508
(Certified Mail No. 7003 2260 0003 0200 4843)

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee, Helis Oil & Gas Company, L.L.C. hereby agrees and consents to the following stipulation, which is to be incorporated into the application for said right-of-way.

During the performance of this grant, the grantee agrees as follows:

During the performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended (reprinted in 41 CFR 60-1.4(a)), which are for the purpose of preventing discrimination against persons on the basis of race, color, religion, sex or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended, are incorporated in this grant by reference.

		.)		• • •	:
	-	1	C.		The second section of the second
Signature					
1.1 20 2001	=				
July 28, 2005 Date			 		

ATTACHMEN'Γ A

The following Designated Oil & Gas Lease Operators and Right-of-Way Holders have been furnished information regarding the proposed pipeline installation by Certified Mail, Return Receipt Requested.

VERMILION AREA

BLOCK 338

Helis Oil & Gas Company, L.L.C.

OCS-G 02877

Oil & Gas Lease

BLOCK 329

Stone Energy Corporation

OCS-G 02876

Oil & Gas Lease

HELIS OIL & GAS COMPANY, LLC 4" Bulk Gas Pipeline Vermilion 338, No. 1 to Vermilion 329 "A" Rev. 0, 7/26/05

PIPELINE DESIGN INFORMATION

I. <u>Pipeline and Riser Description</u>

A. Nominal Pipeline:

Size: 4.500 Inch Wall Thickness: 0.531 Inch

Grade: API 5L Gr. X60 , Seamless Length: 14,427 Feet, 2.73 Miles

Bare Weight: 22.51 lbs/ft

Protection Coating Type

and Thickness: Fusion Bonded Epoxy; 12-14 mils

Weight Coating: None

Specific Gravity of Pipe in

Seawater (empty): 3.18

B. Riser:

Size: 4.500 Inch
Wall Thickness: 0.674 Inch

Grade: API 5L Gr. X60, Seamless

Bare Weight: 27.54 lbs/ft

Protection Coating Type and Thickness:

Below Splash Zone: Fusion Bonded Epoxy; 12-14 mils
 In Splash Zone: Splashtron Coating; ½ Inch

- Above Splash Zone: Fusion Bonded Epoxy; 12-14 mils and/or a three

coat paint system; 12 mils DFT.

Weight Coating: None

II. Cathodic Protection System

The pipeline will be protected by sacrificial anodes as described below. The pipe between the riser insulating flanges will be protected by the pipeline cathodic protection system. The riser clamps will be insulated from the riser by a neoprene coating installed on the inside of the clamps. Above the insulating flange, the riser is protected by a thin film epoxy coating system and the platform cathodic protection system.

Helis Oil Gas Co, LLC 4" Bulk Gas Pipeline Vermilion 338 No. 1 to Vermilion 329 "A" Page 2 of 5

Pipeline and Riser Sacrificial Anodes System:

Design Life:

40 yrs.

Type of Anode:

Galvalum III

Spacing Interval:

500 ft.

Output:

1150 Amps - hrs./lb.

Efficiency:

0.85

Current Density:

2 ma/sq. ft.

% Assumed Bare Pipe:

5%

Minimum Required Weight of Anode:

N/A

$$\# = (.002) (3.14159) (4.500) (500) (.05) (40) (365) (24) / (1150) (12) (.85) = 21.1 lbs.$$

Use one (1) 24# net weight anode every 500 feet.

III. Water-Depth for Pipeline:

The water depth along the pipeline is approximately (-)228 feet.

IV. <u>Description of Internal Protective Measures:</u>

Internal Coating:

None

Corrosion Inhibitor Program:

As necessary

Pigging Program:

A Pigging Schedule has not been defined, however, depending on

the analysis of the transported product, a program will be initiated

as necessary.

V. Riser Protection

At Vermilion 329 "A" the riser will be protected by a riser guard.

VI. Specific Gravity of the Empty Pipe Based on Seawater:

The formula used to calculate the specific gravity is as follows:

$$S.G. = \frac{(W_P + W_{CONC})}{W_{H2O}}$$

Helis Oil Gas Co, LLC 4" Bulk Gas Pipeline Vermilion 338 No. 1 to Vermilion 329 "A" Page 3 of 5

Where:

$$W_P$$
 = Weight of the pipe (lbs/ft) = 22.51
 W_{CONC} = Weight of concrete (lbs/ft) = 0.00
 W_{H20} = Displaced weight of the seawater (lbs/ft) = 7.07

The above weights are based on the pipe outside diameter and corrosion coating thickness and on the densities of the various materials which are listed below.

Density of Pipe =
$$490 \text{ lbs/ft}^3$$

Density of Seawater = 64 lbs/ft^3
The specific gravity of the pipeline = 3.18

VII. Specific Gravity of the Product:

The specific gravity of the oil and gas to be transported is anticipated to be:

VIII. Design Capacity:

The design flowing capacity of the flowline is 20 MMSCFD and 500 BLPD. The total volume capacity of the pipeline is 166 bbls.

IX. Maximum Operating Pressure:

1. Calculations based on CFR, Title 30, Part 250, Subparts H and J.

$$P = \frac{2st}{D}$$

$$P1 = \frac{2s(t-ca)(F)(E)(T)}{D}$$

Helis Oil Gas Co, LLC 4" Bulk Gas Pipeline Vermilion 338 No. 1 to Vermilion 329 "A" Page 4 of 5

Where:

```
P
              Pressure as 100% SMYS (psig)
              Internal Design Pressure (psig)
P1
        =
              Specified Minimum Yield Strength (SMYS) (psi)
        =
S
              Pipe Wall Thickness in Inches
t
              Corrosion Allowance (use 0.00")
ca
D
              Pipe Outside Diameter in Inches
        ==
        ==
              Design Factor
(F)
              0.60 for Risers
              0.72 for Pipelines
(E)
              Joint Factor
              1.0 for Seamless Pipe
              Temperature Derating Factor
(T)
              1.0 for Operating Temperatures below 250 Degrees Fahrenheit
        1)
              Pipeline:
                              4.500" OD x
                                              0.531"
                                                        W.T. API 5L Gr. X60
                        = (2) (60,000) (0.531) / (4.500) = 14,160 psig
              a)
                     P1 = (2)(60,000)(0.531 -
                                                     0.00) (0.72) (1)(1) / 4.500
                                                                                      = 10,195 \text{ psig}
              b)
              c)
                     Hydrostatic Test Pressure = HTP
                     Maximum HTP = 0.95 P =
                                                     (0.95)(14,160) = 13,452 \text{ psig}
                     Minimum HTP will be 12,500 psig for 8 hour hold time
                                       12,500 \text{ psig} / 1.25 = 10,000 \text{ psig}
                     Rated MAOP =
              d)
                     Maximum Allowable Operating Pressure (MAOP) =
                                                                               10,000 psig
        2)
              Riser:
                              4.500" OD x
                                              0.674" W.T. API 5L Gr.
                                                                           X60
              a)
                     P = (2) (60,000) (0.674)
                                                  / (4.500) = 17,973 psig
                                                      (0.00) (0.60) (1)(1)/4.500 = 10,784 psig
              b)
                     P1 = (2) (60,000) (0.674 -
                     Hydrostatic Test Pressure = HTP
              c)
                     Maximum HTP = 0.95 P =
                                                     (0.95)(17,973) = 17,075 \text{ psig}
                     Minimum HTP will be 12,500 psig for 8 hour hold time
```

12,500 psig / 1.25 = 10,000 psig

10,000 psig

Maximum Allowable Operating Pressure (MAOP) =

Rated MAOP =

d)

Helis Oil Gas Co, LLC 4" Bulk Gas Pipeline Vermilion 338 No. 1 to Vermilion 329 "A" Page 5 of 5

- B. MAOP of Flange, Fittings and Valves:
 - 1) Under Water:

API 10000 class = 10,000 psig

2) Platform Facilities (See Safety Schematic):

API 10000 class = 10,000 psig

C. Summary

This pipeline and riser will have an MAOP of 10,000 psig

X. Design Standard:

The design of the proposed pipeline is in accordance with the Department of Interior Subparts H & J Part 250, Title 30, of The Code of Federal Regulations.

XI. Construction Information:

A)	Anticipated Start Date:	December 15, 2005
B)	Method of Construction:	Lay Barge
C)	Method of Burial:	N/A
D)	Time Required to Lay Pipe:	4 Days
E)	Time Required to Complete the Project:	15 Days

COASTAL ZONE MANAGEMENT PROGRAM CONSISTENCY CERTIFICATION

Vermilion Block 338
From (Area/Block)

Vermilion Block 329
To (Area and Block)

14,427' feet (2.73 miles)

The proposed activities described in detail in this right-of-way pipeline application comply with the enforceable policies of the State of Louisiana' approved Coastal Management Program and will be conducted in a manner consistent with such Program.

Helis Oil & Gas Company
Operator

Certifying Official

July 28, 2005

Date

HELIS OIL & GAS COMPANY, L.L.C.

228 ST. CHARLES AVENUE, SUITE 912 NEW ORLEANS, LOUISIANA 70130

Telephone: (504) 523-1831

Facsimile: (504) 522-6486

July 28, 2005

Louisiana Department of Natural Resources Coastal Zone Management Division 617 North 3rd Street, Suite 1048 Baton Rouge, Louisiana 70802

Attention:

Mr. Greg DuCote

RE:

Application for 4-inch Bulk Gas Right-of-Way Pipeline

To Be Installed In and/or Through Blocks 338 and 329, Vermilion Area,

OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

By letter dated July 28, 2005, Helis Oil & Gas Company, L.L.C. (Helis) submitted to the Minerals Management Service an application to install an 4-inch bulk gas right-of-way pipeline in Blocks 338 and 321, Vermilion Area, Offshore, Louisiana.

In accordance with Title 15 CFR 930.53 and further clarified in Notice to Lessees (NTL) 2002-G15, a copy of this pipeline application is hereby submitted for your review along with a check in the amount of \$300.00 to cover the cost of the processing fee for the proposed application.

Should you have any questions concerning this matter, please contact our regulatory representative, Cathy Thornton or Patty Brewer, J. Connor Consulting, Inc. at (281) 578-3388.

Sincerely,

Helis Oil & Gas Company, L.L.C.

Patty Brence

🕍 Bart J. Walker

Operations Manager

BJW:pb

Enclosure: Check No. 030082

HELIS OIL & GAS COMPANY, LLC VR 338 #1 TO VR 329"A" 4" BULK GAS PIPELINE OIL SPILL CALCULATION SHEET WORST CASE DISCHARGE SCENARIO

A. <u>DAILY FLOWRATES</u>

GAS(mmscfd) 20

OIL (bpd) 500 = 0.005787 bbl/sec

B. LEAK RESPONSE TIME

Leak detection time (s) 30 Shut-in response (s) 90

Total response time 120 s = 0.033333 hours

C. <u>DISCHARGE VOLUME DURING RESPONSE</u>

VD1 = oil flow rate x total response time

VD1 = 0.694444 bbls

D. LEAKAGE AFTER SHUT IN

Assume 50% of oil in pipeline leaks out. Liquid holdup is calculated using Beggs & Brill Multiphase Flow.

Total Liquid holdup in pipeline:

41 bbls

(steady state at flowrates above)

Volume discharge if 50% leaks =

VD2= 20.5

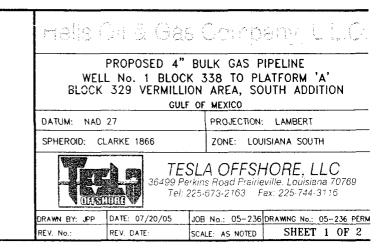
TOTAL VOLUME SPILLED:

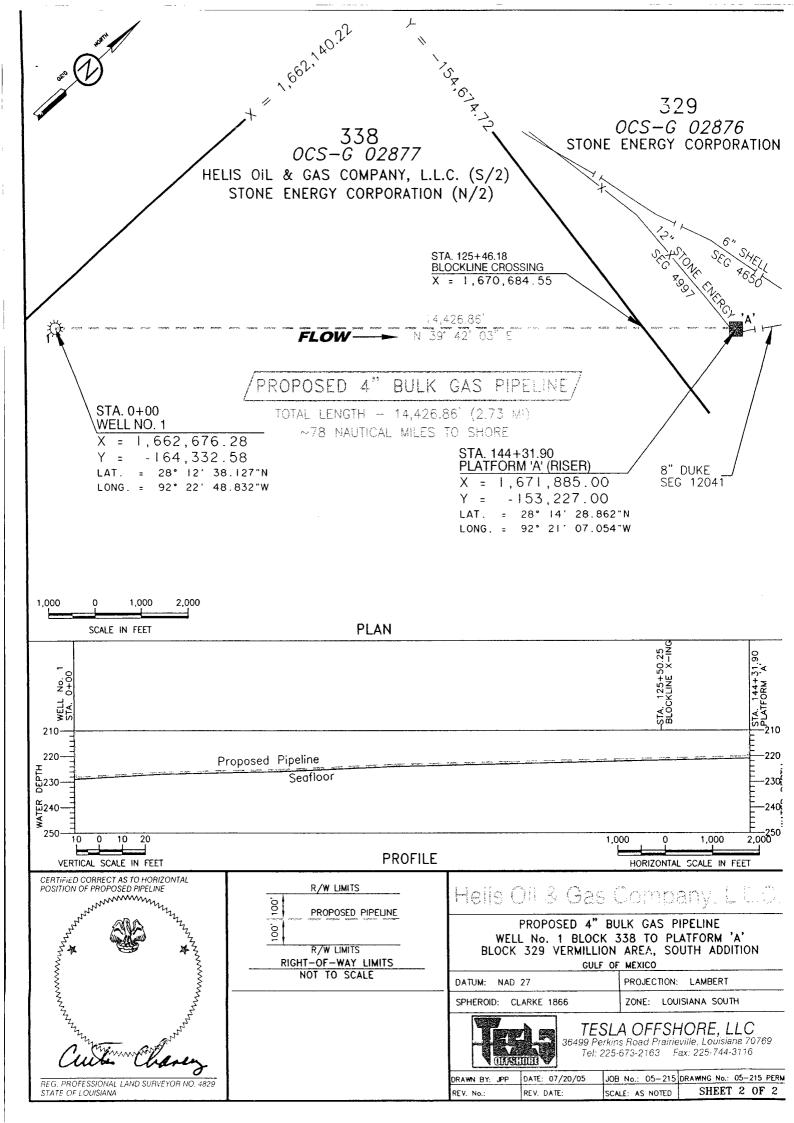
VD1 + VD2 =

21.2 barrels

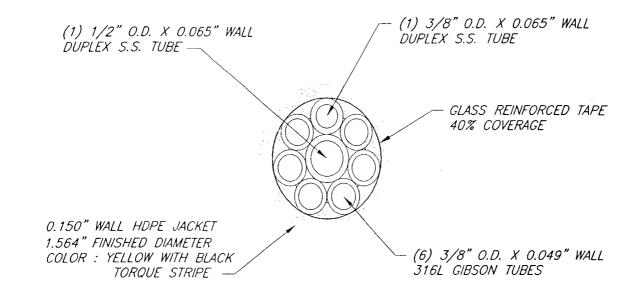


VICINITY MAP





PROPOSAL DRAWING



TUBING HYDRAULIC PROPERTIES			MECHANICAL PROPERTIE	
TUBING SIZE	WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE	
3/8" X .065" WALL	12,500 PSI	15,625 PSI	32,142 PSI	
1/2" X .065" WALL	12,000 PSI	15,000 PSI	23,600 PSI	
3/8" X .049" WALL	5,000 PSI	6,250 PSI	17,800 PSI	SEE DATA SHEET

SAF 2205 TO SPEC UNC S31803 DUPLEX STAINLESS STEEL

316L STAINLESS STEEL TUBE ASTM A-269 SPECIFICATION WELDED & BRIGHT ANNEALED

TUBING SIZES INDICATED ARE OUTSIDE DIA'S. DIAMETER TOLERANCE: +/- .005"

CABETT SUBSEA PRODUCTS

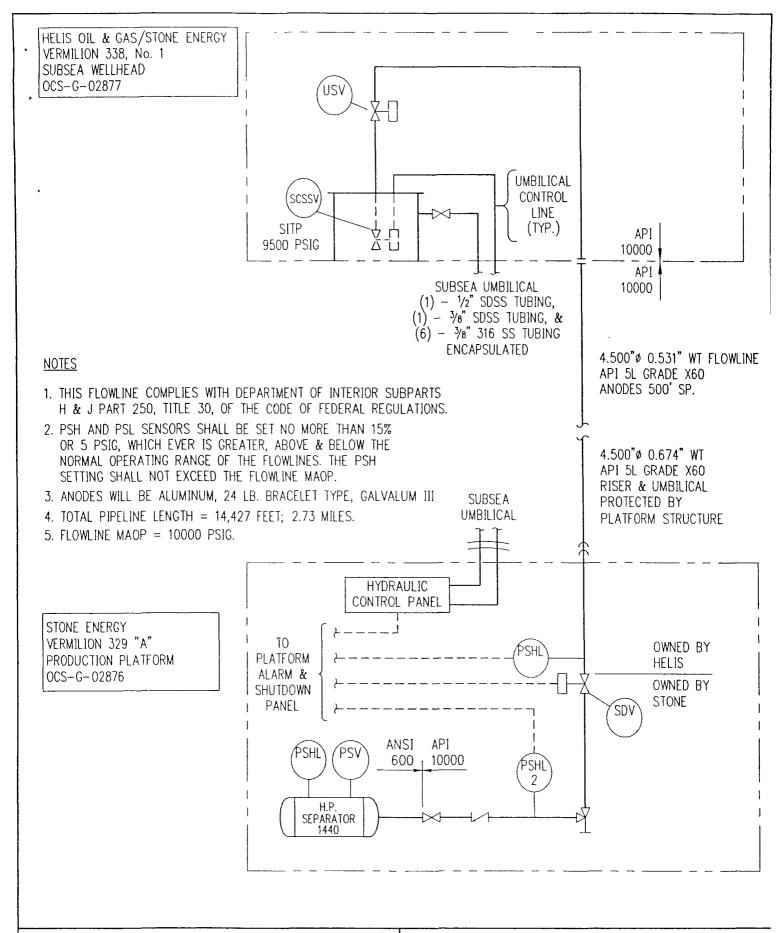


6827 SIGNAT DRIVE HOUSTON, TEXAS 77041 PINNACLE/HELIS
HYDRAULIC CONTROL UMBILICAL
DESIGN SPECIFICATION

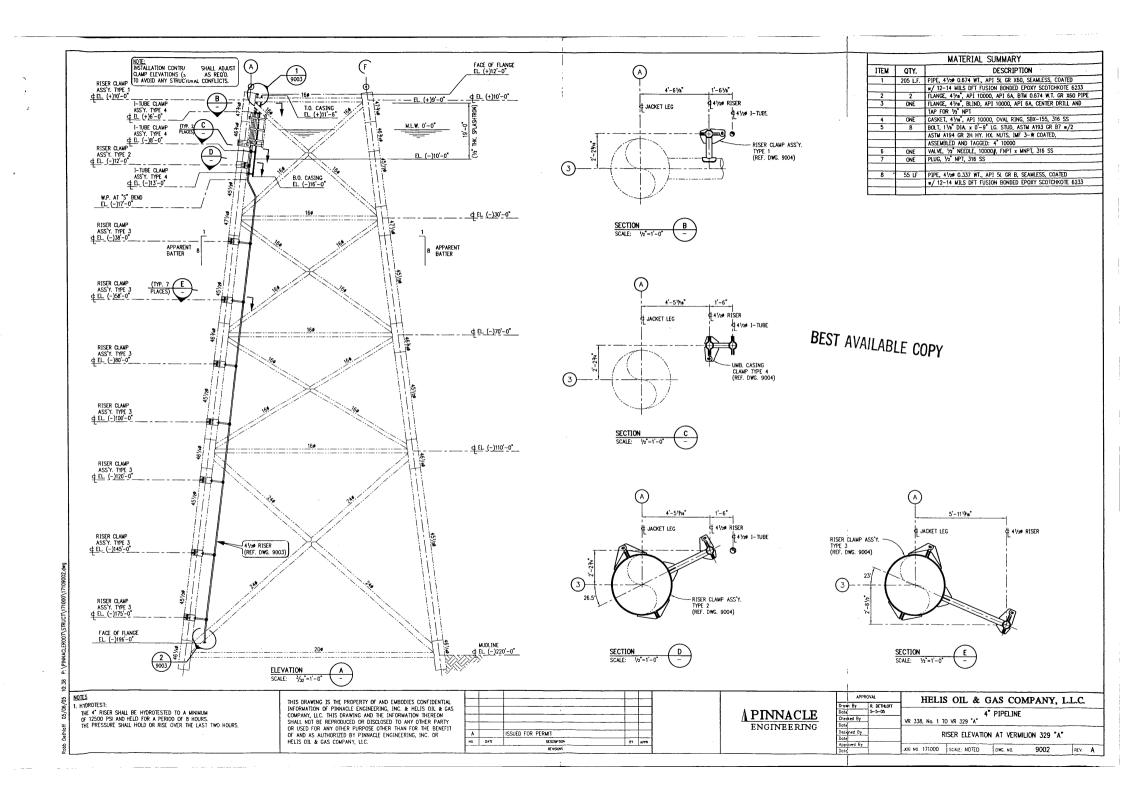
DATE 7/12/05 | SHEE

SHEET 1 OF 1 DWG NO. CSP-1222

^{tt V.} Δ



	PINN	ACLE ENGINEERING, INC HOUSTON, TEXAS		HELIS OIL	& GAS COMPANY, L.	L.C.		
REV.	DATE	E DESCRIPTION		DESCRIPTION APPR.		VE:	RMILION 338, No. 1 TO	
0	0 7/26/05 ISSUED FOR PERMIT	PAC	VERMILION 329 "A"					
				SCHEMATIC FO	OR 4.500" O.D. BULK GAS PIPELIN	٧E		
				JOB NO. 171000	DWG NO. 901	REV. 0		



A	<u> </u>	С		Ε	F
Right-of-Way Pipeline Application	Revised 10/10/2001		Segment No.:		
2					
3 Instructions:					
Complete one form for the pipeline segment submitted in your application. A ROW					
5application may only contain one proposed pipeline segment.					
6 2. Complete one form for each unattached umbilical submitted in your application.		ļ			
3. Provide response/data for all items that are shaded. Other items as required.					
Provide one original and three identical copies of <u>all application materials.</u> 9		 			
© Pipeline Route Data		ł			
List all blocks and lease numbers contacted by the pipeline; (Insert rows as needed)	Area	Block No.	Lease No.	Operator	
(If block is unleased, so note.)	VR	338	G02877	HELIS O&G / STONE ENERGY	
3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	VR	329	G02876	STONE ENERGY	
4					
5					
6		ļ			
7		<u></u>			
6 7 8 act Information 9 and company name (ROW permittee/holder) 0 Name of company representative signing application		i i			
ant company name (ROW permittee/holder) Name of company representative signing application	Helis Oil & Gas Company, L.L.C. David A. Kerstein	+			
Phone No:	504-523-1831				
2 Fax	504-523-1651	†			
2 (3). 3 E-Mai	bwalker@helisoil.com	1			- ;
4 Mailing address	228 St. Charles, Suite 912				
	New Orleans, LA. 70130			A COTTON OF MARKET AND A STATE OF THE STATE	
ROW holder's MMS code (five digit)	01978				_
77					
B Designated operator company name	Helis Oil & Gas Company, LLC				
9 Phone No:	504-523-1831 504-522-6486	 			-
o Fax:	bwalker@helisoil.com	 			
Mailing address	228 St. Charles, Suite 912	 			
	New Orleans, LA. 70130				i
Operator's MMS code (five digit)	01978				
5					_]
6 Regulatory contact (Name)	Patty Brewer				
7 Company name:	J. Connor Consulting, Inc.	ļ			
8 Phone No.	(281) 578-3388			<u> </u>	· ·
9 Fax:	(281) 578-8895				-
o E-Mail	patty brewer@icoteam.com				-
1 2 Technical contact (Name)	Pete Cruz	`	<u> </u>		1
3 Company name	Pinnacle Engineering, Inc.				
none No.	713.784.1005				1
5. 20010000000000000000000000000000000000	713.784.0455				:
o il E-Mail:	petec@pinnacleengr.com				- 1
7					:
B Fees	The second state of the second se	\	<u> </u>		-1
9 Application fee of \$2,350 enclosed? (Required)	Y	<u> </u>			.
Rental fee of \$15 per mile or every fraction thereof enclosed? (Required)	Y 2 72				. .
Right-of-way length (miles) e.g., 7:54	2.73 \$2,395.00				. ļ
Total check amount	8/2/2005	 -			
Check date	030083				i
Check number Name of financial institution upon which check is written:	Sterling Bank				f
STANDARD OF THE STANDARD STAND					
Basic Pipeline Data					ľ
Line service, e.g., oil, gas, bulk gas, lift, injection, service, etc.	Bulk Gas				1
Total pipeline length (feet) - excluding riser(s)	14,427				
Length of pipeline in Federal waters (feet)	14,427				
Length of pipeline in State waters (feet/NA)	NA	ļ		1	. .
Pipeline designed for bi-directional flow? (Y/N)	N	<u></u>			
Alternate line service, e.g., oil, gas, bulk gas, lift, injection, service, etc.	Ŋ		<u> </u>		1

				E	F
A	8	C	P	<u> </u>	
84 Supervisor Control and Data Acquisition system for leak detection installed? (Y/N)	N				
Supervisor Control and Data Acquisition system for leak detection installed? (Y/IN): If yes, system type, e.g., over/short, pressure point analysis, volumetric, etc. Pipeline Origin	NA				1
66					1
67 Pipetine Origin					T
as Type Eacilly, and Diatform Well Subsea Well PLEM Subsea Manifold, Subsea He-In	Subsea Well				1
69 Number/Identifier, e.g. A. 1, 4-B, 13336 (Number/Segment Number/Identifier/NA):	001				T
70 Manned platform? (Y/N/NA)	NA				1
71 Area	VR				
72 Block	338				
73 OCS Lease	G02877				-
74 Pig launcher? (Y/N)	N				
75 System designed for "smart":pigs? (Y/N/NA):	NA				1
76					17 1
77 Pipeline Destination					1
The Ecologie & Diatform Well Subsea Well PLEM Subsea Manifold Subsea Re-In	Platform				T
79 Number/Identifier, e.g.: A, 1, 4-8 (Number/Segment Number/Identifier/NA)	A				-
80 Manned platform? (Y/N/NA)	N N				1
al rea	VR 329				. 1
82 <u>yck</u>	G02876				
831. UCS Lease					
84 Pig receiver? (Y/N/NA)	Z				
85					
86 Pipeline Appurtenances	Ν				1
87 Manifold/subsea templates/etc: along pipeline other than at origin or destination? (Y/N):	NA NA				
les If was specify appurtenant type	NA NA				
If yes, specify appurtenant area and block location, e.g., MP 134					
90					
91 Construction/Air Quality Data	Lay Barge				
92 Pipeline installation method, e.g., lay barge, DP vessel, lack up	2,000				-
93 Maximum anchor spread (feet of NA)	Fourchon				- I
94 Onshore Facility Location	15				Ì
95 Pipeline construction duration (days)	12/15/2005				
96 Construction start date (projected):					†
					•
98 Pipeline product data	20				
99 Design maximum flow rate of gas (mmct/d):	0.65				· †:
100 Gravity of gas (Air = 1.0) 101 Design maximum flow rate of oil/condensate (b/d)	500				
102 API or specific gravity of oil/condensate	0.85				1
103 H2S concentration (ppm)	NA NA				
104 Maximum anticipated pipeline temperature (degrees F)	80°		No. of the second secon		
105 CO ₂ concentration (ppm)	NA NA				
106 CO2 Concern and (ppm)	N				
10 ates anticipated (Y/N)	N				3.
10u Affin anticipated (Y/N)	N			The second secon	1
100		Diameter 2	Diameter 3		
110 Submerged Component Design Data	Diameter 1	Diameter 2	<u> </u>		
Outside diameter (inches)	4 1/2 0.531	 			
112 Wall thickness (inches)	X60				
113 Grade	12,500				.1
Hydrostatic (cit) pressure (bsig)		-			
HTP duration (hours) (Must be equal to or greater than eight)	8				
116 Type external corrosion coating:	FBE 12-14 mils				
Corrosion coating thickness (mils)	12-14 mils NA				
118 Concrete coating density (pcf)	NA NA				
119 Coating thickness (Inches)	NA NA				
120 Type internal corrosion coating (Type/NA)	NA NA				
Coating thickness (mits) (Mits/NA)	3.18	 			
122 Bare pipe specific gravity	NA				
123 Weighted pipe specific gravity:	N N				
- 「	NA NA				
124 Pipe is non-standard (TAN): 125 If yes, note type, e.g., coil tubing, pipe-in-pipe, flexible pipe, other (specify) (Type/NA)	NA CONTRACTOR OF THE CONTRACTO				<u>:</u>

1 1 .

	В	T c	a	T F	F
127 Cathodic Protection Design Data		Ø			1
128 Design Type; e.g., bracelet anodes; anode sleds	Anodes				1
129 Anode Type, e.g. Galvalum III, Aluminum, etc.	Galyalum III				1
130 Net anode weight (pounds)	24				ï
Spacing (feet) (no. of anodes/pipeline length)	500'				1
132 Number of anodes	30				1
133 Anode life (years)	40				1
134 Designs for systems other than bracelet anodes required. (Attached/NA)	NA NA				
135					
136		2			1
137 Departing Riser Design Data	Diameter 1	Diameter 2	Diameter 3		.I
138 Outside diameter (inches)	NA NA				
139 Wall thickness (inches)	NA NA				ļ
140 Grade	NA NA				
141 Hydrostatic test pressure (psig)	NA NA				1
HTP duration (hours) (Must be equal to or greater than eight)	NA				1
splash zone=S.Z.	Below S.Z.	In S.Z.	Above S.Z.		
14J 9 external corrusion coating	NA NA				ļ
14 pating thickness (mile or inches)	NA NA				
146 re internal corrosion coating (Type/NA)	NA NA	 			!
147 Coating thickness (mils) (Mils/NA) 148 Riser guard design attached? Required if origin is caisson or platform (Y/NA)	NA NA	 			ļ
	NA NA				1
	NA NA				
150 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA)	I NA	***			· ‡ ·
151 152 Receiving Riser Design Data	Diameter 1	Diameter 2	Diameter 2		ļ ·
152 Receiving Riser Design Data 153 Outside diameter (inches)	4 1/2	Diameter 2	Diameter 3		
154 Wall thickness (inches)	0.674				· · · -
155 Grade	X60				
156 Hydrostatic fest pressure (psig)	12,500				
155 HTP duration (hours) (Must be equal to or greater than eight)	8				1
158 splash zone=S.Z.	Below S.Z.	In S.Z.	Above S.Z.		†
159 Type external corrosion coating	Fusion Bonded Epoxy	Splashtron	Fusion Bonded Expoxy and/or 3 coat paint system		
Leal Casting thickness Imits or inches)	12-14 mils	0.5			
150 Coating thickness (mils or inches)	12-14 mils NA	0.5	12-14 mils/12 mils DFT		
Type internal corrosion coating (Type/NA)		0.5			
Type internal corrosion coating (Type/NA)	NA NA	0.5			
151 Type internal corresion coating (Type/NA) 152 Coating thickness (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA)	NA NA	0.5			-
15: Type internal corresion coating (Type/NA) 152 Coating thickness (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is calsson or platform (Y/NA) 154 Catenary riser? (Y/N)	NA NA Y	0.5			-
151 Type internal corresion coating (Type/NA) 152 Coating thickness (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA)	NA NA Y N	0.5			-
15: Type internal corresion coating (Type/NA) 152 Coating thickings (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 155	NA NA Y N	0.5			
16: Type internal corresion coating (Type/NA) 162 Coating thickings (mils) (Mils/NA) 163 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 164 Catenary riser? (Y/N) 165 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 166 Flange and Valve Data 166 Flange type (ANSI 600, API 5000, etc.)	NA NA Y N NA	0.5			
15: Type internal corresion coating (Type/NA) Coating thickness (mils) (Mils/NA) 15: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Catenary riser? (Y/N) 15: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANS) 600, API 5000; atc) 16: Flange pressure rating (psig)	NA NA Y N NA API 10000	0.5			
16: Type internal corresion coating (Type/NA) 162 Coating thickings (mils) (Mils/NA) 163 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 164 Catenary riser? (Y/N) 165 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 166 167 Flange and Valve Data 168 Flange type (ANS) 600, API 5009; etc) 169 Flange pressure rating (psig/NA)	NA NA Y N NA NA API 10000 10,000 NA	0.5			
16) Type internal corrosion coating (Type/NA) 162 Coating thickness (mils) (Mils/NA) 163 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 164 Catenary riser? (Y/N) 165 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 166 167 Flange and Valve Data 168 Flange type (ANSI 600; API 5000; etc) 169 Flange pressure rating (psig) 1	NA NA Y N NA NA API 10000 10,000 NA API 10000	0.5			
16: Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) 16: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Latenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANSI 600; API, 5000; etc) 16: Flange pressure rating (psig) 1	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000	0.5			
16) Type internal corrosion coating (Type/NA) 162 Coating thickness (mils) (Mils/NA) 163 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 164 Catenary riser? (Y/N) 165 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 166 167 Flange and Valve Data 168 Flange type (ANSI 600; API 5000; etc) 169 Flange pressure rating (psig) 1	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000 NA	0.5			
Type internal corresion coating (Type/NA) Coating thickin:ss (mils) (Mils/NA) Riser guard design attached? Required if origin is caisson or platform (Y/NA) (f yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) Flange and Valve Data Flange guard (ANSI 600, API 5009, etc) Flange pressure rating (psig) Terated pressure rating (psig) Valve pressure rating (psig) Valve pressure rating (psig) Derated pressure rating (psig/NA)	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000	0.5			
16: Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) 16: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Latenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANSI 600, API 5000; etc) 16: Flange pressure rating (psig) 1	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000 NA	0.5			
152 Type internal corrosion coating (Type/NA) 153 Coating thickness (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 155 156 Flange and Valve Data 156 Flange type (ANSI 600, API, 5000, etc) 159 Flange pressure rating (psig) 1 Perated pressure rating (psig) 1, etype (ANSI/API) 172 Valve pressure rating (psig) 173 Derated pressure rating (psig/NA) 174 175 Pipeline Burial Data 176 Buried minimum of titrice feet? Y/N/Seff (Burial required if less than 200 water depth)	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000 NA	0.5			
15: Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) 15: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Actenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANSI 600, API 5000, atc) 16: Flange pressure rating (psig) 1	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000 NA	0.5			
157 Type internal corresion coating (Type/NA) 158 Coating thickuriss (mils) (Mils/NA) 159 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 150 Catenary riser? (Y/N) 150 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 158 Flange and Valve Data 158 Flange type (ANSI 600, API 5000, etc) 159 Flange pressure rating (psig) 15	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API 10000 NA API NA NA	0.5			
15: Type internal corrosion coating (Type/NA) Coating thickness (mits) (Mits/NA) 15: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Catenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange yipe (ANSt 600, API 5000, atc) 16: Flange pressure rating (psig) 17: Perated pressure rating (psig/NA) 18: It yipe (ANSVAPI) 19: Valve pressure rating (psig/NA) 19: Valve pressure rating (psig/NA) 19: Pipeline Burial Data 19: Pipeline Burial Data 19: Buried minimum of ittree feet? Y/N/Self (Burial required if less than 200" water depth) 19: Buriel method (jest plow; self, other(specify))	NA NA Y N NA NA API 10000 10,000 NA API 10000 10,000 NA	0.5			
ts: Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) Is: Riser guard design attached? Required if origin is caisson or platform (Y/NA) Is: Riser guard design attached? Required if origin is caisson or platform (Y/NA) Is: Catenary riser? (Y/N) If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) Is: Flange and Valve Data Is: Flange type (ANSI 600, API 5000, etc) Is: Flange pressure rating (psig) I: Vertical pressure rating (psig) I: Vertical pressure rating (psig) I: Vertical pressure rating (psig) Is: Operated pressure rating (psig) Is: Derated pressure rating (psig) Is: Derated pressure rating (psig) Is: Pipeline Burial Data Is: Burial method (jet; plow; self; other(specify)) Is: If self burial, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA) Data supporting self burial attached? (Y/NA)	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API 10000 NA API NA NA	0.5			
15: Type internal corrosion coating (Type/NA) Coating thickness (mits) (Mits/NA) 13: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 14: Catenary riser? (Y/N) 15: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange ype (ANSt 600, API 5000, atc). 16: Flange pressure rating (psig) 17: **Verted pressure rating (psig)** 18: **Lingle Pressure rating (psig)** 19: **Lingle Pressure rating (psig)** 19: **Valve pressure rating (psig)** 17: **Valve pressure rating (psig)** 17: **Pipeline Burial Data 17: **Pipeline Burial Data 18: **Burial method (jest plow self; other(specify))** 17: **Burial method (jest plow self; other(specify))** 17: **Data supporting self burial attached? (Y/NA) 18: **Miscellaneous Data**	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API 10000 NA NA NA NA NA NA	0.5			
ts: Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) Is: Riser guard design attached? Required if origin is caisson or platform (Y/NA) Is: Riser guard design attached? Required if origin is caisson or platform (Y/NA) Is: Catenary riser? (Y/N) If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) Is: Flange and Valve Data Is: Flange type (ANSI 600, API 5000, etc) Is: Flange pressure rating (psig) I: Vertical pressure rating (psig) I: Vertical pressure rating (psig) I: Vertical pressure rating (psig) Is: Operated pressure rating (psig) Is: Derated pressure rating (psig) Is: Derated pressure rating (psig) Is: Pipeline Burial Data Is: Burial method (jet; plow; self; other(specify)) Is: If self burial, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA) Data supporting self burial attached? (Y/NA)	NA NA NA Y N N NA API 10000 10,000 NA API 10000 10,000 NA API 10000 NA API 10000 NA NA NA NA NA NA NA	0.5			
151 Type internal corrosion coating (Type/NA) 152 Coating thickness (mils) (Mils/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 155 Flange and Valve Data 156 Flange type (ANSI 600, API 5000; etc) 157 Flange pressure rating (psig) 15	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API 10000 NA NA NA NA NA NA	0.5			
151 Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) 152 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 156 Flange and Valve Data 157 Flange yipe (ANSI 600, API 5000; etc) 159 Flange pressure rating (psig) 150 Verated pressure rating (psig) 171 Valve pressure rating (psig) 172 Valve pressure rating (psig) 173 Derated pressure rating (psig) 174 Burial method (jist plow; self, other(specify)) 175 Burial method (jist plow; self, other(specify)) 176 Data supporting self burial attached? (Y/NA) 180 181 Miscellaneous Data 182 Non-discrimination in employment form attached? (Required)	NA NA NA Y N N NA API 10000 10,000 NA API 10000 10,000 NA API 10000 10,000 NA API NA NA NA NA NA NA	0.5			
15: Type internal corresion coating (Type/NA) Coating thickness (mits) (Mits/NA) 15: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Catenary riser? (Y/N) 16: Catenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANSI 600, API 5000, atc) 16: Flange pressure rating (psig) 17: Verted, pressure rating (psig) 18: Verted, pressure rating (psig/NA) 19: Lype (ANSI/API) 19: Valve pressure rating (psig/NA) 19: Derated pressure rating (psig/NA) 19: Buried minimum of three feet? Y/N/Self (Buriel required if less than 200 water depth) 19: Buriel method (jest, plow, self, other(specify)) 19: If self buriel, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA) 19: Data supporting self buriel attached? (Y/NA) 19: Non-discrimination in employment form attached? (Required) 18: Static Pibeline Volume (Bbls.) If greater than 1:000 then WCD volume required.	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API NA N	0.5			
151 Type internal corrosion coating (Type/NA) Coating thickninss (mils) (Mils/NA) 152 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 155 Flange and Valve Data 156 Flange type (ANSt 600, API 5000; etc) 159 Flange pressure rating (psig) 150 Flange pressure rating (psig) 171 Versted pressure rating (psig) 172 Valve pressure rating (psig) 173 Derated pressure rating (psig) 174 Buriad manimum of three feet? Y/N/Self (Burial required if less than 200 water depth) 175 Pipeline Burial Data 176 Burial method (jest plow; self, other(specify)) 177 Burial method (jest plow; self, other(specify)) 178 If self burial, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA) 180 Data supporting self burial attached? (Y/NA) 181 Miscellaneous Data 182 Non-discrimination in employment form attached? (Required) 185 Static Pipeline Yolume (Bbls.) If greater than 1,000 then WCD volume required.	NA NA NA Y N N NA API 10000 10,000 NA API 10000 10,000 NA API 10000 Y NA API 10000 Y NA NA NA NA NA NA NA NA NA N	0.5			
15: Type internal corresion coating (Type/NA) Coating thickness (mits) (Mits/NA) 15: Riser guard design attached? Required if origin is caisson or platform (Y/NA) 16: Catenary riser? (Y/N) 16: Catenary riser? (Y/N) 16: If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 16: Flange and Valve Data 16: Flange type (ANSI 600, API 5000, atc) 16: Flange pressure rating (psig) 17: Verted, pressure rating (psig) 18: Verted, pressure rating (psig/NA) 19: Lype (ANSI/API) 19: Valve pressure rating (psig/NA) 19: Derated pressure rating (psig/NA) 19: Buried minimum of three feet? Y/N/Self (Buriel required if less than 200 water depth) 19: Buriel method (jest, plow, self, other(specify)) 19: If self buriel, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA) 19: Data supporting self buriel attached? (Y/NA) 19: Non-discrimination in employment form attached? (Required) 18: Static Pibeline Volume (Bbls.) If greater than 1:000 then WCD volume required.	NA NA NA Y N N NA NA API 10000 10,000 NA API 10000 10,000 NA API NA N	0.5			
151 Type internal corrosion coating (Type/NA) Coating thickness (mils) (Mils/NA) 152 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 153 Riser guard design attached? Required if origin is caisson or platform (Y/NA) 154 Catenary riser? (Y/N) 155 If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA) 155 Flange and Valve Data 168 Flange vipe (ANSt 800, API 5000; etc) 159 Flange pressure rating (psig) 1	NA NA NA Y N N NA API 10000 10,000 NA API 10000 10,000 NA API 10000 Y NA API 10000 Y NA NA NA NA NA NA NA NA NA N	0.5			

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190 Diskette per NTL 98-09 attached? :Diskette is required:	<u> </u>				
191		L			! (
192 Does pipeline cross into State waters (Y/N):	N N	1			1
193 If yes, State permit required (Attached/Applied For/NA)	NA NA				
194 If yes, COE permit required (Attached/Applied For/NA)	NA NA				· 1 · · ·
195					
196 Minimum water depth (feet below sea level)	221				-
197 Maximum water depth (feet below sea level)	228	 			
198					
199 Water depth greater than 400 meters? (Y/N):	1 N				
200 If Yes, Chemo study required (see NTL 2000-G20) (Attached/NA)	NA NA				
1 Tos, Greino study required (see NYL 2000-020) (Milached NA)	NA				
Days Water Trees these bless at the standard of MACO (CRE ATT) from Noce WATER	7				ļ
202 Deep Water Operations Plan submitted to MMS? (See NTL 2000-N06) (Y/NA)		ļ			
203 If yes, date submitted (Date/NA)	5/14/2005				<u>.</u>
204					1
205 Pipeline to be towed to logation? (Y/N)	N				
206 If yes, dragged on bottom? (Y/N/NA)	NA NA				1
2071					T
20 latreet in vicinity? (Y/N)	N				1
209լes and PL in La., PL must be > 500′ away. Confirm Y/NA	NA NA				t** • • •
210 Distance to ree/ (feet).	NA				j
211 If Yes and PL in TX., PL must be > seven times water depth away. Confirm Y/NA	NA				
212 Distance to reef (feet).	NA NA				·
213					+· · · · ·
214 Hazard Report submitted? (Yes) Hazard Report is required.	Yes				t
215					ļ
216 Shallow Hazards Analysis Statement included? (Yes) SHAS is required in cover letter.	Yes				ļ
ZTO OHONOW HAZARDS ANALYSIS GROUPE HAMINIAND THE BOST AND IN TORQUITED IN COMMITTEE BY	165				ļ
218 Umbilical associated with pipeline? (Y/N)	Y				
Umbilical type, e.g., hydraulic, electric, other(specify) (Type or NA)	Hydrualic				L
220 Umbilical outside diameter (inches) (Diameter or NA)	1,56				
221 Attached to pipeline? (Y/N/NA; If No, will be assigned a unique segment number)	Y				1
222 If no, separate application form attached? (Yes/NA)	NA NA				1
223					1
224 Does pipeline contact anchorage area or fairways? (Y/N)	N				
225 If Yes, burial depth in anchorage areas or fairways consistent with COE permit? (Y/NA)	NA NA				
226 If yes, COE permit attached? (Y/NA/Pending)	NA NA				† ··
227					·
228 Pipeline Crossing Data					
229 Does proposed pipeline cross an existing pipeline (Y/N).	N				l
230 If yes, enter noted data, adding data rows as required.	Operator	Segment No.	Size (inches)	S1-	T. T. T. T. T.
230 II yes, enter noted data, adding data tows as required.	Operator	Deginerit No.	Size (inches)	Service	Notified?
232					
232					
Z3 (V.c.) Nichard alexander between lines must be 40° (V.c.)NA)	N/A				
235 If yes, minimum clearance between lines must be 18". (Yes/NA)	NA NA				
236 concrete mat.)	NA NA				
237 If sand bags, slope is 3/1. (Confirm Yes/NA)	NA NA				
238 If concrete mat, specify manufacturer	NA NA				
239 If concrete mats, mat edges jetted below mudline. (Yes/NA)	NA NA				
Crossed pipeline operator notified? (Y/N/O O = crossed pipeline owned by applicant)	NA				
241					
242 H ₂ S Contingency Plan and Modeling Data				\$	ļ
H ₂ S Operations Conlingency Plan attached as H ₂ S concentration greater than 20 ppm					
	NA NA	ſ			}
	117				
	1			!	
(Y/Pending/NA)	h14	1	ı		
43 (Y/Pending/NA) 44 Air Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA)	NA NA				
43 (Y/Pending/NA) 44 Air Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA)	AN				
43 (Y/Pending/NA) 44 Air Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA) 45 H ₂ S Crossing Contingency Plan attached as crossed pipeline carries H ₂ S in concentrations 46					
(Y/Pending/NA) All Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA). H ₂ S Crossing Contingency Plan attached as crossed pipeline carries H ₂ S in concentrations.	NA NA				
(Y/Pending/NA) Air Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA) H ₂ S Crossing Contingency Plan attached as crossed pipeline carries H ₂ S in concentrations Subsea Tie-in Data Does pipeline tie into a subsea pipeline? (Y/N)	NA N				
y/Pending/NA) Air Dispersion Model attached as H ₂ S concentration greater than 500 ppm (Y/pending/NA) H ₂ S Crossing Contingency Plan attached as crossed pipeline parties H ₂ S in concentrations	NA NA				

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	В	C	D	<u> </u>	
0.000	NA				· [- · · · -
250 Segment number of pipeline being tied in to (SN/NA)	NA NA				
250 Segment number of pipeline being tied in to (SN/NA) 251 MAOP of pipeline being tied in to (MAOP/NA) 252 If existing valve, letter of no objection from tie-in operator attached? (Yes/NA) 253 If hot tap, appurtenance application submitted to MMS? (Yes/NA) 254 Is assembly snitg proofed? (Y/NA) Required if less than 500' water depth. 255 If sand bags used, 3' coverage required (Y/NA) 256 If sand bags used, 3' coverage required (Y/NA)	NA NA				ļ
252 If existing valve, letter of no objection from tie-in operator attached? (Yes/NA)	NA NA				_ ,
253 If hot tap, appurtenance application submitted to MMS? (Yes/NA)					1
254 Is assembly snag proofed? (Y/NA) Required if less than 500' water depth.	NA				
255 If sand bags used, slope is 3/1 (Y/NA)	NA				
256 If sand bags used, 3' coverage required (Y/NA)	NA				
256 If said bags used, 3 coverage required (Thirty					1
257					4
258 Surface Tie-in Data	N				4
259 Does pipeline tie directly into another pipeline at a surface location? (Y/N)	NA NA				
260 Segment number of pipeline being tied in to (SN/NA)	NA NA				
261 MAOP of pipeline being tied in to (MAOP/NA)	NA				
262					
263 Spill Response Plan Data					
284 Type of spill response plan (OSCP/OSRP per NTL 98-30):	OSRP				T : 1
264 Type to spin response plant Cock Cock	4/29/2005				
285 Date spill plan submitted to MMS	5/5/2005				+
266 Date spill phin approved (Actual Date or "Pending")					4
287					.;
24 ty Schematic Information	Well				
269. ssure source identified? (well separator, pump, etc.)					., .
1 and ARPHAINMORTED of source shown? (DSIQ)	9500 SITP				<u></u>
Origin/destination specification breaks shown on schematic. (Y/NA)	Υ	 			1
272 Receiving segment number noted? (Segment Number or N/A)	NA				
273 Receiving segment no. MAOP (psig) (MAOP or N/A)	NA				
273 Receiving segment no. WACF (psig) (WACF 5)	10,000				4
274 Calculated pipeline MAGP (psig)	Yes				
275 Operator responsibility transfer point shown? (Yes/NA)	The state of the s				+
276					
277 Collapse Information (Deepwater Pipelines Only)	NA NA				
278 Water depth (feet)	NA NA				
279 External pressure (psig)					1
280 Collapse pressure (psig)	NA NA				.1
281 Safety factor	NA NA	 			i
282 Collapse calculations are required. (Attached/NA)	NA	<u> </u>			7
282 Collapse editediation of the					1
283		L			-
284 Safety Design Review					
285 Pipeline Origin	Yes				
285 Pipeline Origin 286 PSHL required at departing end of pipeline or @ receiving end if SS source (Confirm Yes)	Yes				
287 PSHL must be down:stream of choke and/or flow restrictions (Confirm Yes)					
	Yes				
288 For a well, if MSP > MAOP, a redundant PSH and independent SDVs required (Confirm Yes) 289 or a vented PSV is required (Confirm Yes/NA)					
and a vented PSV is required (Confirm Yes/NA)	NA				
	NA				
290 If bi-directional flow, SDV required (Confirm True) 291 If nig trap present, safety equipment can not be bypassed (Confirm True)	NA				1 *** **
mp on line, must be consistent with API RP 14C A7 (Confirm Yes/NA)	NA NA				1
mp on line, must be consistent with AFT 135 140 AT 100 Million		3			
2) Jine Destination (Confirm Ves/NA)	Yes				*
25. Sine Destination 294 If production facility and uni-directional flow, SDV and FSV required (Confirm Yes/NA)	NA				
294 If production facility and uni-directional flow, SDV and PSHL required (Confirm Yes/NA) 295 If production facility and bi-directional flow, SDV and PSHL required (Confirm Yes/NA)	NA				
1.t the in and unit dispetional flow ESV and block valve required (Collision 103/14/4)	NA NA				
					İ
297 If subsea tie-in and bi-directional flow, block valve required (Confirm Yes/NA) 298 If gas lift or water injection flowline on unmanned platform, FSV required (Confirm Yes/NA)	NA NA				
1999 If gas lift or water injection flowline on manned platform, SDV required (Confirm Yes/NA)	NA				
If gas lift or water injection flowline on mainted platform, 35V required at boarding point and					
If crossover platform (pipeline does not receive production), 35V required at 553 and 550 required at 550 and	NA				- 1
300 PSHL required at departing point (Confirm Yes/NA)					1
	NA				
301 If crossover platform is non-manned and non-production, FSV required. (Confirm Yes/NA)		<u> </u>			.1.,
301 II Clossoy Planetti State		4			i
302		K			
303 Departure Data 304 Waiver from NTL 90-20 (buoying of hazards) requested? (Y/N)	Y	ļ			-1.
304 Mawacittour in Incident An (proving at tracking) progression (1777)	N N				
305 Other departures requested? (Y/N)	NA	1			
306 If yes, specify.					
307					
	<u></u>				

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309 319 311 312 313 314 315 315 316 316 319 316 319	В	C	Ε	F
309				
310				
311			 	
312				
313	 			
214				
315				- · · · ·
216				
317 Do Not Enter Data Below This Line - MMS Use Only				
STORY THE ENTER DATA DELOW THIS ENTER THE STORY				
DIDE: INE MASTED ENTRY SHEET		MMS Engineer entry		· · · · · · · · · · · · · · · · · · ·
JIST I LEINE MASTER ENTRY SIEET		MMS Engineer entry		
120 IVarile				
Jan Daie		MMS Engineer entry		
322 Segment Number		MMS Engineer entry		
323 Right-of-way Number				
324 Right-or-way Permittee				
225 Right-of-Way Permittee Code				
32e' rator	Helis Oil & Gas Company, L.L.C.		i .	
ator Code	01978			
عوم المربور 328 proval Code	Right-of-Way	MMS Engineer entry		
329 Authority Code				
330 Pipe Size	4 1/2	MMS Engineer entry		
331 Product Code				
332				
333 ORIGIN				
334 Facility Type	Subsea Well			
335 Identifier	001			
336 Area	VR			•
337 Block	338			
338 Lease	G02877		!	
339				
340 DESTINATION				
341 Facility Type	Platform			
342 Identifier	A			-
343 Area	A VR			** -
344 Block	329			
345 ease	G02876			
346				
347 OCS Segment Length	14,427			'
348 State + Federal Pipeline Length	14,427			
ass Cathodic Code	Galvalum III	MMS Engineer entry		
349 Cathodic Code 350 Cathodic Life Time (Years)				- •
351 **nimum Water Depth (feet)	221			
3: mum Water Depth (feet)	228			-
3: Hall Tyate Devil (IEE)	120			-
35. Buried Designator Flag	NA NA			
354 Bullet Designator Flag 355 Bi-directional Flag	N			
355 Bi-directional Flag 358 Alternate Service	l N			
356 Alternate Service	NA NA			
357 Recv Segment No. (Sub-surface) 358 Recv MAOP 359 Assigned MAOP 360 Pipeline Status Code	NA NA	MMS Engineer entry		!
358 RECV MADE	19/5	INIMO Engineer entry		
359 Assigned MAUP	Dropped			
360 Pipeline Status Code	Proposed			
361 Right-of-Way Status Code 362 363 Comments	Pending			
362		MMS Engineer entry		
363 Comments	<u> </u>			

DNNOR CONSULTING, INC.

030083

DESCRIF	TION	INVOICE DATE	INVOICE AMOUNT	DISCOUNT TAKEN	CIAN TINUOMA
		8/1/05	2,395.00		2,395.00
•					
CHECK NO.		PAYEE		DISCOUNTS TAKEN	CHECK AMOUNT
30083	MINERALS	MINERALS MANAGEMENT SERV.			\$2,395.00
	CHECK NO.	. CHECK NO.	. CHECK NO. PAYEE	. 8/1/05 2,395.00 . CHECK NO. PAYEE	

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J. CONNOR CONSULTING, INC.

16225 PARK TEN PLACE, SUITE 700 HOUSTON, TEXAS 77084-5152 (281) 578-3388 STERLING BANK 3100 RICHMOND AVENUE HOUSTON, TEXAS 77098

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DATE

AMOUNT

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Aug 2, 2005

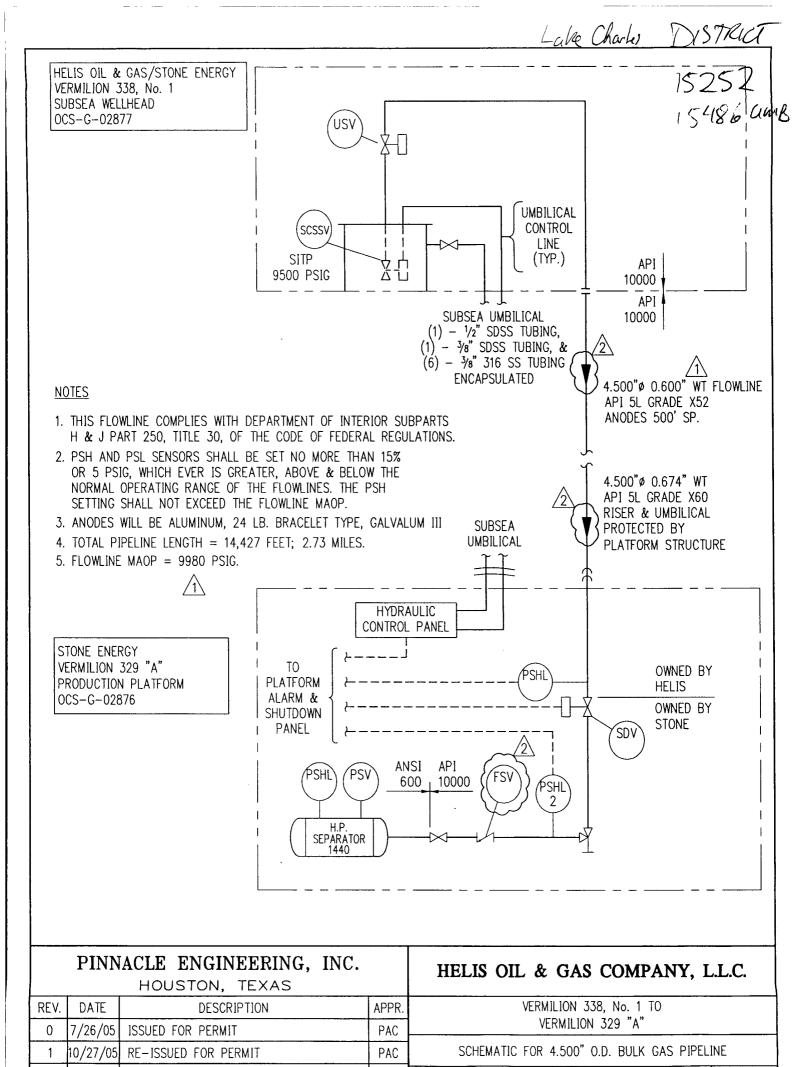
**\$2,395.00

Two Thousand Three Hundred Ninety-Five and 00/100 Dollars

HE ER

MINERALS MANAGEMENT SERV. 1201 ELMWOOD PARK BLVD NEW ORLEANS, LA 70123-2394

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901

REV. 2

12/08/05

ADDED FLOW ARROWS & FSV CALL-OUT