MICRO
15166

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

In Reply To: MS 5232

29 NOV 2005

Ms. L. Susan Hathcock
Anadarko Petroleum Corporation
Post Office Box 1330
Houston, Texas 77251-1330

Dear Ms. Hathcock:

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: May 25, 2005
Supplemental Data Date(s): October 17, 2005, November 28, 2005

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

One 8-inch pipeline 6.47 miles in length to transport bulk gas from DeSoto Canyon Area Block 618 Well No. 1 In-Line Sled (ILS), through DeSoto Canyon Area Blocks 619 and 620, to DeSoto Canyon Area Block 621 PLET; one associated 6-inch electro-hydraulic umbilical approximately 6.47 miles in length from DeSoto Canyon Area Block 618 Well No. 1 SUTA, through DeSoto Canyon Area Blocks 619 and 620, to DeSoto Canyon Area Block 621 SUTA.

Assigned Right-of-Way Number: OCS-G26864
Assigned Segment Number: 15166
Umbilical Segment Number: 15167

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:

1) Our review of your application indicates that the proposed pipeline route is in the vicinity of the unidentified side-scan sonar target listed in the Enclosure, a feature that may represent a significant archaeological resource. In accordance with 30 CFR 250.194(b), you will either (1) conduct an underwater archaeological investigation prior to commencing construction activities to determine whether this feature represents an archaeological resource, or (2) ensure that all seafloor disturbing actions required by pipeline construction avoid the unidentified feature by a distance greater than that listed in the Enclosure. Submit lay barge anchor position plats, at a scale of 1-in. = 1,000-ft. with DGPS accuracy, with your pipeline construction report required

by 30 CFR 250.1008(b) that demonstrate that the feature was not physically impacted by the construction activities. If you conduct an underwater archaeological investigation prior to commencing operations, comply with the investigation methodology and reporting requirements found at: http://www.gomr.mms.gov/homepg/regulate/envir/archaeological/evaluation.html.

2) 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 Eglin Water Test Area Nos. 1 and/or 3. Therefore, please be advised that you will contact AirArmament Center, Encroachment Committee Chairman, 101 West D Avenue, Suite 222, Eglin Air Force Base, Florida 32542-5492 [contact Mr. Robert J. Arnold at (850) 882-4646] concerning the control of electromagnetic emissions and use of boats and aircraft entering into Eglin Water Test Area Nos. 1 and/or 3.

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

Segment No.	MAOP (psig)	MAOP Determination
15166	7325	Pipeline Design

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 as-built plat(s) must be submitted to the National Ocean Service, N/CS26 Room 7317, 1315 E-W Highway, Silver Spring, MD 20910-3282.

Sincerely,

Donald C. Howard
Regional Supervisor
Field Operations

Enclosure

Enclosure No. 1

Side-Scan Sonar Targets

Area/ Block	Magnetometer Association	Dimensions LxWxH(Feet)	Coordinates		Minimum Avoidance Distance(Feet)
DC 620	NO	31x13x	X=	1402018	1000
			Y=	10284681	

Attach 2 MICRO 15166 167

Gagliano, Manny

From: Davidson, Judy [Judy_Davidson@anadarko.com]
Sent: Monday, November 28, 2005 1:18 PM
To: Gagliano, Manny
Cc: Hathcock, Susan
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Attachments: San Jac Hydro Summary.pdf

San Jac Hydro Summary.pdf (1 M..

Here is Jim Babin's response to your earlier request concerning the San Jacinto line. Please let me know if you need anything further.

We received the approval for the Spiderman 10" line this a.m. Thanks!
Any news on the Atlas or Mondo lines?

Judy Davidson
(832) 636-8766

-----Original Message-----
From: Jim Babin [mailto:jbabin@Pegasus-International.com]
Sent: Monday, November 28, 2005 1:09 PM
To: Davidson, Judy; Hathcock, Susan
Cc: Alsup, Jim; Dwayne Doiron; McEvilly, Mike; Paul Beer
Subject: RE: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Judy/Susan,

In response to the MMS request below for the subject application, please find attached a summary hydrotest procedure which includes schematics, summary procedures and testing equipment descriptions which should answer all of the questions raised. Please do not hesitate to call should you have any questions.

Regards,

Jim Babin

Pegasus International, Inc.
777 N. Eldridge Parkway, Suite 300
Houston, Texas 77079-4524

Office: 713-463-4902, Cell: 713-725-5102 jbabin@pegasus-international.com

-----Original Message-----
From: Davidson, Judy [mailto:Judy_Davidson@anadarko.com]
Sent: Monday, November 28, 2005 7:14 AM
To: Jim Babin; Dwayne Doiron; McEvilly, Mike; Paul Beer
Cc: Hathcock, Susan; Alsup, Jim
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Susan is out of the office today. Please see Manny's request below concerning the San Jacinto/Spiderman line, and let me know asap so we can get this line approved. Thanks!

Judy Davidson
(832) 636-8766

-----Original Message-----
From: Gagliano, Manny [mailto:Manny.Gagliano@mms.gov]
Sent: Monday, November 28, 2005 7:02 AM
To: Davidson, Judy
Cc: Hathcock, Susan
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

-----Original Message-----
From: Gagliano, Manny
Sent: Friday, November 25, 2005 3:55 PM
To: 'Hathcock, Susan'
Subject: RE: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Susan:

I need the following additional information regarding Item 4 concerning hydrostatic testing:

1.) Test measuring and recording devices proposed
2.) Summary of your hydrostatic testing procedure including general configuration showing the location of pressure measurement points

Manny Gagliano, P.E.
Minerals Management Service
Field Operations - Pipeline Section
Phone: (504) 736-2549
Fax: (504) 736-2408
manny.gagliano@mms.gov

-----Original Message-----
From: Hathcock, Susan [mailto:Susan_Hathcock@anadarko.com]
Sent: Monday, October 17, 2005 1:52 PM
To: Gagliano, Manny
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

See below for the response on the 6/28/05 e-mail we spoke about. If you have any questions, please call me.

-----Original Message-----
From: Jim Babin [mailto:jbabin@Pegasus-International.com]
Sent: Sunday, October 16, 2005 1:08 PM
To: Hathcock, Susan
Cc: Dwayne Doiron; McEvilly, Mike; Paul Beer (paul.beer@sub-seasolutions.com); P. Stracke
Subject: RE: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Susan,

Please see below our proposed response to the subject pipeline questions from the MMS.

1.) Summary of corrosion monitoring program mentioned in Item 6 of Attachment B.

Reply: Flowline internal corrosion protection shall be provided by injection of corrosion inhibitor at each subsea wellhead. The corrosion inhibitor shall be delivered to each wellhead via the respective umbilical independently, or as a mixture with either scale inhibitor, or MEG system.

2.) Buckle arrestor type and material grade.

Reply: Buckle arrestors for this flowline will be supplied as Jlay collars which provide adequate buckle arrestor properties/dimension. They consist of ASTM A694 F65 forgigns. Attached please find a dimensioned drawing. Only to this flowline. dimensions for the flowline on the drawing.

3.) Condensate gravity

Reply: Condensate gravities are estimated to be between 35 and 47 API for the fields being produced through this flowline.

4.) Where will pressure be measured (elevation) during hydrostatic pressure testing?

Reply: The pressure will be monitored at the seabed. The specified hydrostatic test pressure is the pipeline internal pressure.

5.) VIV analysis summary for SCR.

Reply: There is no SCR associated with this pipeline.

6.) Any pilings or piled structures (SS manifold, PLET, etc.) in ROW?

Reply: Support pilings will not be installed for any of the PLET's, SUTA's or Sleds. These appurtenances will be supported by a mudmat base.
Suction
piles will be used as startup anchors for pipeline installation.
However,
these piles will be removed after installation and prior to final connection of the pipeline ends.

7.) Submit Chemosynth Community Study.

Reply: Assessment of Biological Community Constraints is included in the survey report which was submitted with the permit application. The side scan sonar mosiacs, which are included in the report, indicate no Chemosynthetic communities within the pipeline corridor.

8.) Product composition? Is H2S production expected during service life?

Reply: Expected Product Compostions of the San Jacinto field wells, which will be produced through this flowline are attached. No H2S is expected during the service life.

9.) System design temperature?

Reply: The pipeline design temperature is 140 deg. F

10.) Louisiana CZM consistency certificate received. Florida CZM consistency certification required.

Reply: noted

Regards,

Jim Babin

Pegasus International, Inc.
777 N. Eldridge Parkway, Suite 300
Houston, Texas 77079-4524

Office: 713-463-4902, Cell: 713-725-5102 jbabin@pegasus-international.com -----Original Message-----
From: Hathcock, Susan [mailto:Susan_Hathcock@anadarko.com]
Sent: Friday, October 14, 2005 2:03 PM
To: Jim Babin; Dwayne Doiron
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Importance: High

Here's an e-mail MMS says has not been responded to. Please provide the info asap so I can get to MMS. I will also be forwarding a 2nd e-mail on
the umbilical. Thanks

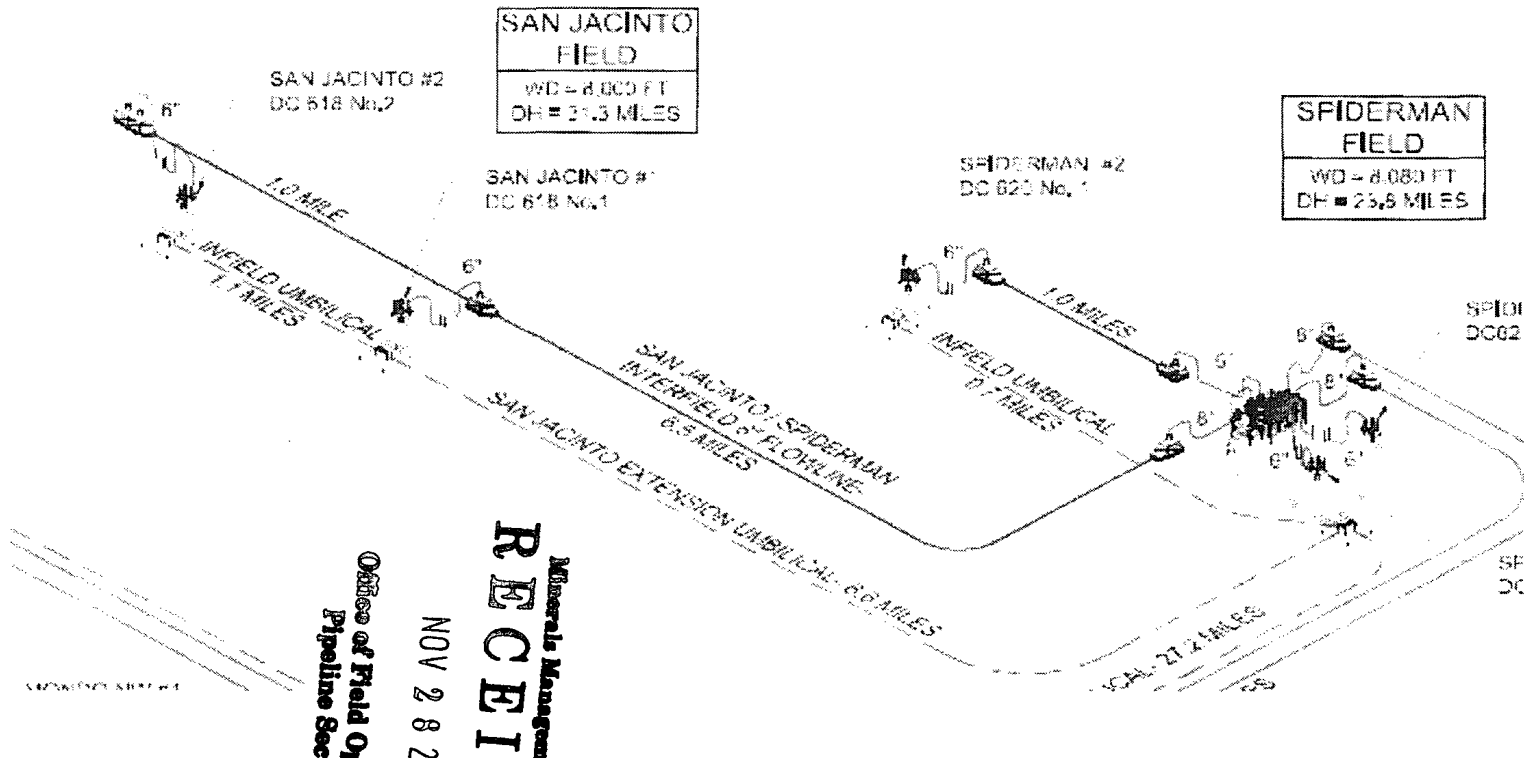
From: Gagliano, Manny [mailto:Manny.Gagliano@mms.gov]
Sent: Tuesday, June 28, 2005 9:34 AM
To: Hathcock, Susan
Subject: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Susan:
We will need the following information and/or clarifications to proceed with our review:
1.) Summary of corrosion monitoring program mentioned in Item 6 of Attachment B.
2.) Buckle arrestor type and material grade.
3.) Condensate gravity
4.) Where will pressure be measured (elevation) during hydrostatic pressure testing?
5.) VIV analysis summary for SCR.
6.) Any pilings or piled structures (ILS, PLET, etc.) in ROW?
7.) Submit Chemosynth Community Study.
8.) Product composition? Is H2S production expected during service life?
9.) System design temperature?
10.) Louisiana CZM consistency certificate received. Florida CZM consistency certification required.

Manny Gagliano, P.E.
Minerals Management Service
Office of Field Operations, Pipeline Section
Phone: (504) 736-2549
Fax: (504) 736-2408
Email: manny.gagliano@mms.gov

SCOPE OF WORK

San Jacinto 8" and Infield Lines are to be flooded, hydrotested, dewatered, and inerted with nitrogen.



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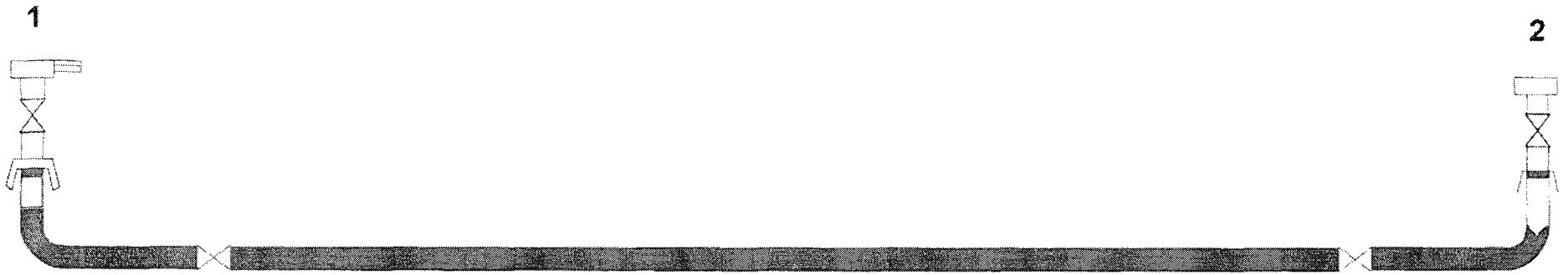
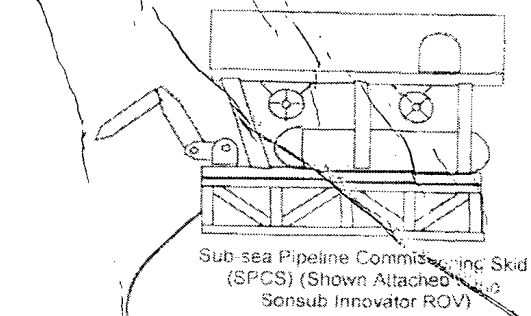
San Jacinto and Infield flow lines

	Flood and Prep
1.	Pre load pipe with pig at 2 onshore.
2.	Free Flood from 1.

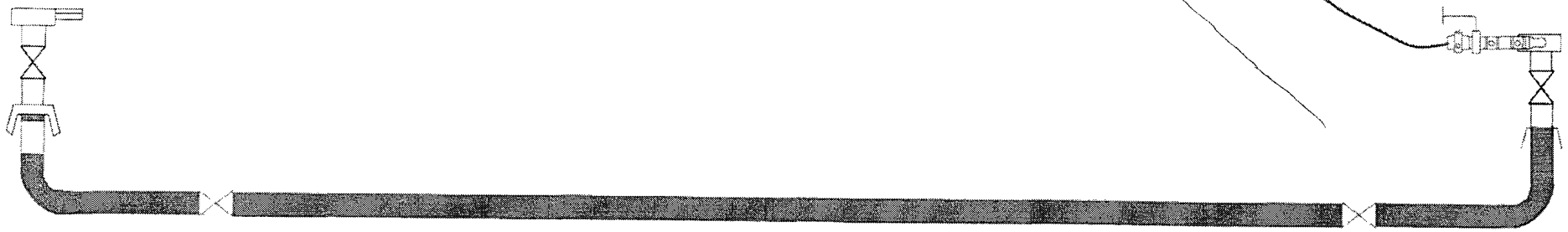


San Jacinto and Infield flow lines

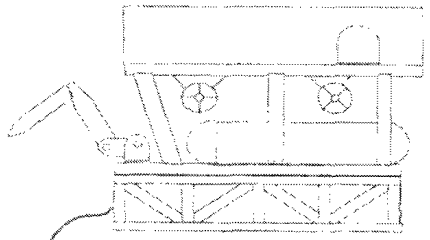
	Flood and Hydrotest
1.	Re-flood with SPCS from 2.



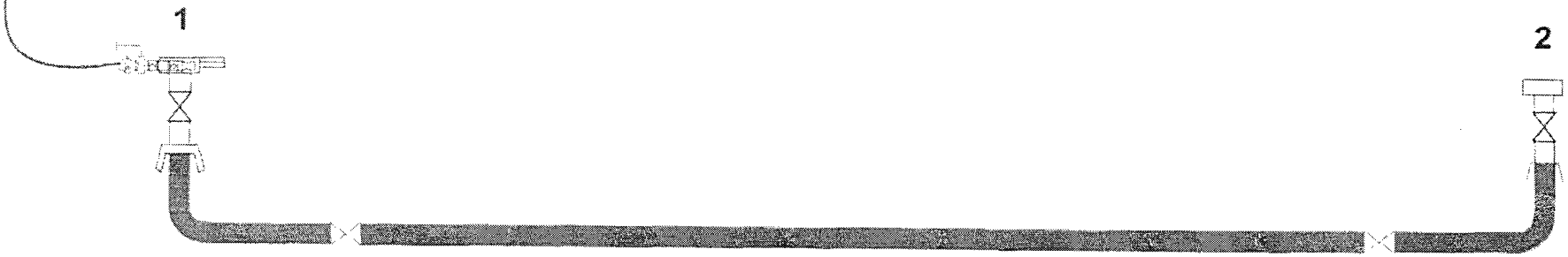
Sub-sea Pipeline Commissioning Skid (SPCS) (Shown Attached to the Sonsub Innovator ROV)

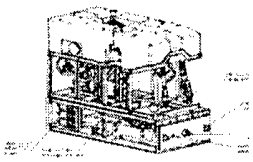


San Jacinto and Infield flow lines



	Flood and Hydrotest
1.	Remove PLET cap 1, inspect pig, and reconnect PLET cap.
2.	Hydrotest from 1.





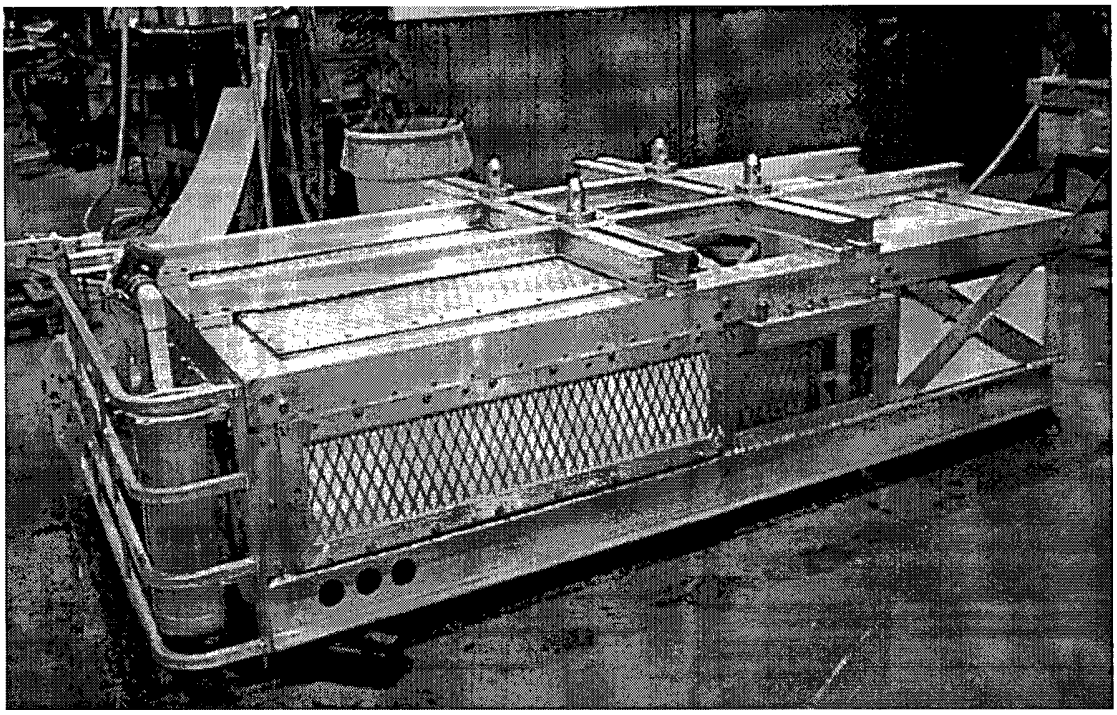
Subsea Pipeline Commissioning System (SPCS)

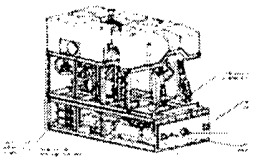
The VCS Subsea Pipeline Commissioning System (SPCS) is a revolutionary device used for completing the commissioning of a subsea pipeline whereby the operation is performed on the seabed. More specifically, the method is carried out with a ROV skid package that powers pumps located on the seabed, or that are carried by the ROV to inject/remove chemical, dewater, and dry, the pipeline.

Valkyrie's patented SPCS design is powered and operated by ROV electric and hydraulic systems incorporating the ability to monitor and control specific functions from the surface. SPCS is designed as purpose built ROV skid packages that mount to the ROV vehicle frame. Weighing approximately 3000lbs in air the skid is neutrally buoyant in seawater. The skid packages are powered by ROV vehicle hydraulics and controlled through the vehicle's control system. Pipeline commissioning data such as pressure, temperature, and flow is transmitted though the ROV umbilical to the surface where it is controlled, monitored, and recorded or recorded remotely via a subsea datalogger system.

SPCS is deployable from a standard ROV vessel of opportunity using the ROV deployment system. SPCS can be transported offshore to an infield ROV vessel by crew boat thus reducing mobilization/demobilization costs. Since the pipeline annulus is not accessed via a direct connection from the surface, SPCS is less weather sensitive to surface conditions.

SPCS is designed to apply existing proven ROV pumping technology to pipeline commissioning work scopes. SPCS uses local water at ambient temperature thereby reducing the requirement for a temperature stabilization phase between flooding and hydrotesting.





As an alternative to the free flooding process, Valkyrie's Patented SPCS technology utilizes ROV based pumping packages as a mechanical means to displace or introduce fluid into subsea pipelines. Additionally, SPCS technology is also able to mechanically introduce chemical, hydrostatically test, and de-water subsea pipelines. This system has many advantages over coiled tubing and these are highlighted as follows:

Reduced Personnel Costs

By eliminating the need for coiled tubing and associated equipment, we can reduce our offshore personnel requirement by the corresponding number of operators required to sustain these operations.

Reduced Vessel Costs

Eliminating the need for the surface equipment reduces the amount of available deck space and loading needed to carry out the commissioning operation. Hence the overall vessel specification can be reduced to that of a standard dual ROV support vessel.

Reduced Mobilization/Demobilization Costs

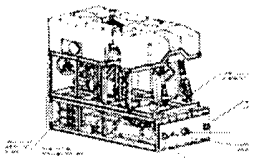
Eliminating the surface equipment also reduces the costs associated to mobilization/demobilization. Coiled Tubing is very large and requires extensive trucking and crane operations. Additionally, mobilization/demobilization schedule is reduced lowering vessel and ancillary equipment daily costs.

Reduced Safety Risks

The elimination of all surface high-pressure equipment reduces the overall risk of high pressure related safety issues associated with the potential for DP run off. The overall surface equipment spread is significantly reduced resulting in a safer and more manageable work area.

Increased Weather Workability

The coiled tubing method requires that a long length of coiled tubing be connected to hardware mounted on the sea bottom. In increased weather situations, vessel surface motion can complicate operations and increase the risk of damage to the coiled tubing, ROV hot stab flexible section, and subsea hardware. Since SPCS allows the ROV to be the main connection point to the subsea hardware, the VCS system is less sensitive to vessel motion (via. TMS – tether management system). Additionally, our system is able to disconnect entirely from the subsea hardware by utilizing a subsea data logging system.

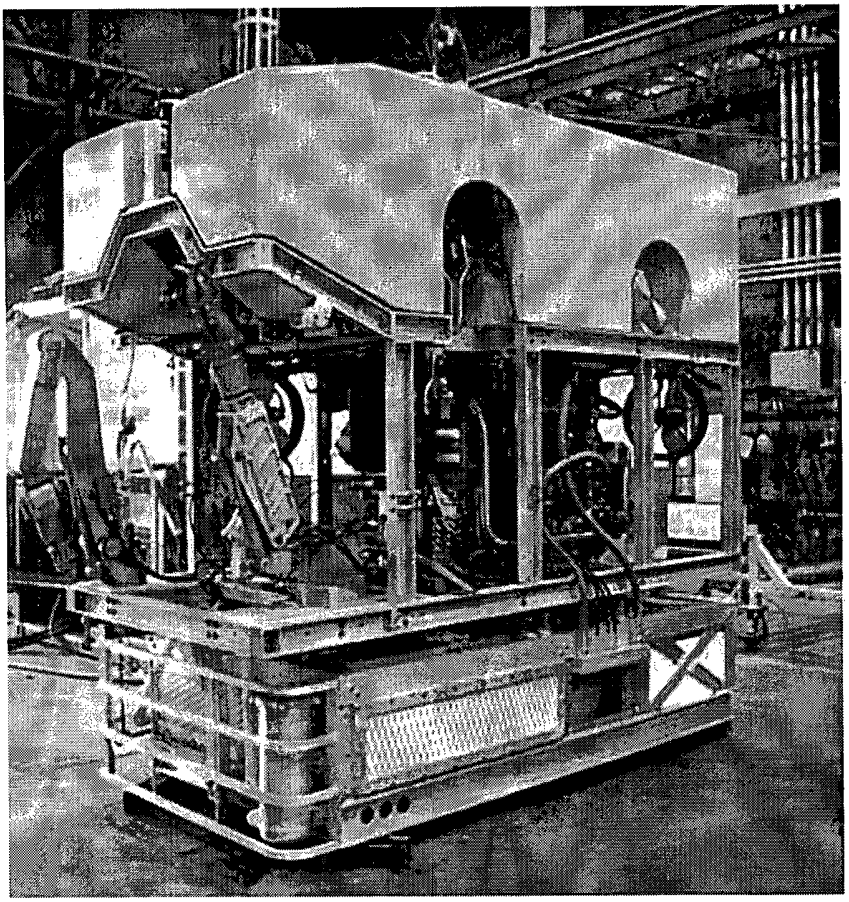


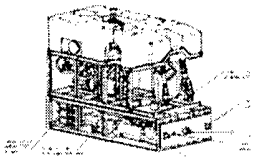
Reduced Mechanical Downtime

With the substantial reduction in surface equipment the risk of mechanical downtime is reduced, as the spread is less comprehensive.

Reduced Mobilization/ Demobilization Complexity

With less equipment we are able to mobilize / demobilize more quickly reducing time. Should an ROV vessel be already mobilized, we can load out the VCS Commissioning Equipment on to the existing vessel or bring it to the ROV vessel by supply boat.





Six-Channel High Pressure Surface Data Acquisition System

Overview

The Six Channel High Pressure Surface Data Acquisition System can acquire data from six different sensors at one time. The intrinsically safe sensors are attached to the Junction Box by 400 feet of cable. The Junction Box is then attached to a laptop computer which becomes the display and recording device for the system. The Software is user friendly and will display a pressure temperature profile plot for each sensor connected.

General

1. All welded construction
2. Intrinsically safe, Class 1 Div. 1
3. Inconel 718, Corrosion Resistant body
4. Modbus protocol
5. Multi-drop network

Pressure

1. 20,000 psi
2. 0.05% FS Accuracy **(Conventional digital dead-weight accuracy is 0.1% and Conventional chart recorder is 0.5%)**
3. 0.003% FS Resolution **(Conventional digital dead-weight is 0.1% and Conventional chart recorder is 0.5%)**

Temperature

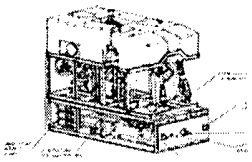
1. Operating Temperature of –20°C to 150°C
2. ±1.0°C Accuracy **(Conventional chart recorder is ±1°C)**
3. 0.001% FS Resolution **(Conventional chart recorder is 0.5%**

Junction Box

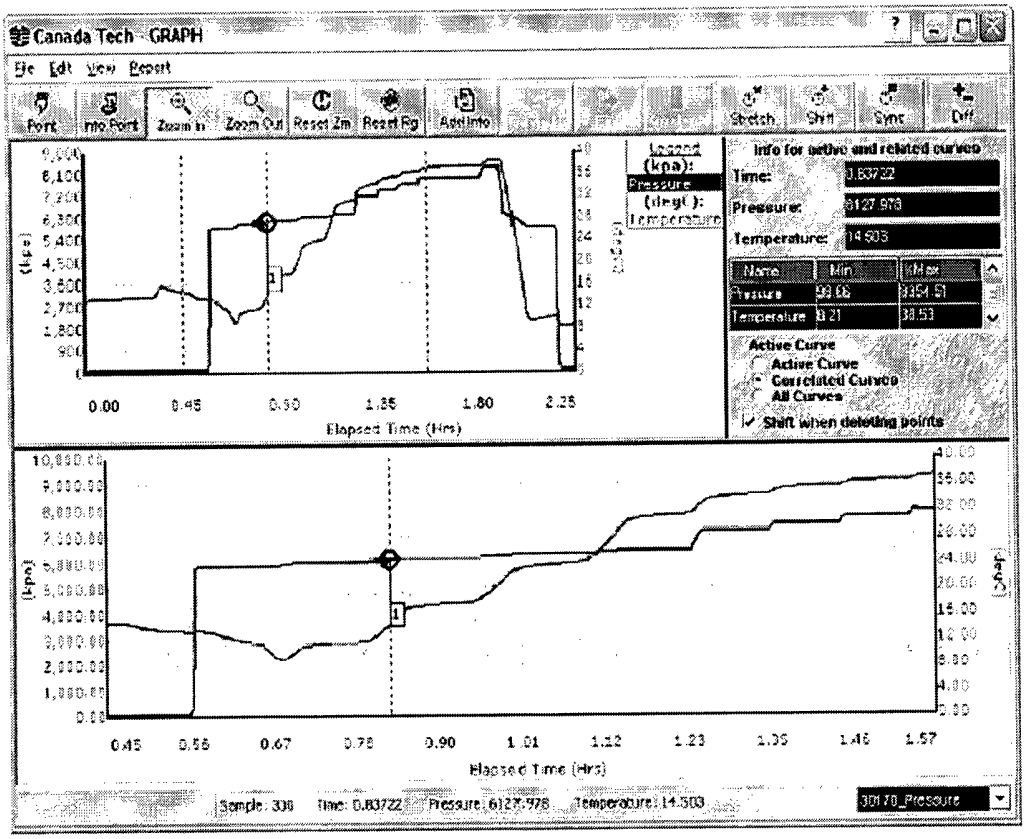
1. Class 1 Div 2 CSA with barrier between Div 1 and Div 2 areas
2. 256 megabytes of storage
3. 1 second sampling of all sensors
4. USB out to laptop
5. Industry standard din rail mounting
6. NEMA 4x IP68 waterproof housing
7. USB operation

Software

1. Simultaneous display and recording of all data for each sensor
2. Windows compatible



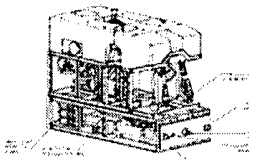
Similar data to the following will be provided for MMS Hydrotest approval, in addition to standard hydrotest paperwork and certification.



Pressure units will be displayed in psig (kpa shown above).
Temperature units will be displayed in deg Fahrenheit (deg Celsius shown above).

The following projects were carried out utilizing digital instrumentation in place of conventional dead-weight testers and circular chart recorders.

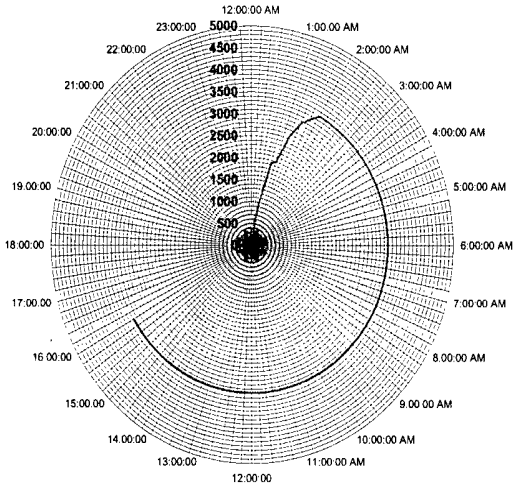
2002 Shell Einset Project (ROV Based Subsea Hydrotest)
2003 Shell Mantee Project (ROV Based Subsea Hydrotest)
2003 W & T Offshore, Inc. Pipeline Installation Project (Topside Based Hydrotest)
2005 ENI K2 Project (Topside Based Hydrotest)



Data Overview:

Data can be presented for MMS approval in many different manners. The real-time graph and data will be presented to MMS as a stand-alone document (section 4 of the equipment specification). The following charts are actual test data that was approved by the MMS on the W&T project. In keeping with an already acceptable standard to the MMS, BP proposed that circular charts be produced for the Thunder Horse project for both pressure and pipe internal temperature from the recorded data files.

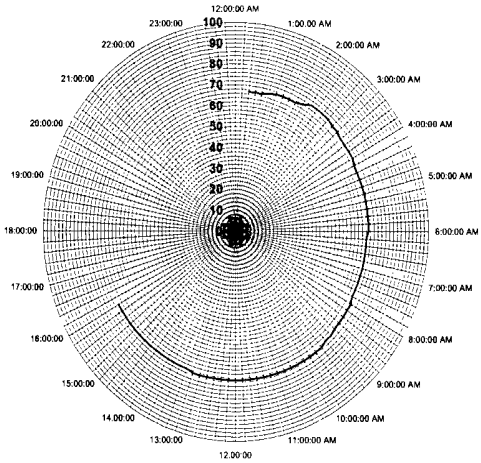
Cal Dive 4" x 28,700' Hydrotest



METER NUMBER	TUBE & ORIF. SIZE
87728-1	4.5" O.D.
TIME PUT ON	TIME TAKEN OFF
0115	1600
DATE PUT ON	DATE TAKEN OFF
02-APR-03	03-APR-03

SIGNED_____

Cal Dive 4" x 28,700' Hydrotest



METER NUMBER	TUBE & ORIF. SIZE
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TIME PUT ON	TIME TAKEN OFF
0115	1600
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SIGNED_____

MICRO 15166
15167

Amend 1 MICRO

Gagliano, Manny

From: Hathcock, Susan [Susan_Hathcock@anadarko.com]
Sent: Monday, October 17, 2005 1:52 PM
To: Gagliano, Manny
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Attachments: HP-112-01-1-C.pdf; SANJACCOMP.pdf

HP-112-01-1-C.pdf (155 KB) SANJACCOMP.pdf (68 KB)

See below for the response on the 6/28/05 e-mail we spoke about. If you have any questions, please call me.

-----Original Message-----
From: Jim Babin [mailto:jbabin@Pegasus-International.com]
Sent: Sunday, October 16, 2005 1:08 PM
To: Hathcock, Susan
Cc: Dwayne Doiron; McEvilly, Mike; Paul Beer (paul.beer@sub-seasolutions.com); P. Stracke
Subject: RE: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

Susan,

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1.) Summary of corrosion monitoring program mentioned in Item 6 of Attachment B.

Reply: Flowline internal corrosion protection shall be provided by injection of corrosion inhibitor at each subsea wellhead. The corrosion inhibitor shall be delivered to each wellhead via the respective umbilical independently, or as a mixture with either scale inhibitor, or MEG system.

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Reply: Buckle arrestors for this flowline will be supplied as Jlay collars which provide adequate buckle arrestor properties/dimensions.
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4.) Where will pressure be measured (elevation) during hydrostatic pressure testing?

Reply: The pressure will be monitored at the seabed. The specified hydrostatic test pressure is the pipeline internal pressure.

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Reply: There is no SCR associated with this pipeline.

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Reply: Support pilings will not be installed for any of the PLET's, SUTA's or Sleds. These appurtenances will be supported by a mudmat base.
Suction piles will be used as startup anchors for pipeline installation.
However, these piles will be removed after installation and prior to final connection of the pipeline ends.

7.) Submit Chemosynth Community Study.

Reply: Assessment of Biological Community Constraints is included in the survey report which was submitted with the permit application. The side scan sonar mosiacs, which are included in the report, indicate no Chemosynthetic communities within the pipeline corridor.

8.) Product composition? Is H2S production expected during service life?

Reply: Expected Product Compostions of the San Jacinto field wells, which will be produced through this flowline are attached. No H2S is expected during the service life.

9.) System design temperature?

Reply: The pipeline design temperature is 140 deg. F

10.) Louisiana CZM consistency certificate received. Florida CZM consistency certification required.

Reply: noted

Regards,

Jim Babin

Pegasus International, Inc.
777 N. Eldridge Parkway, Suite 300
Houston, Texas 77079-4524

Office: 713-463-4902, Cell: 713-725-5102 jbabin@pegasus-international.com -----Original Message-----
From: Hathcock, Susan [mailto:Susan_Hathcock@anadarko.com]
Sent: Friday, October 14, 2005 2:03 PM
To: Jim Babin; Dwayne Doiron
Subject: FW: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application
Importance: High

Here's an e-mail MMS says has not been responded to. Please provide the info asap so I can get to MMS. I will also be forwarding a 2nd e-mail on
the umbilical. Thanks

From: Gagliano, Manny [mailto:Manny.Gagliano@mms.gov]
Sent: Tuesday, June 28, 2005 9:34 AM
To: Hathcock, Susan
Subject: SN 15166 Anadarko San Jacinto / Spiderman Interfield 8-inch BLKG Flowline Application

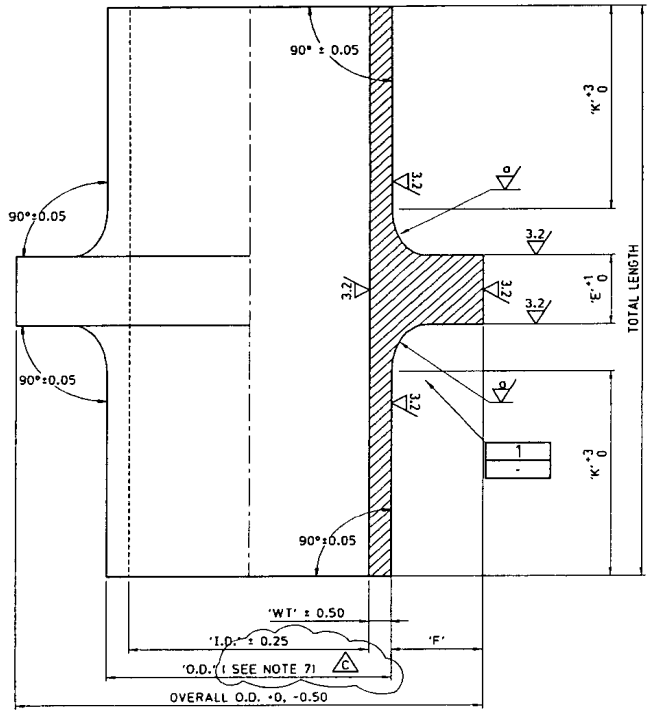
Susan:
We will need the following information and/or clarifications to proceed with
our review:
1.) Summary of corrosion monitoring program mentioned in Item 6 of Attachment B.
2.) Buckle arrestor type and material grade.
3.) Condensate gravity
4.) Where will pressure be measured (elevation) during hydrostatic pressure testing?
5.) VIV analysis summary for SCR.

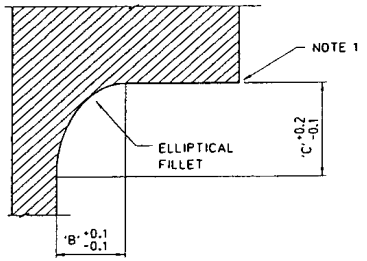
6.) Any pilings or piled structures (ILS, PLET, etc.) in ROW?
7.) Submit Chemosynth Community Study.
8.) Product composition? Is H2S production expected during service life?
9.) System design temperature?
10.) Louisiana CZM consistency certificate received. Florida CZM consistency certification required.

Manny Gagliano, P.E.
Minerals Management Service
Office of Field Operations, Pipeline Section
Phone: (504) 736-2549
Fax: (504) 736-2408
Email: manny.gagliano@mms.gov

GENERAL NOTES

1. BREAK SHARP EDGES R = 0.5 MAX.
2. ALL DIMENSIONS ARE IN mm
3. FINAL MACHINE FINISH AS INDICATED ON DRAWING AND TABLE.
4. DO NOT HANDLE COLLARS WITH STEEL HOOKS, GRIPS OR TONGS. USE NYLON SLINGS FOR HANDLING. AFTER FINAL MACHINING, WRAP ALL COLLARS WITH BURLAP OR SIMILAR MATERIAL.
5. MANUFACTURE, INSPECTION AND QUALITY CONTROL PROCEDURES SHOULD BE APPROVED BY 'CLIENT'/HMC, PRIOR TO ANY FABRICATION ACTIVITY.
6. ALL SURFACE FINISHING VALUES INDICATED IN MICROMETER'S (μM).
7. I.D. AND W.T. ARE GOVERNING FOR DIMENSIONAL CONTROL, O.D. FOLLOWS FROM THESE TOLERANCES.





DETAIL 1 : 1 — 1 / -

LINE	'O.D.'	OVERALL O.D.	'W.T.'	'I.D.'	'E'	'F'	MACH	MAT	'B'	'C'	'K'	TOTAL LENGTH
	mm	mm	mm	mm	mm	mm	α'		mm	mm	mm	mm
FLOWLINE (8.625", WT 17.145)	219.25	359.25	17.145	184.96	60	70	1.6	F65	26.5	40	175	490
SCR (8.625", WT 24.13)	220.00	360.00	24.500	171.00	70	70	0.8	F65	26.5	40	175	500

C

FOR CONSTRUCTION

GRAPHIC SCALE 1 : 1 — 0 2 4 6 8 10 12 CM

GRAPHIC SCALE 1 : 2 — 0 4 8 12 16 20 24 CM

REV.	DATE	DRAWN	DESCRIPTION	APPROVED ENGINEERING	APP'D CPS
C	29 JUN 2005		REV. AS INDICATED / FOR CONSTRUCTION		
B	31 MAR 2005		REVISED AS INDICATED		
A	22 MAR 2005		FOR INFORMATION		

PROJECT: INDEPENDENCE FLOWLINES & RISER

SUBJECT: J-LAY COLLARS

Heerema Marine Contractors Nederland B.V.

CLIENT'S DRAWING NO.

SCALE (A1 FORMAT)	JOB NO.	DRAWING NO. (DISCIPLINE / DEPT. NO. / SUBJECT NO. / SHEET NO.)	REVISION
1 : 2	10277.00000	HP - 112 - 01 - 1	C

TABLE 4-4: RESERVOIR FLUID COMPOSITIONS – SAN JACINTO

Component	Mole % (Sample 1.12)		
	Flashed Gas	Flashed Liquid	Monophasic Fluid
Carbon Dioxide	0.05	0.00	0.05
Hydrogen Sulfide	0.00	0.00	0.00
Nitrogen	0.54	0.00	0.54
Methane	99.12	0.00	99.00
Ethane	0.22	0.00	0.22
Propane	0.03	0.01	0.03
I-Butane	0.01	0.01	0.01
N-Butane	0.01	0.01	0.01
I-Pentane	0.00	0.01	0.00
N-Pentane	0.01	0.01	0.01
C6	0.00	0.03	0.00
M-C-Pentane	0.00	0.03	0.00
Benzene	0.00	0.00	0.00
Cyclohexane	0.00	0.01	0.00
C7	0.00	0.12	0.00
M-C-Hexane	0.00	0.07	0.00
Toluene	0.01	2.20	0.01
C8	0.00	0.35	0.00
E Benzene	0.00	0.11	0.00
M/P-Xylene	0.00	0.01	0.00
O-Xylene	0.00	0.05	0.00
C9	0.00	0.96	0.00
psuedo C10H22	0.00	1.36	0.00
pseudo C11H24	0.00	1.42	0.00
psuedo C12H26	0.00	1.61	0.00
psuedo C13H28	0.00	1.53	0.00
psuedo C14H30	0.00	3.06	0.00
psuedo C15H32	0.00	14.34	0.02
pseudo C16H34		46.25	0.06
psuedo C17H36		5.22	0.01
psuedo C18H38		14.88	0.02
psuedo C19H40		1.12	0.00
psuedo C20H42		1.98	0.00
psuedo C21H44		0.50	0.00
psuedo C22H46		0.55	0.00
psuedo C23H48		0.28	0.00
psuedo C24H50		0.26	0.00
psuedo C25H52		0.16	0.00
psuedo C26H54		0.15	0.00
psuedo C27H56		0.14	0.00
psuedo C28H58		0.14	0.00
psuedo C29H60		0.13	0.00
C30+		0.90	0.00

Compositions have not been adjusted to remove any drilling mud contamination, which would reduce the condensate yield of the fluids. The de-contaminated condensate yield for this composition is 0.826 BBL/MMSCFD; however, 1 BBL/MMSCFD is used for design.

Gagliano, Manny

From: Hathcock, Susan [Susan_Hathcock@anadarko.com]
Sent: Monday, October 17, 2005 4:35 PM
To: Gagliano, Manny
Subject: FW: SN 15167 Anadarko San Jacinto / Spiderman Intefield Umbilical Application

please see e-mail below.

-----Original Message-----
From: Jim Babin [mailto:jbabin@Pegasus-International.com]
Sent: Monday, October 17, 2005 3:38 PM
To: Hathcock, Susan
Cc: John Anderson; 'doirond@cc-lc.net'; McEvilly, Mike; Paul Beer (paul.beer@sub-seasolutions.com); P. Stracke
Subject: RE: SN 15167 Anadarko San Jacinto / Spiderman Intefield Umbilical Application

Susan,

Please reply with the following relative to the MMS questions for the subject umbilical.

1.) Service description / flow rates of each tube

Reply: The estimated chemical treatment volumes are:

1-1/2" ID tube.....MEG/corrosion inhibitor.....353 GPH MEG + 0.6 GPH corrosion inhibitor 1-1/2" ID tube.....MEG/corrosion inhibitor.....spare MEG injection line 1/2" ID tube.....paraffin inhibitor or paraffin dispersant.....0.03 GPH paraffin inhibitor or 0.11 GPH paraffin dispersant 1/2" ID tube.....scale inhibitor.....0.02 GPH 1-1/2" ID tube.....spare

All other lines are for high pressure hydraulic service(2 ea. 1/2" tubes), low pressure hydraulic service(2 ea. 3/4" tubes and well annulus pressure monitoring(2 ea. 1" tube), where flow rates are normally not applicable.

Regards,

Jim Babin

Pegasus International, Inc.
777 N. Eldridge Parkway, Suite 300
Houston, Texas 77079-4524

Office: 713-463-4902, Cell: 713-725-5102 jbabin@pegasus-international.com -----Original Message-----
From: Hathcock, Susan [mailto:Susan_Hathcock@anadarko.com]
Sent: Friday, October 14, 2005 2:04 PM
To: Jim Babin; Dwayne Doiron
Subject: FW: SN 15167 Anadarko San Jacinto / Spiderman Intefield Umbilical Application
Importance: High

please respond asap. thanks

From: Gagliano, Manny [mailto:Manny.Gagliano@mms.gov]
Sent: Tuesday, June 28, 2005 9:34 AM
To: Hathcock, Susan
Subject: SN 15167 Anadarko San Jacinto / Spiderman Intefield Umbilical Application

Susan:
We will need the following information and/or clarifications to proceed with
our review:
1.) Service description / flow rates of each tube

Manny Gagliano, P.E.
Minerals Management Service
Office of Field Operations, Pipeline Section
Phone: (504) 736-2549
Fax: (504) 736-2408
Email: manny.gagliano@mms.gov

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

8" 15166
Umb 15167

May 25, 2005

Mr. Donald C. Howard, Regional Supervisor Field Operations
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123

Attention: Mr. Alex Alvarado
MS 5232

RE: Application for 8-Inch Bulk Gas Right-of-Way Pipeline (San Jacinto/Spiderman Interfield Flowline) and associated electric/hydraulic umbilical to be installed in the Desoto Canyon Area, OCS Federal Waters, initiating in Desoto Canyon Area Block 618 and terminating in Desoto Canyon Area Block 621.

Gentlemen,

Pursuant to the authority granted Section 5 (e) the Outer Continental Shelf Lands Act (67 Stat. 462) (43 U.S.C. 1331), as amended (92 Sta. 629), and in compliance with the regulations contained in Title 30 CFR Part 250 Subpart J, Anadarko Petroleum Corporation (Anadarko) is filing this application, in quadruplicate (original and three copies), for a Right-of-Way two hundred feet (200') in width for the construction, maintenance and operation of an 8-inch bulk gas pipeline to be installed in and/or through Desoto Canyon Area Blocks 618, 619, 620 and, OCS Federal Waters, Gulf of Mexico. Anadarko agrees that said Right-of-Way, if approved, will be subject to the terms and conditions of said regulations. The associated electric/hydraulic umbilical will be installed in and/or through Desoto Canyon Area Blocks 618, 619, 620 and, OCS Federal Waters, Gulf of Mexico.

The bulk gas pipeline, which is approximately 6.47 miles (34,148.12 feet) long, will be utilized to transport bulk gas production from an In-Line valve Sled (ILS) located in DC-618 near well #1. The flowline will connect via jumpers and manifold (to be permitted later) to two pipelines (Spiderman East and Spiderman West) which are currently under review by the Minerals Management Service. Please note that this pipeline will be a continuation of a Dominion Exploration & Production, Inc. (Dominion) lease term pipeline from a PLET, located in DC-618 Well#2 to the ILS near well #1. The Dominion lease term pipeline will be permitted separately by Dominion. The overall Umbilical length is approximately 7.5 miles (39,590 feet) long. This system is shown on the included Safety Flow Schematic and maps.

Anadarko will be the designated operator of the subject Right-of-Way bulk gas pipeline. The proposed pipeline will be designed, constructed operated and maintained in accordance with Title 30 CFR Part 250. The pipeline is to be located in a maximum water depth of 8,080 feet and a minimum water depth of 7,783 feet. Since the entire pipeline is in water depths in excess of 200 feet, the pipeline will be installed without burial below the seabed.

Installation of the proposed bulk gas pipeline will be accomplished by utilizing a Dynamically Positioned (DP) lay vessel and will not require the use of anchors for positioning. The estimated project duration is a total of 14 days commencing with pipeline installation around March 1, 2006 (7 days). Installation of the umbilical will commence around August 15, 2006(7 days). Startup is expected around July, 2007.

The operations base for Anadarko is located in Houma, Louisiana. During construction for this project, the base of operations will be Fourchon, Louisiana.

The proposed pipeline crosses four (4) Desoto Area Blocks; Desoto Canyon Area Blocks 618, 619, 620 and 621. The pipeline does not cross any pipelines. In accordance with applicable regulations, Anadarko has forwarded a copy of this proposed pipeline application by Certified Mail, Return Receipt Requested, to each designated Oil and Gas Lease Operator whose lease is so affected. Copies of these letters and copies of the unsigned requested Return Receipt are attached for reference. A list of Designated Operators and Right-of-Way or Easement Holders is also attached. Copies of the Return Receipts showing dates and signatures as evidence of service upon such Operators and Right-of-Way or Easement Holders will be forwarded to your office upon receipt. In the event Anadarko cannot obtain completed return receipt cards, we understand that a letter from the Lessee expressing no objection to the proposed project is acceptable. In order to expedite the permit process, Anadarko has requested a letter from the Operator expressing no objection to the proposed project. When obtained, these letters will be forwarded to your office.

The proposed route of the Right-of-Way does not adjoin or subsequently cross state-submerged lands.

Anadarko hereby certifies that the proposed activity described in this application complies with and will be conducted in a manner consistent with the Coastal Management Program for the affected states (Louisiana and Florida). A copy of the letter and consistency certification are attached for your review.

C&C Technologies conducted a pipeline Pre-Lay Survey and Hazards Study for the proposed Operations. The survey report prepared by C&C Technologies, and submitted with this application, identifies side-scan sonar contacts within the surveyed area. The coordinates of the side scan sonar contacts will be recorded into the installation vessels on-board navigation and position system and avoided during pipelay. Anadarko has reviewed the hazard survey and will comply with all recommendations found therein.

This pipeline will be inspected after installation on the seabed, by use of a Remote Operated Vehicle (ROV), to determine if any spanning has occurred. Any excessive spanning will be rectified by installing adequate supports or Vortex Induced Vibration (VIV) suppression. The location of any spans will be identified, reported, and records maintained in Anadarko's as-built construction report.

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, Anadarko shall report such findings immediately, to the Director, Gulf of Mexico OCS Region, and make every reasonable effort to preserve and protect the cultural resources from damage until the Director has given directions as to its preservation.

The calculated worst-case discharge for the proposed Right-of-Way Oil Pipeline is less than 1,000 barrels. Worst-case Oil Spill calculations are included.

Please refer to your New Orleans Miscellaneous File No. 981 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of Anadarko. Additionally, Anadarko has an approved $300,000 Right-of-Way Grant Bond (Bond No. 945480) on file with the MMS, covering installation of right-of-way pipelines in Federal Waters, Gulf of Mexico.

Applicant agrees to be bound by the foregoing regulations, and further agrees to comply with the application stipulations as set forth in Title 30 CFR 250 (Subpart J).

Anadarko requests the following departures:

1. Anadarko 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, Anadarko will comply with the recommended avoidance criteria of any magnetic anomalies found in the Pipeline Pre-Lay Survey Report along the proposed pipeline route.

2. The American National Standards Institute (ANSI) B31.8 design code and 30 CFR 250 will be used in setting the internal design pressure for the steel pipe used in the pipeline and riser. Where ANSI B31.8 does not provide specific guidance, a limit state design philosophy will be adopted. API RP 1111 will be referred to for external pressure collapse calculations, as B31.8 does not adequately address these for deepwater applications. For this reason, Anadarko hereby requests approval for the utilization of API RP 1111 for the design against collapse of the pipeline due to external hydrostatic pressure. Pertinent calculations are included for reference.

3. Anadarko hereby requests a waiver from recording magnetometer data as part of the shallow hazards survey in water depths beyond 600 feet.

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

1. Attachment A - List of Lease Operators and Right-of-Way Holders
2. Attachment B - Pipeline Design Criteria
3. Attachment C - Signed copies of Nondiscrimination in Employment statement (one original and three copies)
4. General Permit Information:
    a. Attachment D - Vicinity Layout
    b. Attachment E - Route and Profile Maps
    c. Attachment F - Safety Flow Schematic
    d. Attachment G - Umbilical Data Sheet
5. Attachment H - Copies of Lease and Pipeline crossing "Request for No Objection" letters and requested Return Receipts.
6. Attachments I – Copies of the affected states Consistency Certification and letter of request for determinations.
7. Enclosure 1 – MMS Checklist.

8. Enclosure 2 - Check in the amount of $2,875.00 of which $2,350.00 covers the application fee and $525.00 ($105/year) covers the first five (5) year's rental payment on 6.47 miles of Right-of-Way.
9. Enclosure 3 - High Resolution Geophysical Survey Report (plus one diskette with ASCII file for the flowline route and one diskette for the umbilical route) prepared by C&C Technologies

Anadarko 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.

Contacts on technical points or other information should be directed to:

Susan Hathcock
Anadarko Petroleum Corporation
P. O. Box 1330
Houston, TX 77251-1330
832/636-8758
susan_hathcock@anadarko.com

Your efforts to approve the installation of the subject pipeline in a timely fashion would be most appreciated.

Very truly yours,

Charles G. Hughes
Agent & Attorney-in-Fact

Attachments and Enclosures

MMS PERMIT APPLICATION

ATTACHMENT A
LIST OF LEASE OPERATORS AND RIGHT OF WAY HOLDERS
ANADARKO PETROLEUM CORPORATION
8-INCH BULK GAS PIPELINE (SAN JACINTO/SPIDERMAN) AND UMBILICAL
DESOTO CANYON AREA BLOCK 618 TO DESOTO CANYON AREA BLOCK 621

A. Lease Operators

8" Bulk Gas Pipeline

The following lease operators are being notified of the proposed pipeline route in accordance with the "No Objection" requirements:

BLOCK	LEASE	LEASE HOLDER
DC - 618	OCS-G-23526	Dominion Exploration & Production, Inc.
DC - 619	OCS-G-23527	Dominion Exploration & Production, Inc.
DC - 620	OCS-G-23528	Anadarko Petroleum Corporation
DC - 621	OCS-G-23529	Anadarko Petroleum Corporation

Electric/Hydraulic Umbilical

The following lease operators are being notified of the proposed pipeline route in accordance with the "No Objection" requirements:

BLOCK	LEASE	LEASE HOLDER
DC - 618	OCS-G-23526	Dominion Exploration & Production, Inc.
DC - 619	OCS-G-23527	Dominion Exploration & Production, Inc.
DC - 620	OCS-G-23528	Anadarko Petroleum Corporation
DC - 621	OCS-G-23529	Anadarko Petroleum Corporation

B. Pipeline Operators

The following pipeline operators are being notified of the proposed pipeline route in accordance with the "No Objection" requirements:

ROW HOLDER	PIPELINE SIZE/PRODUCT	OCS ROW NO.	SEG. NO.	AREA/BLOCK
None				

MMS PERMIT APPLICATION
ATTACHMENT B
PIPELINE DESIGN CRITERIA
ANADARKO PETROLEUM CORPORATION
8-INCH BULK GAS PIPELINE (SAN JACINTO/SPIDERMAN) AND UMBILICAL
DESOTO CANYON AREA BLOCK 618 TO DESOTO CANYON AREA BLOCK 621

A. INTRODUCTION

This proposed 8-inch bulk gas pipeline will be utilized to transport production from the San Jacinto Field located in the Desoto Canyon Area, Gulf of Mexico. This pipeline will be part of an overall gathering system for this field, as part of the Independence Project, and is shown on the attached Safety Flow Schematic.

B. DESIGN INFORMATION

Design of the flowline system will be in accordance with 30 CFR 250. The maximum wellhead Shut-in Tubing Pressure(SITP) for any source for this pipeline is 7,716 psi, which is less than the design pressure of 8,100 psig. When applicable, the effects of external pressure in the design are considered.

1. Product to be transported: Bulk Gas

2. Pipeline and Riser Specifications:

PARAMETER	PIPELINE
Water Depth Range (ft)	8,080 to 7,783
Length (ft)	39,590
Outside Diameter (in)	8.625
Wall Thickness (in)	0.675
Buckle Arrestors (in)	0.812
Material	API 5L
Grade	X-65

3. Type of Cathodic Protection:

   a. Sacrificial Anode System (480 foot spacing)
   b. Type of Anode: Aluminum-Indium-Zinc Alloy
   c. Two (2) additional anodes will be placed at each end of the pipeline.
   d. Unit weight of anode: 72.7 lbs. for
   e. Platform anodes will not be used to protect the pipeline.
   f. Pipeline anode life: 20 years minimum.

   Based on the formula: $Le_{(p/1)} = 3.82 \times 10^4 \times w^o/DIR$

   Where:

   $Le_{(p/1)}$ = Life expectancy (years)
   w^o = Weight of anode unit (lbs)
   D = Diameter of pipe (inches)
   I = Separation between anodes (ft)

R = Rate of consumption (lbs/amp year)= 7.42 lbs/amp year

$Le_{(p/1)}$ = $(3.82 \times 10^4)(72.7)/[(8.625)(480)(7.42)]$ = 90.4 years

4. Water Depth: Minimum of 7,783 feet at the DC-618 Pipeline End Termination Sled(PLET) Maximum of 8,080 feet at the DC-621 Pipeline End Termination Sled(PLET).

5. Description of Protective Coating:

   a. Pipeline:
   Fusion Bonded Epoxy (FBE) -Minimum 14-16 mils
   Concrete Weight Coating (CWC) - None.

6. Internal Corrosion Protection: The pipeline will be monitored for corrosion and a chemical injection program instituted if necessary. The pipeline will not be designed for pigging. However, the pipeline will be suitable for pigging if necessary later.

7. Specific Gravity: SG = weight in air (empty) / water displacement (in seawater)

Description:	Air Weight (lb/ft)	Water Displacement (lb/ft)	Submerged Empty Weight (lb/ft)	Pipeline/Riser Specific Gravity
PIPELINE Line Pipe: 8.625" O.D. X 0.675" W.T. with FBE Coat.	57.75	26.09	31.65	2.21

8. Specific Gravity of Gas (Air = 1.0): 0.65

9. Design Capacity for Pipeline: 120 MMSCFD
   Condensate Rate: 1 BBL/MMSCF

10. Flowline System Shut-in Pressure:

    The maximum flowline system shut-in pressure will be based on the shut-in tubing pressure of any well source. The maximum source shut-in tubing pressure is 7716 psi.

11. Hydrostatic Test Pressure:

    The minimum internal Hydrostatic Test pressure and duration for any location along the flowline will be 10,125 psig and 8 hours respectively. This minimum hydrostatic test pressure will be the actual internal pressure in the pipeline (i.e. external pressure excluded). This test pressure is based on the meeting 125% of the Design Pressure at any location of the flowline system.

12. Internal Design Pressure of Flowline:

The flowline pipe design pressure and subsequent pipe wall thickness requirements are based on the design equation as required in 30CFR250, Subpart J. The maximum shut-in tubing pressure at any wellhead source is 7,716 psi, and the maximum design pressure is 8,100 psig.

For the flowline, the minimum water depth is utilized to determine the external pressure, yielding the most conservative result.

Flowline 8-inch section (All Locations)

$$t_{nom} = \frac{(P_i - P_e)D}{2(F)(E)(T)(S)} \Rightarrow \text{30 CFR 250 , ANSI B31.8 (rearranged)}$$

S = Specified Minimum Yield Strength (SMYS) = 65,000 psi

D = Pipe Outside Diameter= 8.625 in.

F = Construction Design Factor = 0.72 (pipeline per 30 CFR 250)

E = Longitudinal Joint Factor = 1.0 (Seamless Pipe)

T = Temperature Derate Factor = 1.0 (Temp. ≤ 250 °F)

P_i = Internal Design Pressure= 8100 (psig)

P_e = External Pressure = $P_{seawater}$ (Calculated at minimum water depth)

$$= \left((7{,}783 \text{ ft})\left(\frac{64 \text{ lb}}{\text{ft}^3}\right)\left(\frac{\text{ft}^2}{144 \text{ in}^2}\right) \right) = 3{,}459 \text{ psig}$$

$$t_{nom} = \frac{\left(8{,}100 \text{ lb/in}^2 - 3{,}459 \text{ lb/in}^2\right)\left(8.625 \text{ in}\right)}{2\left(0.72\right)\left(1.0\right)\left(1.0\right)\left(65{,}000 \text{ lb/in}^2\right)} = 0.428 \text{ in}$$

= 0.675 in. Selected ⇒ OK

13. Design Pressure (P) of Flanges, Fittings and Valves in Pipeline:

- Valves: API Rating: 10,000 psig
- Flanges, fittings, etc: API Rating: 10,000 psig

14. Pipeline Hoop Stress During Hydrotest:

In order to verify that 95% of the material Specified Minimum Yield Strength is not exceeded during hydrostatic testing, the calculations below were performed for the flowline system at minimum and maximum water depths.

$$\% \text{ SMYS at Hydrotest} = \frac{P_{eff\ hyd} D}{2tS} \times 100\%$$

D = Outside Pipe Diameter = varies 8.625 (in)

t = Pipe Wall Thickness = varies (in) (pipeline = 0.675 in.)

S = Specified Minimum Yield Strength (SMYS) = 65,000 (lb/in2)

$P_{eff\ hyd}$ = Effective HydrostaticTest Pressure = P_{hyd} - P_e

P_{hyd} = Internal Hydrostatic Test Pressure = 10,125 (lb/in2)

P_e = External Pressure = $P_{seawater}$ (lb/in2) = Water Depth x $(\frac{64\ \text{lb}}{\text{ft}^3})(\frac{\text{ft}^2}{144\ \text{in}^2})$

$$7{,}783 \text{ fsw} \Rightarrow \% \text{ SMYS at Hydrotest} = \left[(\frac{10{,}125\ \text{lb}}{\text{in}^2}) - (7{,}783\ \text{ft})(\frac{64\ \text{lb}}{\text{ft}^3})(\frac{\text{ft}^2}{144\ \text{in}^2})\right](\frac{8.625\ \text{in}}{1})(\frac{1}{2})(\frac{1}{0.675\ \text{in}})(\frac{\text{in}^2}{65{,}000\ \text{lb}}) \times 100\% = 65.5\%$$

$$8{,}080 \text{ fsw} \Rightarrow \% \text{ SMYS at Hydrotest} = \left[(\frac{10{,}125\ \text{lb}}{\text{in}^2}) - (8{,}080\ \text{ft})(\frac{64\ \text{lb}}{\text{ft}^3})(\frac{\text{ft}^2}{144\ \text{in}^2})\right](\frac{8.625\ \text{in}}{1})(\frac{1}{2})(\frac{1}{0.675\ \text{in}})(\frac{\text{in}^2}{65{,}000\ \text{lb}}) \times 100\% = 64.2\%$$

15. Maximum Allowable Operating Pressure (MAOP):

The Maximum Allowable Operating Pressure of the flowline is 8,100 psig.

17. On Bottom Stability:

Stability against effects of water currents and storms has been evaluated. The specific gravity of the operational pipeline is more than adequate to ensure on-bottom pipeline stability in these water depths.

18. Pipeline Spanning:

A pipeline span analysis has been conducted along the entire route. Although the analysis indicates the possible existence of pipeline spans after installation, these spans are within allowable limits for installation, operation and hydrostatic testing. The analysis accounts for static and dynamic stresses as well as vortex induced vibrations. All stresses for installation, operation and hydrostatic testing are within allowable limits. The potential spans lengths identified are short enough such that Vortex Induced Vibrations (VIV) are not expected. Should spans which exceed allowable limits be found after installation, these will be rectified with placement of intermediate supports, or VIV suppression.

19. Collapse Due to External Pressure:

The flowline pipe has been designed to resist collapse due to external pressure. Evaluation has been performed in accordance with API Recommended Practice 1111 (Third Edition). The evaluations for the

flowline pipe were conducted based on the maximum associated water depth. Results are provided below:

P_e = ExternalPressure (Sea Water Hydrostatic Pressure)

$P_e = (D_{H_2O})(\rho\rho_{H_2O})$

D_{H_2O} = Water Depth (ft)

$\rho\rho_{H_2O}$ = Sea Water Density ($64\ {}^{lb}/_{ft^3}$)

$$P_e = \left[(8{,}080\text{ ft})(\frac{64\text{ lb}}{\text{ft}^3})(\frac{\text{ft}^2}{144\text{ in}^2})\right] = 3{,}591\ {}^{lb}/_{in^2}$$

$P_e = 3{,}591 psig$

$$P_s = \frac{(P_y)(P_{ins})}{\sqrt{(P_y^{\,2} + P_{ins}^{\,2})}} = \text{Collapse Pressure of Pipe}$$

P_y = Plastic Yield Pressure = $\frac{2St}{D}$

S = Pipe Yield Strength ($^{lb}/_{in^2}$) = 65,000 $^{lb}/_{in^2}$

t = Pipe Wall Thickness (in) = 0.675 in

D = Pipe Outside Diameter (in) = 8.625 in

$$P_y = (\frac{2}{1})(\frac{65{,}000\text{ lb}}{\text{in}^2})(\frac{0.675\text{ in}}{1})(\frac{1}{8.625\text{ in}}) = 10{,}174\ {}^{lb}/_{in^2}$$

$P_y = 10{,}174$ psi

$$P_{ins} = \text{Elastic Instability Pressure} = (2.2)(E)\left(\frac{t}{D}\right)^3$$

E = Elastic Modulus = 29,000,000 $^{lb}/_{in^2}$ (for steel)

$$P_{ins} = (2.2)(\frac{29{,}000{,}000\text{ lb}}{\text{in}^2})\left(\frac{0.675\text{ in}}{8.625\text{ in}}\right)^3 = 30{,}581\ {}^{lb}/_{in^2}$$

$P_{ins} = 30{,}581$ psi

$$P_s = \frac{(10{,}174\ {}^{lb}/_{in^2})(30{,}581\ {}^{lb}/_{in^2})}{\sqrt{((10{,}124\ {}^{lb}/_{in^2})^2 + (30{,}581\ {}^{lb}/_{in^2})^2)}} = 9{,}658\ {}^{lb}/_{in^2}$$

$P_s = 9{,}658$ psi

$$\text{Safety Factor Against Casing Collapse} = \frac{P_s}{P_e} = \frac{9{,}658\text{ psi}}{3{,}591\text{ psi}} = 2.69 \Rightarrow \text{OK: Safety Factors} > 1.5 \text{ are adequate}$$

20. Buckle Arrestors:

The flowline pipe has not been designed to resist a propagating buckle if initiated. The flowline will be installed with buckle arrestors designed to arrest propagating buckles and spaced at 1000-foot spacings.

21. Pipeline Crossings:

There are no crossings of existing pipelines associated with this installation.

22. Worst Case Discharge:

As this is a "dry" gas flowline, oil spill volumes due to a leak in the flowline system would be minimal. However, the worst case oil spill calculations take into account potential condensate trapped in the pipeline. The potential "worst case" calculation is summarized below:

System leak detection plus shutdown response time:	1.5 minutes
Predicted oil(condensate) flow rate:	0.167 bbl/min
Flowing volume loss:	1 bbl
Longest untrapped volume:	5 bbl
Worst Case Discharge:	6 bbl

24. Control Umbilical

There will be a control umbilical associated with this pipeline. An umbilical cross section and data sheet are included as an attachment to this permit application.

C. INSTALLATION REQUIREMENTS

The pipeline will be installed in water depths to 8,080 feet. The pipeline is located in water depths greater than 200 feet; therefore pipeline burial is not required.

The 8-inch line will be electrically isolated from any platforms.

D. CONSTRUCTION INFORMATION

1. Proposed Construction Commencement date is March 1, 2006.
2. Shore Construction Base to be located in Fourchon, Louisiana.
3. The pipeline and spools will be installed by a dynamically positioned J-lay lay vessel.
4. The pipeline will not be buried.
5. Time Required for Construction: Pipeline :2 weeks (Approx. March 2006).

UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

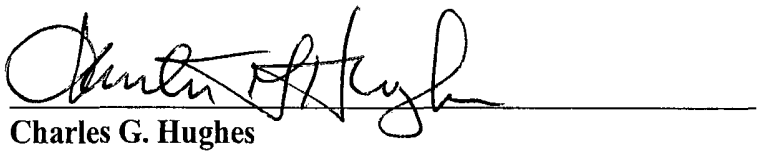
NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee, Anadarko Petroleum Corporation 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.

Anadarko Petroleum Corporation - Grantee



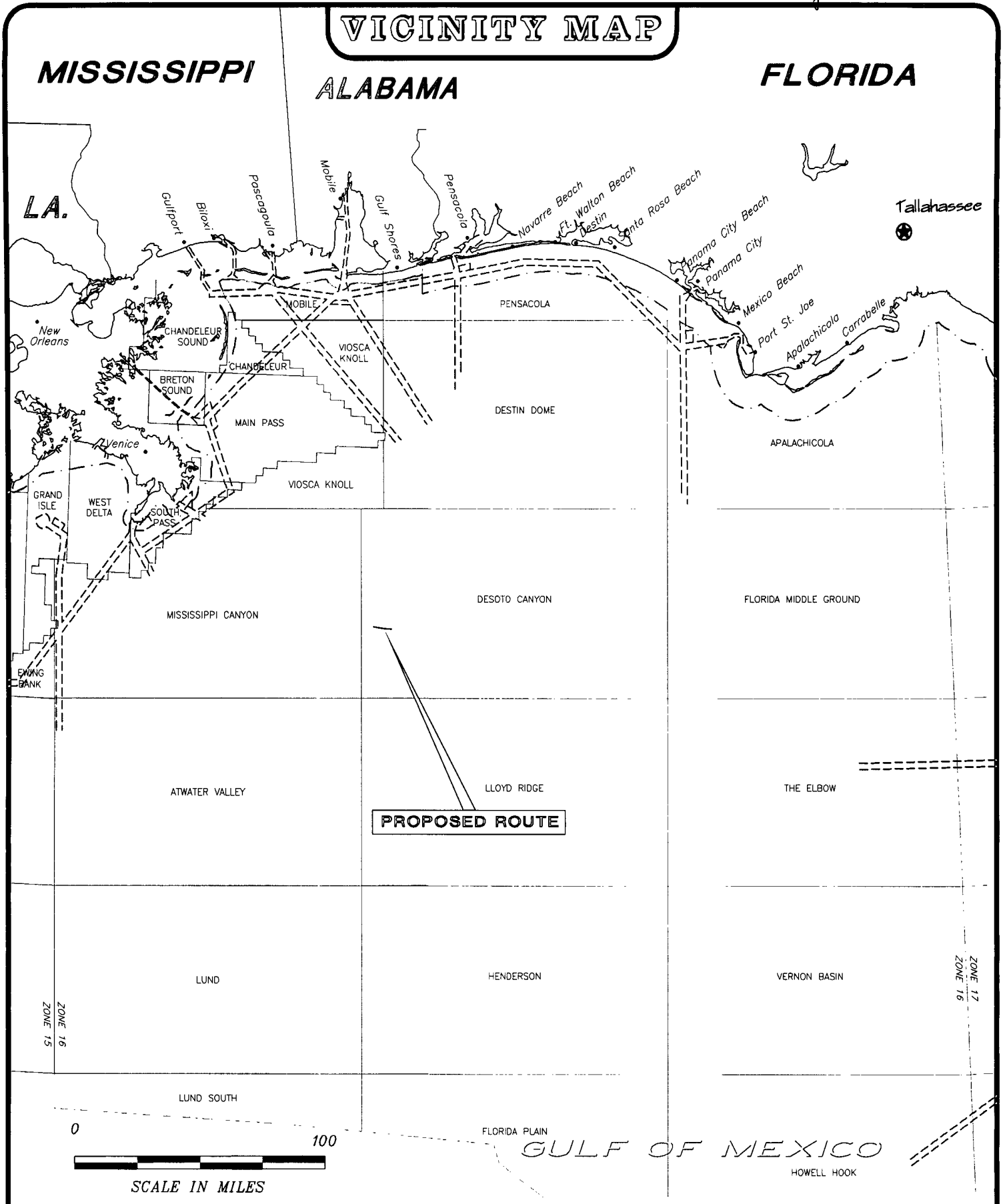
Charles G. Hughes
Agent & Attorney-in-fact

5.25.05

Date

Segment # 15166

VICINITY MAP



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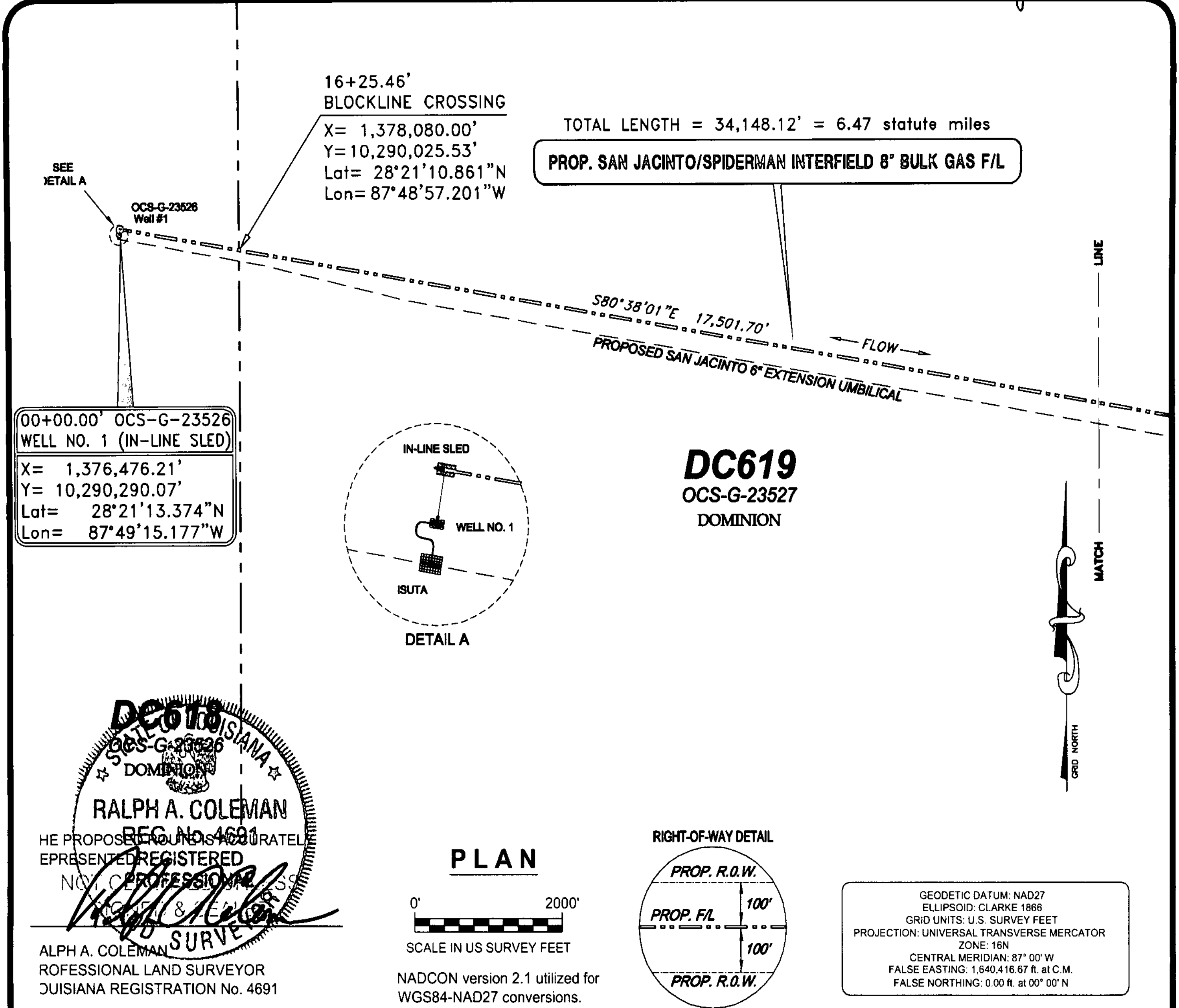
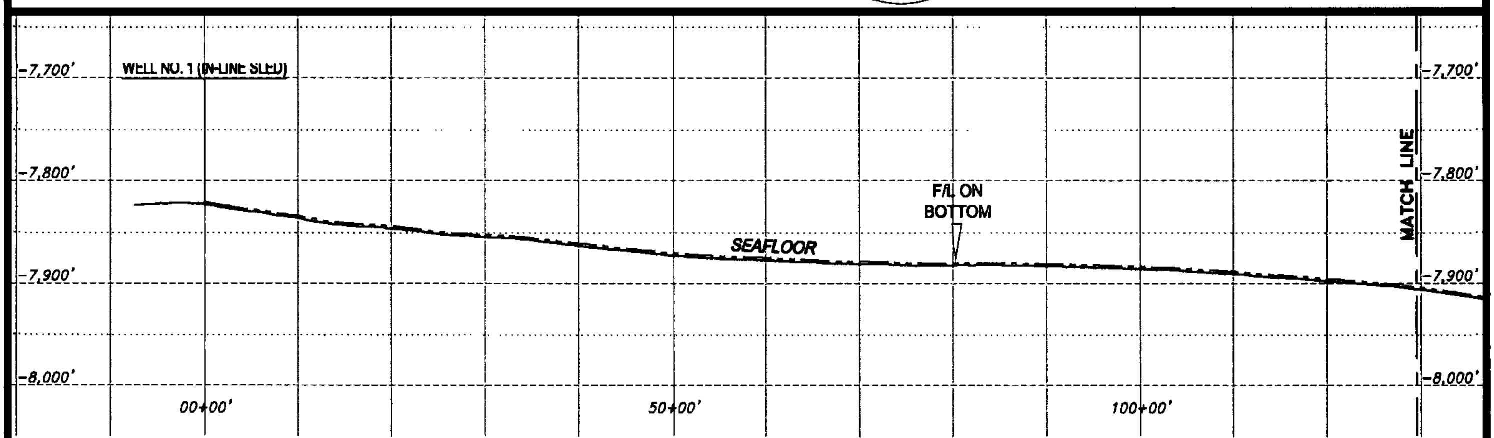
Anadarko Petroleum Corporation

PROP. SAN JACINTO/SPIDERMAN INTERFIELD 8" BULK GAS F/L
Block 618 Well No. 2 (PLET)
to Block 621 Well No. 1 (PLET)
DeSoto Canyon Area

PREPARED BY:	JOB No: 7458-7589	REVISED:	DATE: May 11, 2005
C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660	FILENAME: PRMCVR7458.DWG		SHEET 1 of 4

Seg 15166





PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

DATE: 05/11/2005 TIME: 17:35 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\7458PRM-SJ-FL.DWG

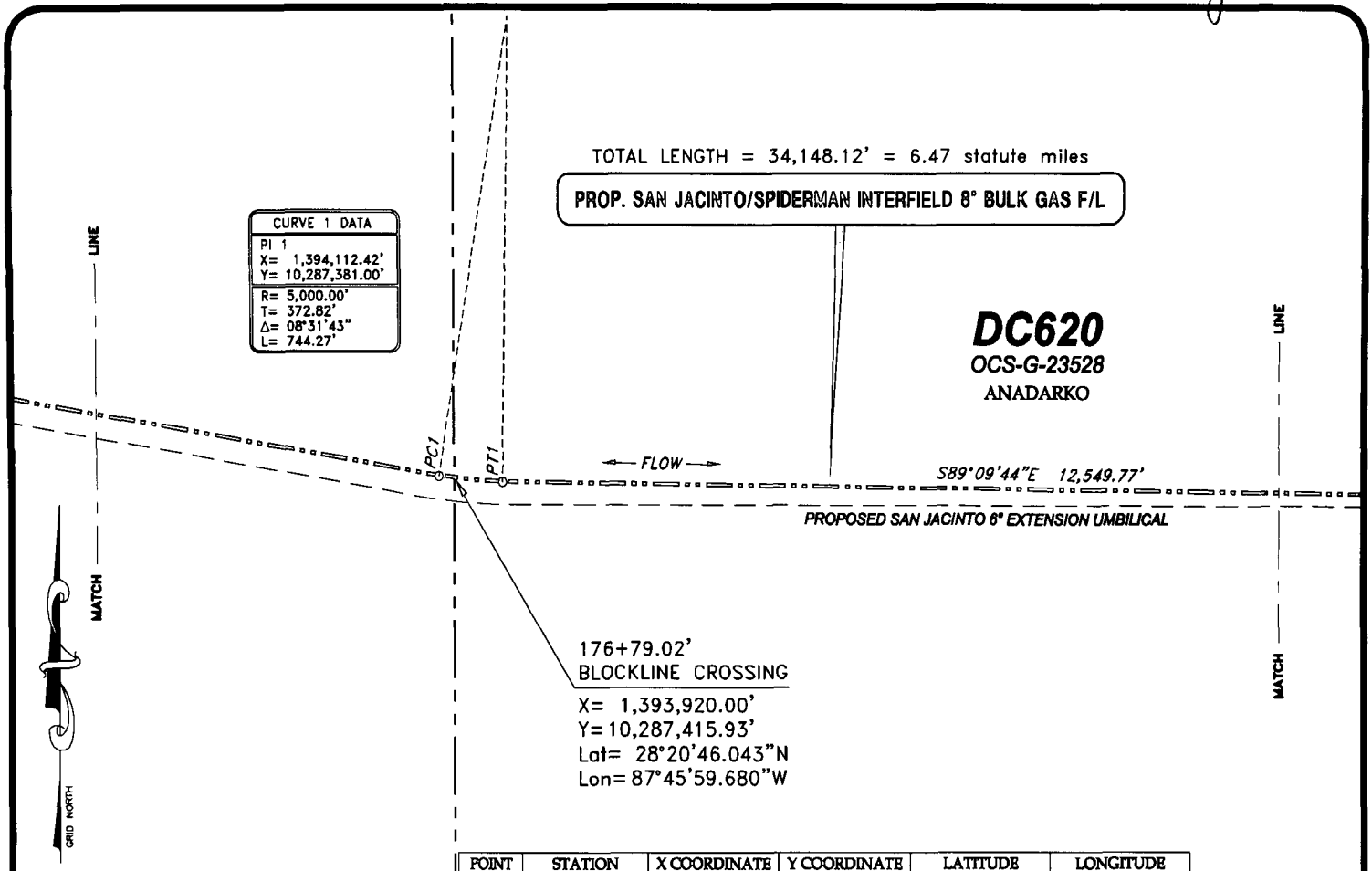
VERTICAL EXAGGERATION = 10

Anadarko Petroleum Corporation

PROP. SAN JACINTO/SPIDERMAN INTERFIELD 8" BULK GAS F/L
Block 618 Well No. 1 (IN-LINE SLED) to
Block 621 Well No. 1 (PLET)
Desoto Canyon Area

PREPARED BY: C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660	JOB No: 7458-7589	REVISED:	DATE: May 11, 2005
	FILENAME: 7458PRM_SJ-FL.DWG		SHEET 2 of 4

Deg 15166



POINT	STATION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
PC1	175+01.70'	1,393,744.57'	10,287,441.68'	28°20'48.287"N	87°46'01.845"W
PT1	182+45.97'	1,394,485.21'	10,287,375.55'	28°20'45.679"N	87°45'53.349"W

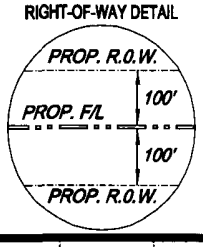
PLAN

0' 2000'

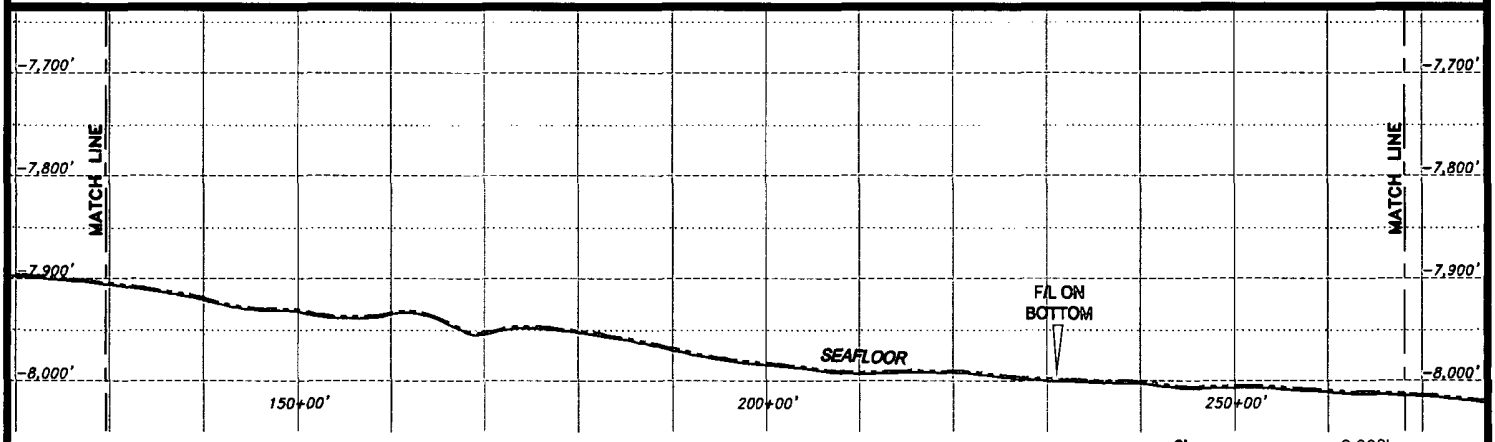
SCALE IN US SURVEY FEET

NADCON version 2.1 utilized for WGS84-NAD27 conversions.

RIGHT-OF-WAY DETAIL



GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N



PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

DATE: 05/11/2005 TIME: 17:35 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\7458PRM-SJ-FL.DWG

VERTICAL EXAGGERATION = 10

Anadarko Petroleum Corporation

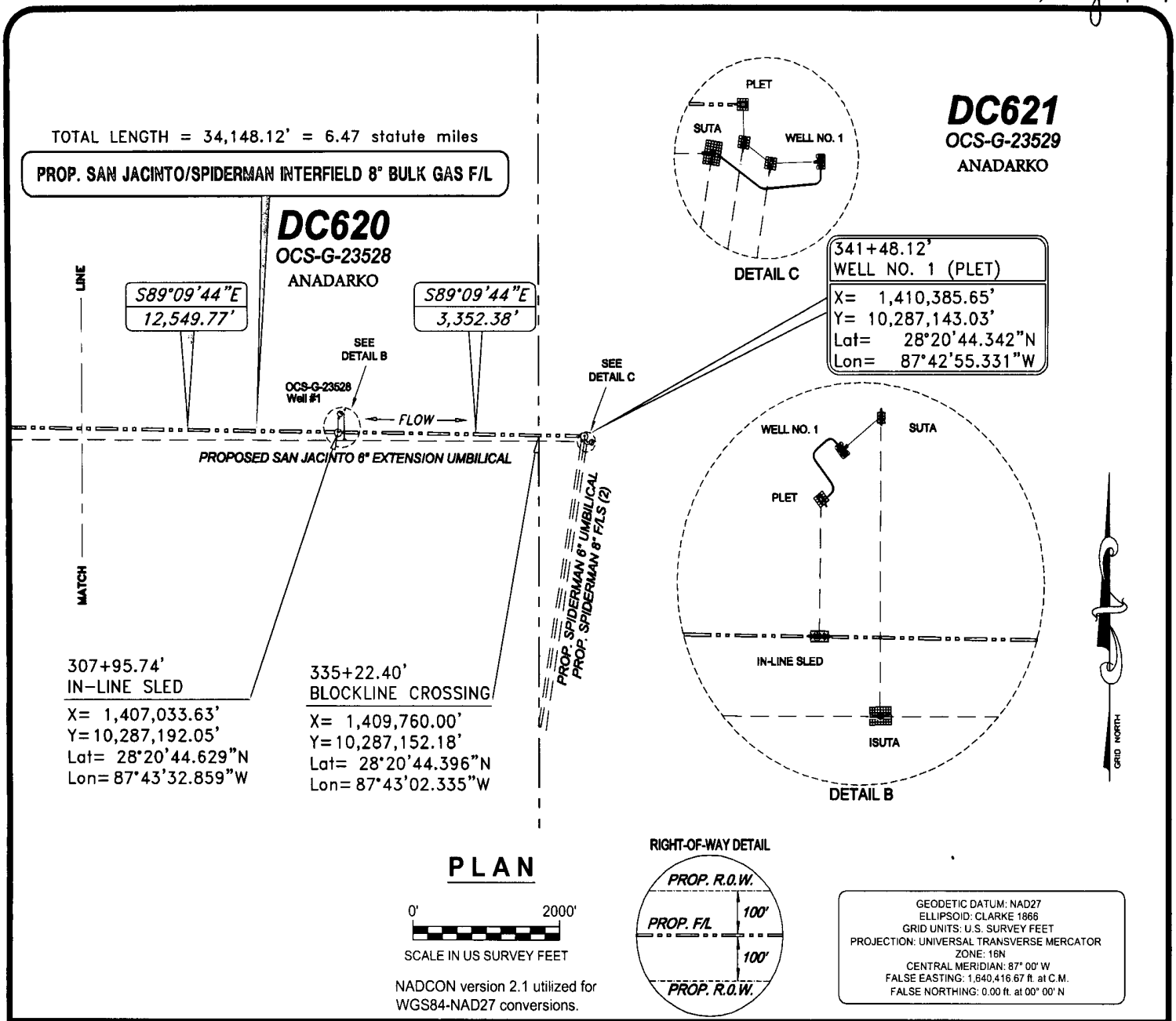
PROP. SAN JACINTO/SPIDERMAN INTERFIELD 8" BULK GAS F/L
Block 618 Well No. 1 (IN-LINE SLED) to Block 621 Well No. 1 (PLET)
Desoto Canyon Area

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

JOB No: 7458-7589 | REVISED: | DATE: May 11, 2005

FILENAME: 7458PRM_SJ-FL.DWG | SHEET 3 of 4

Seg 15164



PLAN

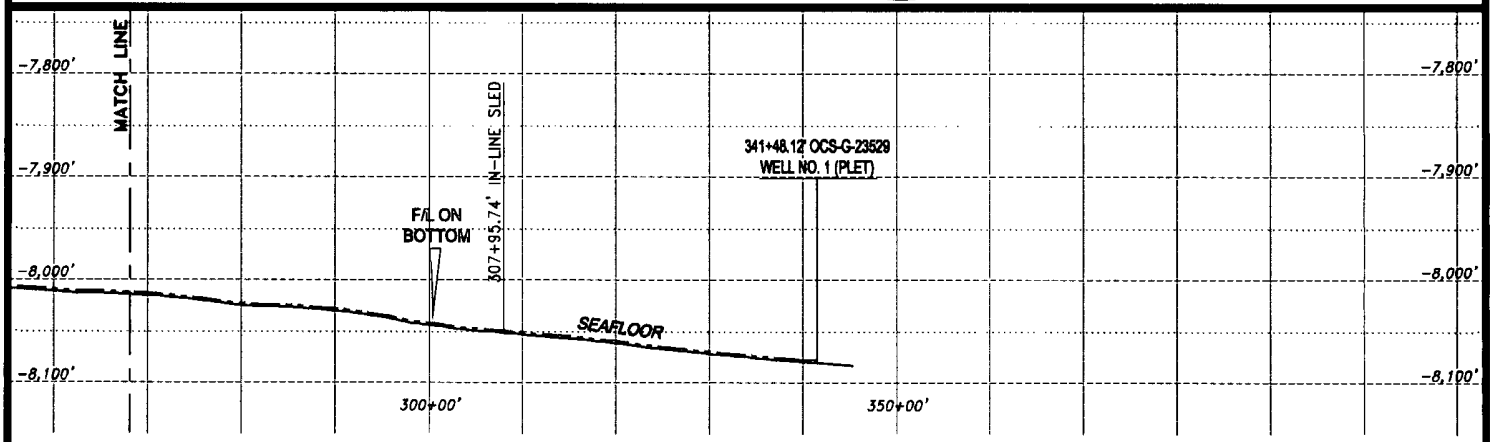
0' 2000'

SCALE IN US SURVEY FEET

NADCON version 2.1 utilized for WGS84-NAD27 conversions.

RIGHT-OF-WAY DETAIL

GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N



PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

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VERTICAL EXAGGERATION = 10

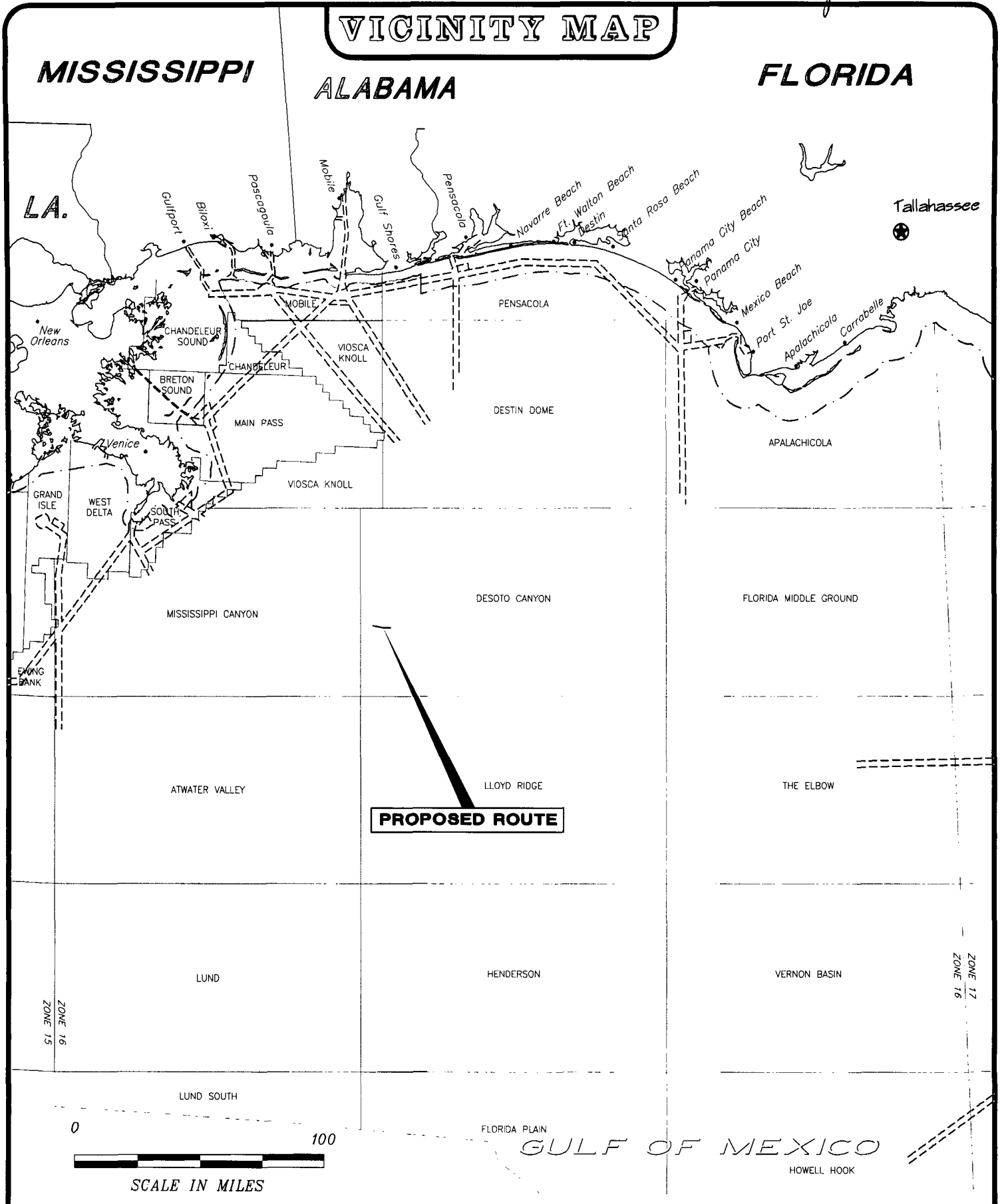
Anadarko Petroleum Corporation

PROP. SAN JACINTO/SPIDERMAN INTERFIELD 8" BULK GAS F/L
Block 618 Well No. 1 (IN-LINE SLED) to Block 621 Well No. 1 (PLET)
Desoto Canyon Area

PREPARED BY:	JOB No: 7458-7589	REVISED:	DATE: May 11, 2005
C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660	FILENAME: 7458PRM_SJ-FL.DWG		SHEET 4 of 4

Segment 15167

VICINITY MAP



DATE: 05/11/2005 TIME: 17:41 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\PRMCVR7458.DWG

Anadarko Petroleum Corporation

PROP. SAN JACINTO 6" EXTENSION UMBILICAL
Block 618 Well No. 2 (SUTA)
to Block 621 Well No. 1 (SUTA)
DeSoto Canyon Area

PREPARED BY:	JOB No: 7458-7589	REVISED:	DATE: May 11, 2005
C&C Technologies SURVEY SERVICES 730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0660	FILENAME: PRMCVR7458.DWG		SHEET 1 of 4

Seg 15167

POINT	STATION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
ISUTA	00+00.00'	1,376,456.81'	10,290,173.32'	28°21'12.216"N	87°49'15.385"W
PC1	19+71.97'	1,378,400.91'	10,289,843.00'	28°21'09.075"N	87°48'53.595"W
PT1	20+28.07'	1,378,455.92'	10,289,832.06'	28°21'08.970"N	87°48'52.978"W
PC2	39+73.25'	1,380,352.34'	10,289,399.21'	28°21'04.809"N	87°48'31.715"W
PT2	40+34.18'	1,380,412.11'	10,289,387.47'	28°21'04.697"N	87°48'31.045"W

GRID NORTH

S80°21'25"E
1,971.97'

16+46.46'
BLOCKLINE CROSSING
X= 1,378,080.00'
Y=10,289,897.53'
Lat= 28°21'09.593"N
Lon=87°48'57.192"W

CURVE 1 DATA
PI 1
X= 1,378,428.57'
Y= 10,289,838.30'
R= 1,000.00'
T= 28.06'
Δ= 03°12'51"
L= 56.10'

CURVE 2 DATA
PI 2
X= 1,380,382.05'
Y= 10,289,392.43'
R= 1,000.00'
T= 30.47'
Δ= 03°29'27"
L= 60.92'

DC619
OCS-G-23527
DOMINION

SEE DETAIL A

OCS-G-23526
Well #1

PC1
PT1

S77°08'34"E
1,945.19'

PC2
PT2

FLOW

S80°38'01"E
13,430.60'

LINE

MATCH

DC618
OCS-G-23526
DOMINION

00+00.00'
ISUTA
X= 1,376,456.81'
Y=10,290,173.32'
Lat= 28°21'12.216"N
Lon= 87°49'15.385"W

IN-LINE SLED

WELL NO. 1

DETAIL A

PROPOSED SAN JACINTO 6" EXTENSION UMBILICAL

TOTAL LENGTH = 34,149.05' = 6.47 statute miles

STATE OF LOUISIANA
RALPH A. COLEMAN
REG. No. 4691
REGISTERED
PROFESSIONAL
SURVEYOR

THE PROPOSED ROUTE IS ACCURATELY REPRESENTED. NOT CERTIFIED UNLESS SIGNED

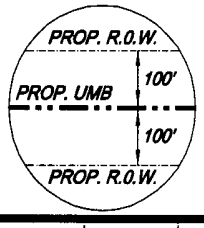
RALPH A. COLEMAN
PROFESSIONAL LAND SURVEYOR
LOUISIANA REGISTRATION No. 4691

PLAN

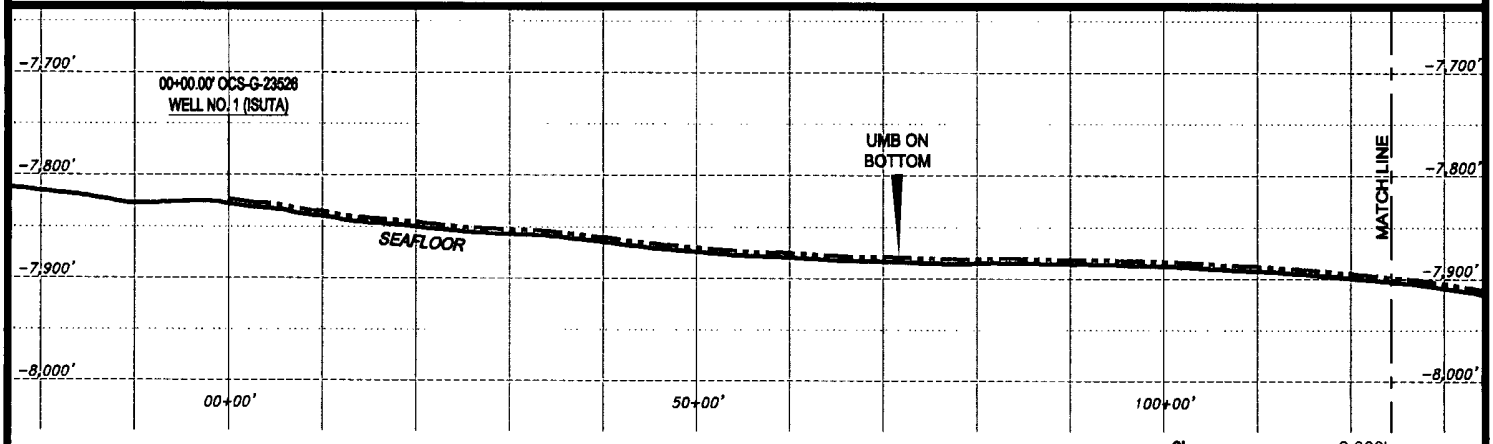
0' 2000'
SCALE IN US SURVEY FEET

NADCON version 2.1 utilized for WGS84-NAD27 conversions.

RIGHT-OF-WAY DETAIL



GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N



PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

DATE: 05/11/2005 TIME: 16:26 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\7458PRM-SJ-UMB.DWG

VERTICAL EXAGGERATION = 10

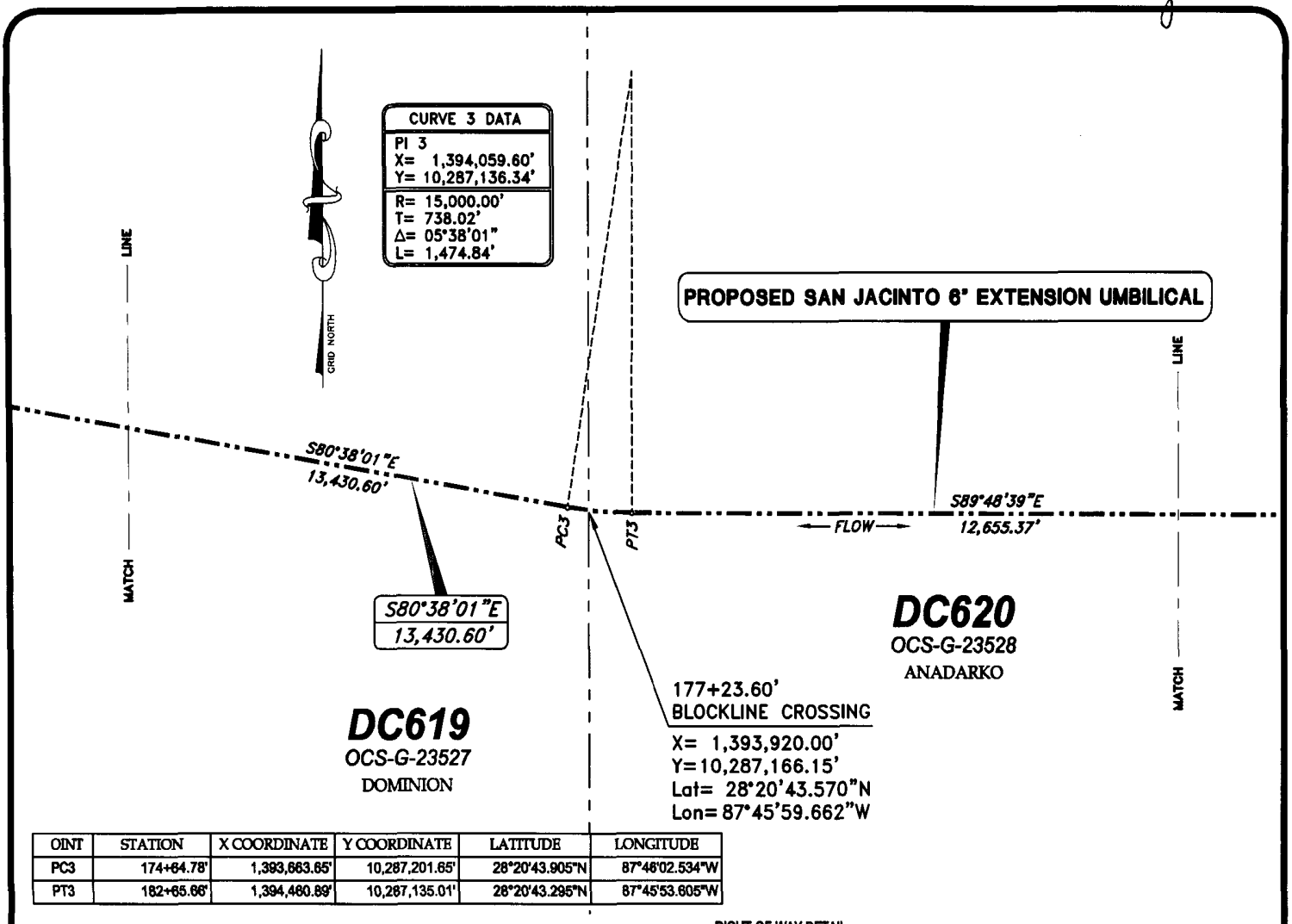
Anadarko Petroleum Corporation

PROP. SAN JACINTO 6" EXTENSION UMBILICAL
Block 618 Well No. 2 (SUTA) to Block 621 Well No. 1 (SUTA)
Desoto Canyon Area

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

JOB No: 7458-7589
FILENAME: 7458PRM_SJ-UMB.DWG
REVISED:
DATE: May 11, 2005
SHEET 2 of 4

Seg 15167



OINT	STATION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
PC3	174+64.78'	1,393,663.65'	10,287,201.65'	28°20'43.905"N	87°46'02.534"W
PT3	182+65.66'	1,394,460.89'	10,287,135.01'	28°20'43.295"N	87°45'53.605"W

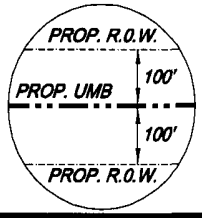
PLAN

0' 2000'

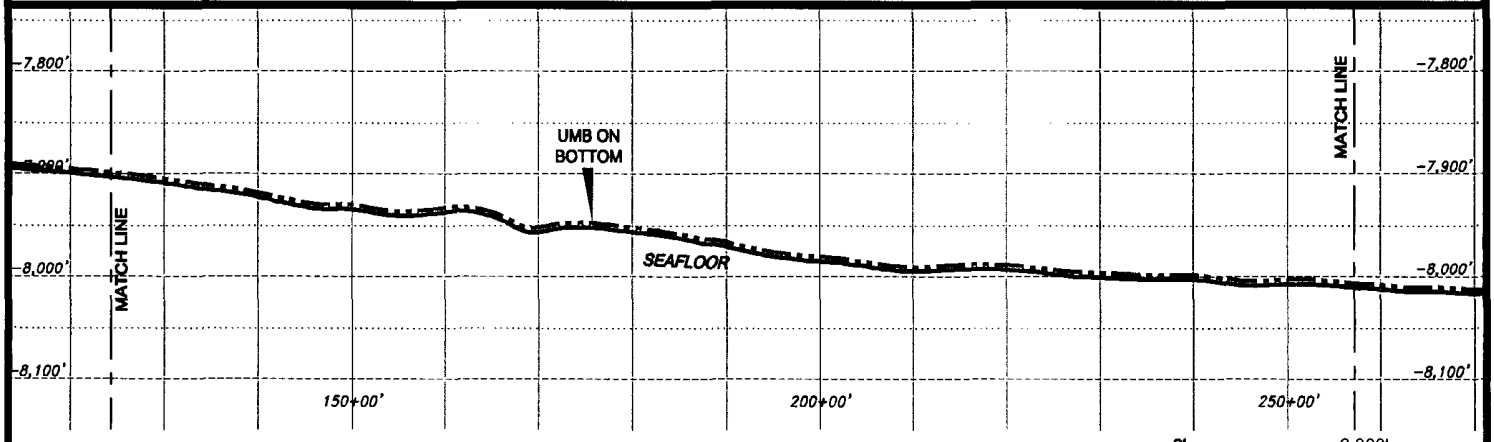
SCALE IN US SURVEY FEET

NADCON version 2.1 utilized for WGS84-NAD27 conversions.

RIGHT-OF-WAY DETAIL



GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N



PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

DATE: 05/11/2005 TIME: 16:26 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\7458PRM-SJ-UMB.DWG VERTICAL EXAGGERATION = 10

Anadarko Petroleum Corporation

PROP. SAN JACINTO 6" EXTENSION UMBILICAL
Block 618 Well No. 2 (SUTA) to Block 621 Well No. 1 (SUTA)
Desoto Canyon Area

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

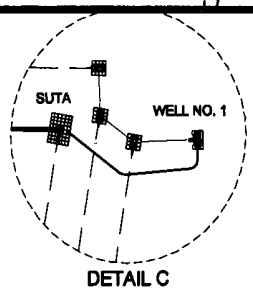
JOB No: 7458-7589
FILENAME: 7458PRM_SJ-UMB.DWG
REVISED:
DATE: May 11, 2005
SHEET 3 of 4

Aeg 15167

POINT	STATION	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
ISUTA	309+21.03'	1,407,116.19'	10,287,093.25'	28°20'43.656"N	87°43'31.929"W
SUTA	341+49.05'	1,410,344.20'	10,287,082.59'	28°20'43.741"N	87°42'55.791"W

TOTAL LENGTH = 34,149.05' = 6.47 statute miles

PROPOSED SAN JACINTO 6" EXTENSION UMBILICAL



DETAIL C

DC620
OCS-G-23528
ANADARKO

DC621
OCS-G-23529
ANADARKO

341+49.05' OCS-G-23529
WELL NO. 1 (SUTA)
X= 1,410,344.20'
Y= 10,287,082.59'
Lat= 28°20'43.741"N
Lon= 87°42'55.791"W

GRID NORTH

LINE

MATCH

SEE DETAIL B

OCS-G-23528 Well #1

SEE DETAIL C

FLOW

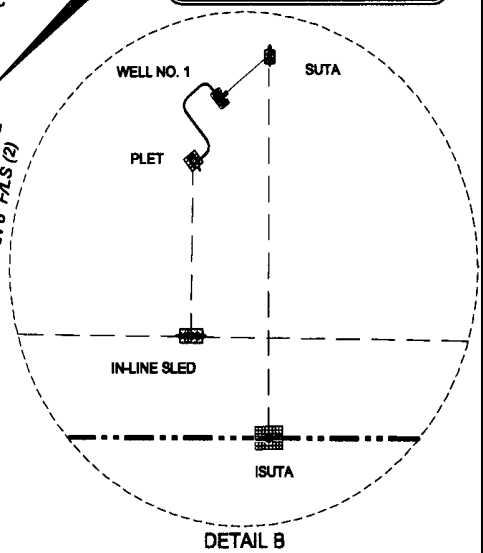
S89°48'39"E 3,228.02'

PROP. SPIDERMAN 6" UMBILICAL
PROP. SPIDERMAN 8" FLS (2)

S89°48'39"E 12,655.37'

309+21.03'
ISUTA
X= 1,407,116.19'
Y=10,287,093.25'
Lat= 28°20'43.656"N
Lon=87°43'31.929"W

335+64.85'
BLOCKLINE CROSSING
X= 1,409,760.00'
Y=10,287,084.52'
Lat= 28°20'43.726"N
Lon=87°43'02.331"W



DETAIL B

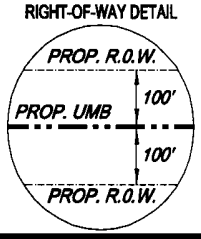
PLAN

0' 2000'

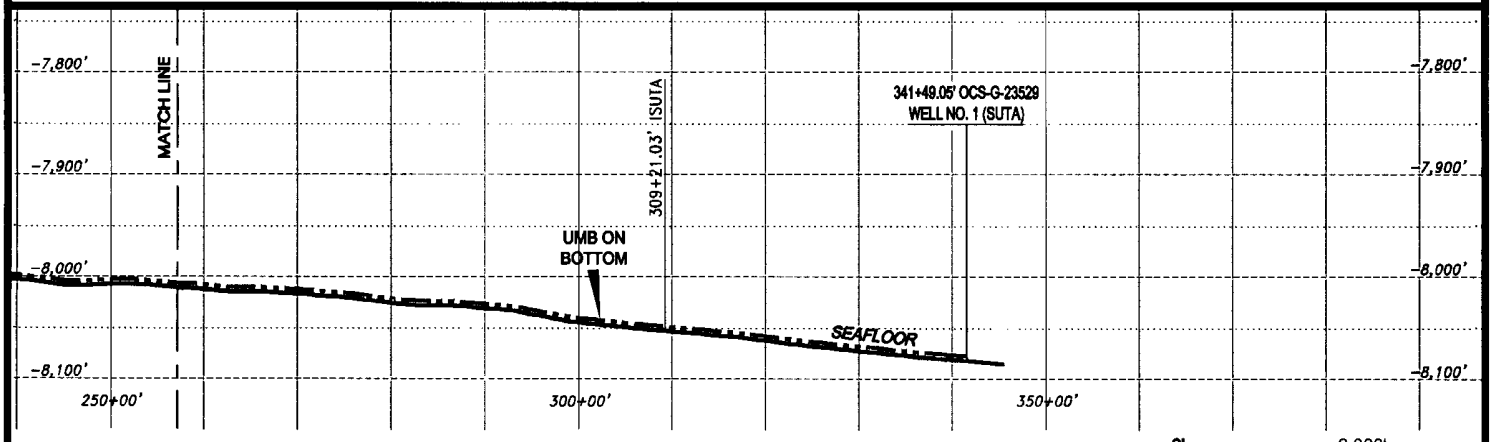
SCALE IN US SURVEY FEET

NADCON version 2.1 utilized for WGS84-NAD27 conversions.

RIGHT-OF-WAY DETAIL



GEODETIC DATUM: NAD27
ELLIPSOID: CLARKE 1866
GRID UNITS: U.S. SURVEY FEET
PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
ZONE: 16N
CENTRAL MERIDIAN: 87° 00' W
FALSE EASTING: 1,640,416.67 ft. at C.M.
FALSE NORTHING: 0.00 ft. at 00° 00' N



PROFILE

HORIZONTAL SCALE: 0' 2,000'
VERTICAL SCALE: 0' 200'

DATE: 05/11/2005 TIME: 16:26 FILENAME: J:\7458-7589\PERMITS\SAN JACINTO\7458PRM-SJ-UMB.DWG

VERTICAL EXAGGERATION = 10

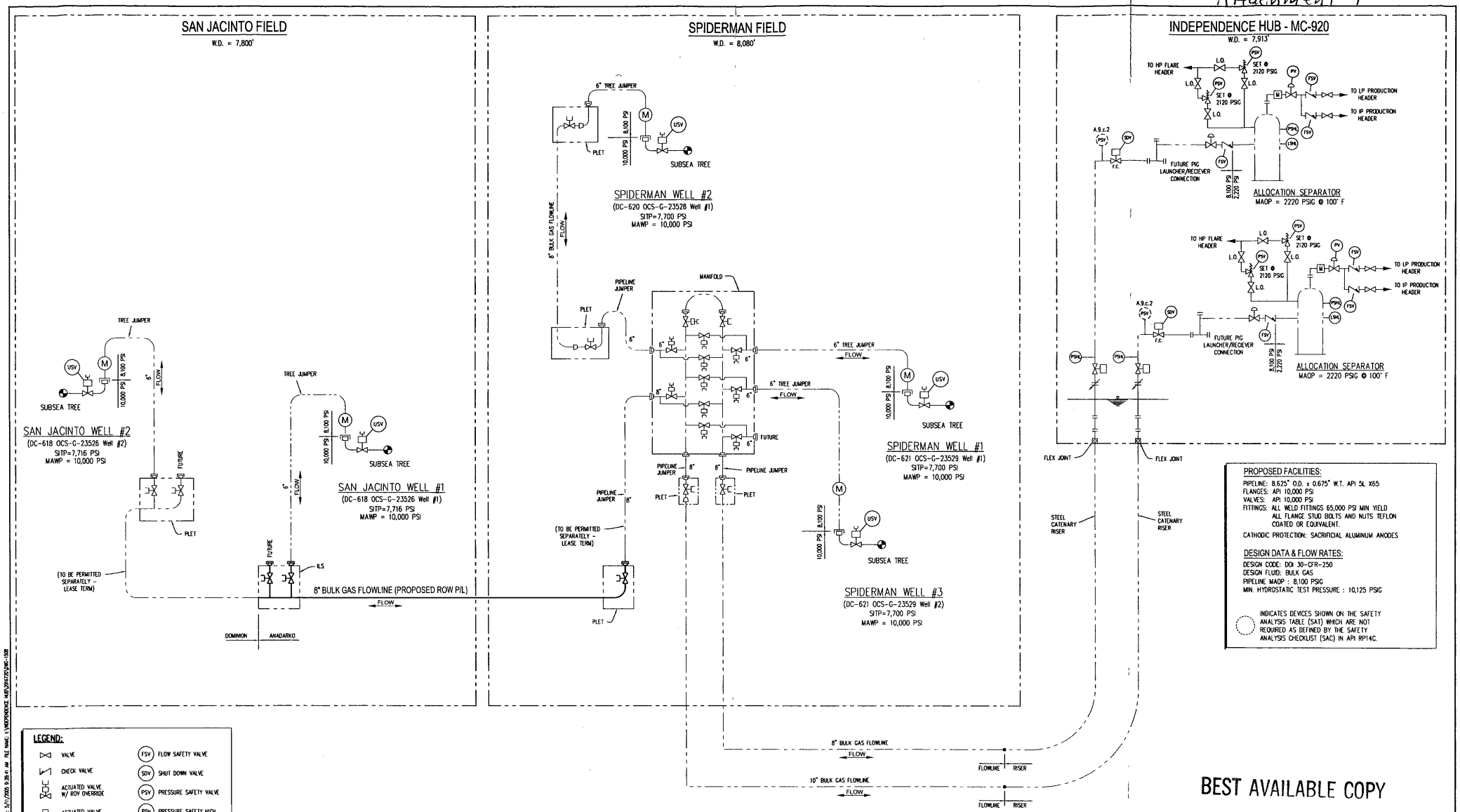
Anadarko Petroleum Corporation

PROP. SAN JACINTO 6" EXTENSION UMBILICAL
Block 618 Well No. 2 (SUTA) to Block 621 Well No. 1 (SUTA)
Desoto Canyon Area

PREPARED BY: C&C Technologies SURVEY SERVICES
730 E. KALISTE SALOOM ROAD, LAFAYETTE, LA (337) 261-0880

JOB No: 7458-7589
FILENAME: 7458PRM_SJ-UMB.DWG
REVISED:
DATE: May 11, 2005
SHEET 4 of 4

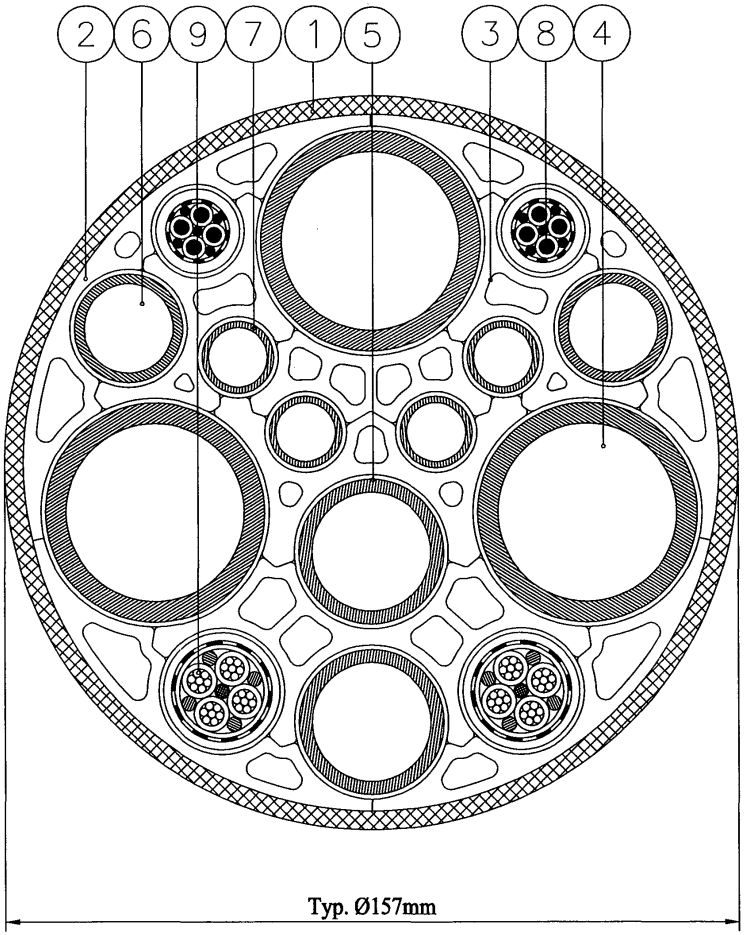
Attachment F



BEST AVAILABLE COPY

BEST AVAILABLE COPY

Attachment G



TECHNICAL DATA

Umbilical weight in air, empty:	300 N/m
Umbilical weight in air, fluid filled:	363 N/m
Umbilical weight in water, fluid filled:	168 N/m
Design tension capacity of umbilical:	1016 kN
Breaking strenght of umbilical:	1969 kN

	2	9	Electric Cable	16mm2 TSQ OD=25 mm			
	2	8	Electric Cable	6mm2 TSQ OD=17.5 mm			
	4	7	Steel Tube	1/2" x 1.13 mm 10000 psi			Super Duplex
	2	6	Steel Tube	3/4" x 1.84 mm 10000 psi			Super Duplex
	2	5	Steel Tube	1" x 2.61 mm 10000 psi			Super Duplex
	3	4	Steel Tube	1 1/2" x 3.95 mm 10000 psi			Super Duplex
	5	3	Intemediate Conduit				PVC
	4	2	Outer Conduit				PVC
	1	1	Outer Sheathing.				PE
TK/PC Best.nr./Purch.No.	Ant./Qty	Pos. nr. / Pt.NO	Navn / Type / Name / Type	Dimensjon / Dimension	Kg/stk / Kg/each	Referanse / Reference	Materiale / Material

Additional Information/Notes

Date	Drawn	Checked	Approved
29.03.2005	MKa		

Reason for issue: RE-ISSUED FOR IDC

Title: MC-920 POWER HUB SPIDERMAN & VORTEX STATIC & EXTENSION

CAD Ref.: Autocad

Scale: 1:1

Size: A3

Drawing no.: 11-MB0262-00

Rev.no.: B

Port no.:

Sheet No.: 1 / 1

Kværner Oilfield Products a.s
Prof. Kohts vei 5,P.O. Box 94, N-1325 Lysaker Norway

KVÆRNER™

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

VIA CERTIFIED MAIL – RETURN RECEIPT

May 25, 2005

Dominion Exploration and Production, Inc.
1450 Poydras Street
New Orleans, LA 70112-6000

ATTN: Mitch Ackal

RE: Application for a 8" Bulk Gas Right-of-Way Pipeline and associated umbilical to be Installed in and/or Through Blocks 618 and 619 DeSoto Canyon Area, OCS Federal Waters, Gulf of Mexico, Offshore

Mr. Ackal:

In accordance with 30 CFR, Part 250.1010(c), Anadarko Petroleum Corporation hereby gives notice we have made application with the Minerals Management Service to install the referenced 8" bulk gas right-of-way pipeline with associated umbilical. The proposed pipeline crosses Dominion's DeSoto Canyon Area Blocks 618 and 619, as shown on the attached application.

We hereby request a letter of no objection to this proposal. Please send your response to my attention at the address above. I can be reached at (832) 636-8758 if you have any questions. Your prompt response would be greatly appreciated.

Sincerely,

Susan Hathcock

Susan Hathcock
Supervisor, Regulatory & Environmental

SH:sj

Enclosures

Attachment I

CZM CONSISTENCY CERTIFICATION

The Louisiana Coastal Zone Management Program includes the following: general coastal use guidelines, levees, linear facilities (pipelines); dredged soil deposition; shoreline modifications, surface alterations, hydrologic and sediment transport modifications, waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas, or other mineral activities; and air and water quality.

Relevant enforceable policies were considered in certifying consistency for Louisiana.

The Florida Coastal Zone Management Program includes the following: The Florida Coastal Zone Management Act authorized the development of the coastal management program. A network of agencies comprises the coastal management agencies to represent a balanced statewide perspective including interests in coastal development, professional/academic coastal science, commercial fishing, environmental/coastal conservation, local government, coast/marine commerce, energy development, recreational fishing/boating, regional planning councils, water management districts, and environmental education. The purpose of the program is to protect historic and archaeological resources, freshwater fish, birds, and both upland game and no-game animals, including endangered species; development, maintenance, and protection of the transportation systems, and the saltwater fisheries and marine mammals.

CZM Consistency Certifications for Louisiana and Florida are enclosed.

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

May 25, 2005

Coastal Management Division
ATTN: OCS Plans
P. O. Box 44487
Baton Rouge, LA 70804-4487

RE: CZM Consistency Certification
8" Bulk Gas Pipeline and Associated Umbilical Right-of-Way Application
From Desoto Canyon Block 618 (San Jacinto) to Desoto Canyon 621 (Spiderman)

Gentlemen:

Enclosed is a copy of Anadarko Petroleum Corporation's application to the Minerals Management Service for an 8" bulk gas pipeline right-of-way to be installed in and/or through Desoto Canyon Blocks 618, 619, 620, and 621. The associated umbilical is to be installed in and/or through Desoto Canyon Blocks 618, 619, 629, and 621. The onshore support base for installation of the pipeline is Fourchon, Louisiana. Our check in the amount of $300.00 is enclosed covering the processing fee for a federal consistency determination for this right-of-way.

If you should have any questions, please call me at 832/636-8758.

Sincerely,

Susan Hathcock

Susan Hathcock
Regulatory & Environmental Supervisor

SH/me

Enclosures (2)

COASTAL ZONE MANAGEMENT PROGRAM
CONSISTENCY CERTIFICATION

From Desoto Canyon Block 618

To Desoto Canyon Block 621

6.47
Length (miles)

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

Anadarko Petroleum Corporation
Right-of-Way Applicant

Certifying Official

5/25/05
Date

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

VIA CERTIFIED MAIL – RETURN RECEIPT

May 25, 2005

Dominion Exploration and Production, Inc.
1450 Poydras Street
New Orleans, LA 70112-6000

ATTN: Mitch Ackal

RE: Application for a 8" Bulk Gas Right-of-Way Pipeline and associated umbilical to be Installed in and/or Through Blocks 618 and 619 DeSoto Canyon Area, OCS Federal Waters, Gulf of Mexico, Offshore

Mr. Ackal:

In accordance with 30 CFR, Part 250.1010(c), Anadarko Petroleum Corporation hereby gives notice we have made application with the Minerals Management Service to install the referenced 8" bulk gas right-of-way pipeline with associated umbilical. The proposed pipeline crosses Dominion's DeSoto Canyon Area Blocks 618 and 619, as shown on the attached application.

We hereby request a letter of no objection to this proposal. Please send your response to my attention at the address above. I can be reached at (832) 636-8758 if you have any questions. Your prompt response would be greatly appreciated.

Sincerely,

Susan Hathcock

Susan Hathcock
Supervisor, Regulatory & Environmental

SH:sj

Enclosures

BEST AVAILABLE COPY

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Dominion Exploration
and Production
1450 Poydras Street
New Orleans, LA
70112-6000
ATTN: Mitch Nickel

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

☐ Agent
☐ Addressee

B. Received by (Printed Name) V. Stevenson

C. Date of Delivery 5-31-05

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7002 2410 0005 3161 8242

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

Attachment I

CZM CONSISTENCY CERTIFICATION

The Louisiana Coastal Zone Management Program includes the following: general coastal use guidelines, levees, linear facilities (pipelines); dredged soil deposition; shoreline modifications, surface alterations, hydrologic and sediment transport modifications, waste disposal; uses that result in the alteration of waters draining into coastal waters; oil, gas, or other mineral activities; and air and water quality.

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CZM Consistency Certifications for Louisiana and Florida are enclosed.

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

May 25, 2005

Coastal Management Division
ATTN: OCS Plans
P. O. Box 44487
Baton Rouge, LA 70804-4487

RE: CZM Consistency Certification
8" Bulk Gas Pipeline and Associated Umbilical Right-of-Way Application
From Desoto Canyon Block 618 (San Jacinto) to Desoto Canyon 621 (Spiderman)

Gentlemen:

Enclosed is a copy of Anadarko Petroleum Corporation's application to the Minerals Management Service for an 8" bulk gas pipeline right-of-way to be installed in and/or through Desoto Canyon Blocks 618, 619, 620, and 621. The associated umbilical is to be installed in and/or through Desoto Canyon Blocks 618, 619, 629, and 621. The onshore support base for installation of the pipeline is Fourchon, Louisiana. Our check in the amount of $300.00 is enclosed covering the processing fee for a federal consistency determination for this right-of-way.

If you should have any questions, please call me at 832/636-8758.

Sincerely,

Susan Hathcock
Regulatory & Environmental Supervisor

SH/me

Enclosures (2)

COASTAL ZONE MANAGEMENT PROGRAM
CONSISTENCY CERTIFICATION

From Desoto Canyon Block 618

To Desoto Canyon Block 621

6.47
Length (miles)

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

Anadarko Petroleum Corporation
Right-of-Way Applicant

Certifying Official

5/25/05
Date

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

May 25, 2005

Ms. Lynn Griffin
Coastal Program Administrator
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Stop 47
Tallahassee, FL 32399-3000

RE: CZM Consistency Certification
8" Bulk Gas Pipeline and Associated Umbilical Right-of-Way Application
From Desoto Canyon Block 618 (San Jacinto) Well No. 2 In field Sled to Desoto Canyon 621 (Spiderman) Manifold

Gentlemen:

Enclosed are seven (7) copies of Anadarko Petroleum Corporation's application to the Minerals Management Service for an 8" bulk gas pipeline right-of-way with associated umbilical to be installed in and/or through Desoto Canyon Blocks 618, 619, 620 and 621. The onshore support base for installation of the pipeline is Fourchon, Louisiana.

If you should have any questions, please call me at 832/636-8758.

Sincerely,

Susan Hathcock

Susan Hathcock
Regulatory & Environmental Supervisor

SH/me

Enclosures (1)

CONSISTENCY CERTIFICATION

Anadarko Petroleum Corporation's Certification of Consistency with the State of Florida Coastal Management Program

INTRODUCTION

This Consistency Certification is an evaluation by Anadarko Petroleum Corporation (APC) of its proposed right-of-way (ROW) pipeline between APC's proposed production in-line sled in Desoto Canyon Area Block 618 and the Desoto Canyon Block 621 manifold for any reasonably foreseeable coastal effects on the land, water uses, or natural resources of the coastal zone of Florida, pursuant to the enforceable policies of the Florida Coastal Management Program (FCMP).

APC plans to lay a pipeline and an associated umbilical between its in-line sled in Desoto Canyon Block 618 (San Jacinto) and the manifold in Desoto Canyon Block 621. The pipeline is an 8-inch east flow pipeline. The activities proposed in the ROW pipeline application will occur in outer continental shelf (OCS) waters, offshore Alabama, approximately 136 miles from the nearest Florida shoreline. APC believes that the planned activities will have little, if any, effect beyond the area immediately adjacent to the proposed activity sites, and that the possibility of any impacts to Florida's coastal zone is remote. However, APC has undertaken this consistency evaluation and believes that the proposed activities comply with the enforceable policies of the FCMP and will be conducted in a manner consistent with this Program.

The activities will be conducted in accordance with Minerals Management Service (MMS) and U.S. Environmental Protection Agency (USEPA) regulations, applicable Notices to Lessees (NTLs), conditions in the approved permits, and lease stipulations. All required Federal permits will be obtained, and all activities will be conducted in compliance with such regulations, NTLs, conditions, and stipulations.

CONSISTENCY ANALYSIS

The FCMP is authorized by the Florida Coastal Management Act, Chapter 380, Land and Water Management, Part II, Coastal Planning and Management, of the Florida Statutes. For this consistency certification, APC has analyzed the proposed action in relation to 16 chapters of the Florida Statutes identified by the State as "core enforceable policies" having specific applicability to offshore oil and gas activity:

(1) Chapter 161 – Beach and Shore Preservation
(2) Chapter 252 – Emergency Management
(3) Chapter 253 – State Lands
(4) Chapter 258 – State Parks and Preserves
(5) Chapter 259 – Land Acquisitions for Conservation or Recreation
(6) Chapter 260 – Recreational Trails System
(7) Chapter 267 – Archives, History, and Records Management
(8) Chapter 288 – Commercial Development and Capital Improvements

(9) Chapter 370 – Saltwater Fisheries
(10) Chapter 372 – Wildlife
(11) Chapter 373 – Water Resources
(12) Chapter 375 – Outdoor Recreation and Conservation
(13) Chapter 376 – Pollution Discharge Prevention and Removal
(14) Chapter 377 – Energy Resources
(15) Chapter 403 – Environmental Control
(16) Chapter 582 – Soil and Water Conservation

1. Chapter 161 – Beach and Shore Preservation

The enforceable policies in this chapter recognize that coastal areas are among the State's most valuable natural, aesthetic, and economic resources and that they protect and provide habitat for a variety of plant and animal life. The State is required to protect beach and dune systems from imprudent activities that could weaken, damage, or destroy the integrity of the system, manage coastal sediments to reduce erosion, and restore and maintain critically eroding beaches. The State also designates coastal areas used, or likely to be used, by sea turtles for nesting and prohibits the removal of vegetative cover that binds sand. This chapter includes Part I, Regulation of Construction, Reconstruction, and Other Physical Activity; Part II, Beach and Shore Preservation Districts; and Part III, Coastal Zone Protection.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana during the proposed operations, there will be no new construction, dredging, or filling on Florida's lands or waters that could weaken, damage, or destroy the integrity of the system or cause erosion of beaches. In addition, oil spill impacts on Florida beaches and other coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional Oil Spill Response Plan (OSRP), which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions included in APC's plan are consistent with the core policies of protecting beach and dune systems. Therefore, the proposed activities are consistent with Chapter 161.

2. Chapter 252 – Emergency Management

The enforceable policies of this chapter direct the State to reduce the vulnerability of its people and property to natural and manmade disasters; prepare for, respond to, and reduce the impacts of natural and manmade disasters; and decrease the time and resources needed to recover from disasters. Disaster mitigation is necessary to ensure the common defense of Floridians' lives and to protect the public peace, health, and safety. The policies provide the means to assist in the prevention or mitigation of emergencies that may be caused or aggravated by the inadequate planning or regulation of facilities and land uses. State agencies are directed to keep land uses and facility construction under continuing study and identify areas that are particularly susceptible to natural or manmade catastrophic occurrences.

The proposed activities do not involve construction or operation of any facilities in the State of Florida. Therefore, a large oil spill is the only emergency that is considered relevant to this

analysis. APC has developed a Sub-Regional OSRP that outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. An oil spill is highly unlikely to reach Florida waters or shorelines due to (1) the measures detailed in APC's Sub-Regional OSRP and (2) the distance from shore (approximately 136 miles). The precautions included in APC's plan are consistent with the core policies of preparing for and responding to an oil spill and reducing the vulnerability of Florida's people and resources to impacts if such a spill occurred. Therefore, the proposed activities are consistent with Chapter 252.

3. Chapter 253 – State Lands

This chapter, in part, defines State-owned and State-managed lands and grants authority to acquire and lease lands and to grant rights-of-way and easements. The enforceable policies guide the management of State-owned and sovereign submerged lands and property by the Board of Trustees of the Internal Improvement Trust Fund (Trustees). Lands acquired for preservation, conservation, and recreation serve the public interest by contributing to the public health, welfare, and economy. In carrying out the requirements of this statute, the Trustees are directed to take necessary action to fully conserve and protect State lands, maintain natural conditions, protect and enhance natural areas and ecosystems, prevent damage and depredation, and preserve archaeological and historical resources. All submerged lands are considered single-use lands to be maintained in natural condition for the propagation of fish and wildlife and public recreation. Where multiple-uses are permitted, ecosystem integrity, recreational benefits, and wildlife values are conserved and protected.

During the operations along the pipeline/umbilical route between Desoto Canyon Block 618 and Desoto Canyon Block 621, APC will not seek to lease or acquire rights-of-way across Florida State lands. The proposed operations will be conducted offshore Alabama, and at existing dock and port facilities located in the Port Fourchon, Louisiana area and helicopter facilities at Galliano, Louisiana. There will be no pipeline construction requiring acquisition of rights-of-way or easements on Florida State lands. In addition, oil spill impacts on State-owned and managed lands are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies to fully conserve and protect State lands and other natural areas and ecosystems. Therefore, the proposed activities are consistent with Chapter 253.

4. Chapter 258 – State Parks and Preserves

State parks, aquatic preserves, and recreation areas are acquired to exemplify the State's natural values and to ensure that these values are conserved for all time. Parks and preserves are managed for the non-depleting use, enjoyment, and benefit of Floridians and visitors and to contribute to the State's tourist appeal. Aquatic preserves are recognized as having exceptional biological, aesthetic, and scientific value and are set aside for the benefit of future generations. Disruptive physical activities and polluting discharges are highly restricted in aquatic preserves. State managed wild and scenic rivers possess exceptionally remarkable and unique ecological,

fish and wildlife, and recreational values and are designated for permanent preservation and enhancement for both the present and future.

Chapter 258 specifies limitations on dredge-and-fill activities, discharges, erection of structures, and drilling for oil or gas within aquatic preserves. APC's proposed activities along the proposed pipeline and umbilical route are not within or adjacent to any State parks or aquatic preserves. Hydrostatic testing discharges for the proposed activity will be governed by the National Pollutant Discharge Elimination System (NPDES) General Permit or an Individual Permit; impacts will be localized in deep, offshore waters, and will not have any effect on State parks, aquatic preserves, and recreation areas. Finally, oil spill impacts in these coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of preserving and protecting the natural resources and aesthetic values of Florida's State parks, aquatic preserves, and recreation areas. Therefore, the proposed activities are consistent with Chapter 258.

5. Chapter 259 – Land Acquisitions for Conservation or Recreation

This chapter discusses the "Land Conservation Act" and the acquisition of lands or water areas for preservation, conservation, and recreational purposes. The chapter indicates an area is of special importance to the State if it involves an endangered or natural resource in imminent danger of development, is of unique value to the State, will result in irreparable loss to the State, or will impair the State's ability to manage or protect other State-owned lands. The enforceable policies guide the acquisition and management of lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities for the benefit of future generations. Florida's legislature and citizens have made a tremendous financial commitment to long-term land acquisitions that will preserve and restore unique ecosystems, habitats, water resources, and recreational lands.

APC will be using existing dock and port facilities in Port Fourchon, Louisiana and helicopter facilities in Galliano, Louisiana during the proposed activities. Therefore, there will be no new development, construction, dredging, or filling on Florida's lands or waters. In addition, hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not have any effect on Florida lands being acquired or managed for preservation, conservation, or recreational purposes. Finally, oil spill impacts in these coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of managing lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities. Therefore, the proposed activities are consistent with Chapter 259.

6. Chapter 260 – Recreational Trails System

This chapter discusses the "Florida Greenways and Trails Act," and the State policies to conserve, develop, and use its natural resources for healthful and recreational purposes by the establishment of a "Florida Greenways and Trails System." The System serves to provide recreational opportunities, including, among others, canoeing, jogging, and historical and archaeological interpretation, by acquiring designated lands and waterways for open space to benefit environmentally sensitive lands and wildlife.

As APC will be using existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no new construction, dredging, or filling on Florida's lands or waters, and no motorized watercraft will conduct any operations within or adjacent to any defined canoe trail necessary to ensure the safe use of a water body for canoes. Therefore, the proposed activities are consistent with the core policies of Chapter 260.

7. Chapter 267 – Archives, History, and Records Management

This chapter discusses the "Florida Historical Resources Act," the State policy to locate, inventory, and evaluate historic properties, and the preservation by the Division of Historical Resources of the Department of State, of all historical property, including sunken or abandoned ships with intrinsic historical or archaeological value. The enforceable policies recognize the State's rich and unique heritage of historic resources and direct the State to locate, acquire, protect, preserve, operate, and interpret historic and archaeological resources for the benefit of current and future generations of Floridians. Objects or artifacts with intrinsic historic or archaeological value located on, or abandoned on, State-owned lands or State-owned submerged lands belong to the citizens of the State. The Act operates in conjunction with the National Historic Preservation Act of 1966 to require State and Federal agencies to consider the effect of their direct or indirect actions on historic and archaeological resources. These resources cannot be destroyed or altered unless no prudent alternative exists. Unavoidable impacts must be mitigated.

In compliance with MMS NTL 98-20, APC engaged C & C Technologies, Inc. (C&C) to evaluate 3-D seismic data in the preparation of a Shallow Hazards Report, in order to identify and assess the seafloor and shallow geologic conditions along the pipeline/umbilical route.

The blocks along the pipeline/umbilical route are not on the MMS list of blocks determined to have a high probability of either prehistoric or historical archaeological resources. Therefore, no archaeological survey or report is required under NTL 2002-G01. It is highly unlikely that objects or artifacts with intrinsic historic or archaeological value would be affected by APC's activities. Therefore, the proposed activities are consistent with the core policies of Chapter 267.

C&C delineated 18 unidentified sonar targets during the route survey. The locations of all unidentified side-scan sonar contacts as well as manmade features will be noted and avoided during the pipeline and umbilical installation.

8. Chapter 288 – Commercial Development and Capital Improvements

Chapter 288 establishes enforceable policies that promote and develop the general business, trade, and tourism components of the State economy. The policies include requirements to protect and promote the natural, coastal, historical, and cultural tourism assets of the State, foster the development of nature-based tourism and recreation, and upgrade the image of Florida as a quality destination. Natural resource-based tourism and recreational activities are critical sectors of Florida's economy. The needs of the environment must be balanced with the need for growth and economic development.

As APC will be using existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana during the proposed operations, there will be no activities conducted in Florida that would affect the general business, trade, or tourism components of the State economy. There will be no project-associated vessel or aircraft traffic in Florida waters, and there are no plans to purchase supplies or equipment in Florida. The project area is at least 136 miles from the nearest Florida shoreline, and activities will not be visible from the coast or Florida State waters. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently washing up on beaches. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of protecting the natural, coastal, historical, and cultural tourism assets of the State and maintaining the image of Florida as a quality destination. Therefore, the proposed activities are consistent with Chapter 288.

9. Chapter 370 – Saltwater Fisheries

The enforceable policies of this chapter direct the State to conserve and manage its renewable marine fishery resources through the protection and management of marine habitat and saltwater fisheries. The paramount conservation and management objective is the continuing health and abundance of the resource. Best available information must be used to manage and protect the State's marine, crustacean, shellfish, and finfish resources and to regulate the commercial and recreational use of the State's saltwater fisheries to ensure optimum sustained benefits to the people of the State.

Hydrostatic testing discharges will be in compliance with the standards imposed by the NPDES General Permit or an Individual Permit. Water quality is expected to quickly return to normal in the area after operations have been completed. Due to the low toxicity and rapid dispersion of discharges, little or no impact on water column biota is likely, including fish larvae that recruit to nearshore nursery areas.

APC's Sub-Regional OSRP outlines response actions for specific hypothetical spill events. The Sub-Regional OSRP makes provisions for the use of a dispersant by boat or aerial application, but notes that before a dispersant can be applied, Federal and State authorities must grant permission. Additional items that are addressed in the plan include provisions for inspection and maintenance of response equipment; required spill response drills; procedures for spill notification to government agencies; inventories of locally and nationally available response equipment; hierarchy of response team organization; provisions for disposal of wastes; and procedures for monitoring and predicting spill movement. If an oil spill should occur, APC's Sub-Regional OSRP addresses plans and procedures for containment, recovery, and removal. The precautions in APC's plan are consistent with the core policies of conserving and protecting marine habitat and saltwater fisheries and maintaining the continuing health and abundance of the resource. Therefore, APC's proposed activities are consistent with Chapter 370.

10. Chapter 372 – Wildlife

This chapter discusses the "Florida Endangered and Threatened Species Act" and its implementation by the Fish and Wildlife Conservation Commission to conserve and protect the fish and wildlife resources of the State, particularly those species defined as endangered or threatened. The Fish and Wildlife Conservation Commission has established a Wildlife Habitat Program, and a Conservation and Recreation Lands Program Trust Fund, for acquiring and managing lands for the conservation of fish and wildlife. The enforceable policies direct the State to conserve its diverse fish and wildlife resources. Florida has more endangered or threatened species than any other continental state; therefore, the protection of species defined as endangered or threatened is emphasized. State lands that provide habitat needed by these species shall be maintained and enhanced for their value as fish and wildlife habitat. Substances thrown, spilled, drained, or discharged into fresh waters that injure or kill fish are expressly prohibited.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no new construction, dredging, or filling on Florida's lands or waters to affect wildlife habitats or recreation lands. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently endangering Florida wildlife. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving Florida's fish and wildlife resources, including endangered or threatened species. Therefore, the proposed activities are consistent with Chapter 372.

11. Chapter 373 – Water Resources

This chapter establishes enforceable policies that guide the management and protection of water resources, water quality, and environmental quality. The policies address the conservation of surface and ground waters for full beneficial use; sustainable water management; preservation of natural resources, fish, and wildlife; protecting public land; and promoting the health and general welfare of Floridians. The State manages and conserves water and related natural resources by determining whether activities will unreasonably consume water, degrade water quality, or adversely affect environmental values such as protected species habitat, recreational pursuits, and marine productivity.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no usage of Florida water resources and no new construction, dredging, or filling on Florida's lands or waters to affect water quality, protected habitat, recreational pursuits, or marine productivity. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. In addition, oil spill impacts on Florida water resources are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving surface and ground waters for full beneficial use and protecting natural resources, fish, wildlife, and public lands. Therefore, the proposed activities are consistent with Chapter 373.

12. Chapter 375 – Outdoor Recreation and Conservation

This chapter discusses the "Outdoor Recreation and Conservation Act of 1963" and the responsibility of the Florida Department of Environmental Protection (FDEP) to implement a comprehensive outdoor recreation plan in cooperation with the Fish and Wildlife Conservation Commission and the water management districts. The FDEP participates in the land and water conservation fund program to acquire lands and water areas for outdoor recreation, natural resource conservation, wildlife and forestry management, and water conservation and control. The Act also empowers the Fish and Wildlife Conservation Commission to regulate motor vehicle access and traffic control on public lands.

APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana. Therefore, there will be no new construction, dredging, or filling on Florida's lands or waters, and no new vehicle traffic on public lands. In addition, oil spill impacts on Florida conservation, recreation, or resource areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of preserving Florida's lands and water areas for outdoor recreation, conservation, and wildlife management. Therefore, the proposed activities are consistent with Chapter 375.

13. Chapter 376 – Pollution Discharge Prevention and Removal

Chapter 376 declares that the preservation of the seacoast as a source of public and private recreation and the preservation of water and certain lands are matters of the highest urgency and priority and shall be accomplished by maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands adjoining the seacoast in as close to a pristine condition as possible. The discharge of pollutants into or upon any coastal waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the State is declared to be inimical to the paramount interests of the State and is prohibited. The statute provides for hazards and threats of danger and damages resulting from any pollutant discharge to be evaluated, requires the prompt containment and removal of pollution, provides penalties for violations, and ensures the prompt payment of reasonable damages from a discharge. Portions of Chapter 376 serve as a complement to the national contingency plan portions of the Federal Water Pollution Control Act.

APC has prepared a Sub-Regional OSRP as required for the Eastern Planning Area, which must be consistent with the National Contingency Plan, and with the Oil Pollution Act of 1990 (OPA), in order to obtain MMS approval. As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no transfers between vessels and Florida onshore facilities. As to transfers between offshore facilities and vessels, APC's Sub-Regional OSRP outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. The precautions in APC's plan are consistent with the core policies of preventing unauthorized pollutant discharges and maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands in as close to a pristine condition as possible. Therefore, the proposed activities are consistent with Chapter 376.

14. Chapter 377 – Energy Resources

The State's policy is to conserve and control the oil and gas resources in the State, including products made from these resources, and to safeguard the health, property, and welfare of Floridians. To accomplish this, Chapter 377 addresses the regulation, planning, and development of the energy resources of the State. The FDEP is authorized to regulate all phases of exploration, drilling, and production of oil, gas, and other petroleum products in the State. This chapter describes the permitting requirements and criteria necessary to drill for and develop oil and gas. FDEP rules ensure that all precautions are taken to prevent the spillage of oil or any other pollutant in all phases of extraction and transportation.

The State explicitly prohibits pollution resulting from drilling and production activities. No person drilling for or producing oil, gas, or other petroleum products may pollute land or water; damage aquatic or marine life, wildlife, birds, or public or private property; or allow any extraneous matter to enter or damage any mineral or freshwater-bearing formation. Penalties for violations of any provisions of this chapter are detailed.

The proposed project does not involve any activities in Florida that are regulated by the FDEP. Hydrostatic testing discharges will be in accordance with the NPDES General Permit or an

Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters, damage wildlife or public or private property, or contaminate any mineral or freshwater-bearing formation. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently washing up on Florida shorelines or waters. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of safeguarding the health, property, and welfare of Floridians and preventing pollution during offshore activities. Therefore, the proposed activities are consistent with Chapter 377.

15. Chapter 403 – Environmental Control

Chapter 403 establishes enforceable policies that guide environmental control efforts by conserving State waters, protecting and improving water quality for consumption and for the propagation of fish and wildlife, and maintaining air quality to protect human health and plant and animal life. Statutory provisions are enacted to protect the health, peace, safety, and general welfare of the people of the State. The statute provides wide-ranging authority to address various environmental control concerns, including air and water pollution, resource recovery and management, solid and hazardous waste management, drinking water protection, pollution prevention, ecosystem management, and natural gas transmission pipeline siting. Chapter 403 declares that pollution of the air and waters is a menace to public health and is harmful to wildlife, fish, and other aquatic life; that the policy of the State is to conserve, maintain, and improve its waters and air quality, and to develop a comprehensive program for its prevention, abatement, and control of pollution by establishing ambient air and water quality standards.

Projected air emissions for the proposed activities fall well below allowable exemption levels and will not result in onshore ambient air concentrations above significant levels as prescribed in the regulations. Therefore, the proposed activities are consistent with the core policies of Chapter 403.

Hydrostatic testing discharges shall be in compliance with the standards imposed by the USEPA Region IV NPDES General Permit or an Individual Permit. Discharges from project activities may temporarily affect water quality in the immediate vicinity of the operations, but would not affect water quality or wildlife in Florida State waters. Pollution of coastal waters by an oil spill is highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill; and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving State waters and protecting water and air quality. Therefore, the proposed activities are consistent with Chapter 403.

16. Chapter 582 – Soil and Water Conservation

The enforceable policies in this chapter require the conservation, development, and use of soil and water resources to preserve natural resources and to control and prevent soil erosion. Soil stabilization preserves State and private lands, protects wildlife habitat, maintains water quality, assists in the maintenance of navigable waterways, and prevents the impairment of dams and reservoirs.

The proposed operations will be conducted offshore Alabama, and at APC's existing dock and port facilities located in the Port Fourchon, Louisiana area and helicopter facilities at Galliano, Louisiana. Routine operations will not involve any construction or other activities in Florida that could result in soil erosion. Oil spill impacts on Florida soils are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). Any cleanup or recovery activities in Florida would be conducted using applicable best management practices to minimize soil erosion. The precautions in APC's plan are consistent with the core policies of preserving Florida's natural resources and preventing soil erosion. Therefore, the proposed activities are consistent with Chapter 582.

CERTIFICATION

The proposed activity complies with the enforceable policies of Florida's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

ANADARKO PETROLEUM CORPORATION

L. Susan Hathcock
Regulatory & Environmental Coordinator
May 25, 2005

ANADARKO PETROLEUM CORPORATION

TEL. 832/ 636-1000
P.O. BOX 1330 • HOUSTON, TEXAS 77251-1330

Anadarko

May 25, 2005

Ms. Lynn Griffin
Coastal Program Administrator
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Stop 47
Tallahassee, FL 32399-3000

RE: CZM Consistency Certification
8" Bulk Gas Pipeline and Associated Umbilical Right-of-Way Application
From Desoto Canyon Block 618 (San Jacinto) Well No. 2 In field Sled to Desoto Canyon 621 (Spiderman) Manifold

Gentlemen:

Enclosed are seven (7) copies of Anadarko Petroleum Corporation's application to the Minerals Management Service for an 8" bulk gas pipeline right-of-way with associated umbilical to be installed in and/or through Desoto Canyon Blocks 618, 619, 620 and 621. The onshore support base for installation of the pipeline is Fourchon, Louisiana.

If you should have any questions, please call me at 832/636-8758.

Sincerely,

Susan Hathcock

Susan Hathcock
Regulatory & Environmental Supervisor

SH/me

Enclosures (1)

CONSISTENCY CERTIFICATION

Anadarko Petroleum Corporation's Certification of Consistency with the State of Florida Coastal Management Program

INTRODUCTION

This Consistency Certification is an evaluation by Anadarko Petroleum Corporation (APC) of its proposed right-of-way (ROW) pipeline between APC's proposed production in-line sled in Desoto Canyon Area Block 618 and the Desoto Canyon Block 621 manifold for any reasonably foreseeable coastal effects on the land, water uses, or natural resources of the coastal zone of Florida, pursuant to the enforceable policies of the Florida Coastal Management Program (FCMP).

APC plans to lay a pipeline and an associated umbilical between its in-line sled in Desoto Canyon Block 618 (San Jacinto) and the manifold in Desoto Canyon Block 621. The pipeline is an 8-inch east flow pipeline. The activities proposed in the ROW pipeline application will occur in outer continental shelf (OCS) waters, offshore Alabama, approximately 136 miles from the nearest Florida shoreline. APC believes that the planned activities will have little, if any, effect beyond the area immediately adjacent to the proposed activity sites, and that the possibility of any impacts to Florida's coastal zone is remote. However, APC has undertaken this consistency evaluation and believes that the proposed activities comply with the enforceable policies of the FCMP and will be conducted in a manner consistent with this Program.

The activities will be conducted in accordance with Minerals Management Service (MMS) and U.S. Environmental Protection Agency (USEPA) regulations, applicable Notices to Lessees (NTLs), conditions in the approved permits, and lease stipulations. All required Federal permits will be obtained, and all activities will be conducted in compliance with such regulations, NTLs, conditions, and stipulations.

CONSISTENCY ANALYSIS

The FCMP is authorized by the Florida Coastal Management Act, Chapter 380, Land and Water Management, Part II, Coastal Planning and Management, of the Florida Statutes. For this consistency certification, APC has analyzed the proposed action in relation to 16 chapters of the Florida Statutes identified by the State as "core enforceable policies" having specific applicability to offshore oil and gas activity:

(1) Chapter 161 – Beach and Shore Preservation
(2) Chapter 252 – Emergency Management
(3) Chapter 253 – State Lands
(4) Chapter 258 – State Parks and Preserves
(5) Chapter 259 – Land Acquisitions for Conservation or Recreation
(6) Chapter 260 – Recreational Trails System
(7) Chapter 267 – Archives, History, and Records Management
(8) Chapter 288 – Commercial Development and Capital Improvements

(9) Chapter 370 – Saltwater Fisheries
(10) Chapter 372 – Wildlife
(11) Chapter 373 – Water Resources
(12) Chapter 375 – Outdoor Recreation and Conservation
(13) Chapter 376 – Pollution Discharge Prevention and Removal
(14) Chapter 377 – Energy Resources
(15) Chapter 403 – Environmental Control
(16) Chapter 582 – Soil and Water Conservation

1. Chapter 161 – Beach and Shore Preservation

The enforceable policies in this chapter recognize that coastal areas are among the State's most valuable natural, aesthetic, and economic resources and that they protect and provide habitat for a variety of plant and animal life. The State is required to protect beach and dune systems from imprudent activities that could weaken, damage, or destroy the integrity of the system, manage coastal sediments to reduce erosion, and restore and maintain critically eroding beaches. The State also designates coastal areas used, or likely to be used, by sea turtles for nesting and prohibits the removal of vegetative cover that binds sand. This chapter includes Part I, Regulation of Construction, Reconstruction, and Other Physical Activity; Part II, Beach and Shore Preservation Districts; and Part III, Coastal Zone Protection.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana during the proposed operations, there will be no new construction, dredging, or filling on Florida's lands or waters that could weaken, damage, or destroy the integrity of the system or cause erosion of beaches. In addition, oil spill impacts on Florida beaches and other coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional Oil Spill Response Plan (OSRP), which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions included in APC's plan are consistent with the core policies of protecting beach and dune systems. Therefore, the proposed activities are consistent with Chapter 161.

2. Chapter 252 – Emergency Management

The enforceable policies of this chapter direct the State to reduce the vulnerability of its people and property to natural and manmade disasters; prepare for, respond to, and reduce the impacts of natural and manmade disasters; and decrease the time and resources needed to recover from disasters. Disaster mitigation is necessary to ensure the common defense of Floridians' lives and to protect the public peace, health, and safety. The policies provide the means to assist in the prevention or mitigation of emergencies that may be caused or aggravated by the inadequate planning or regulation of facilities and land uses. State agencies are directed to keep land uses and facility construction under continuing study and identify areas that are particularly susceptible to natural or manmade catastrophic occurrences.

The proposed activities do not involve construction or operation of any facilities in the State of Florida. Therefore, a large oil spill is the only emergency that is considered relevant to this

analysis. APC has developed a Sub-Regional OSRP that outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. An oil spill is highly unlikely to reach Florida waters or shorelines due to (1) the measures detailed in APC's Sub-Regional OSRP and (2) the distance from shore (approximately 136 miles). The precautions included in APC's plan are consistent with the core policies of preparing for and responding to an oil spill and reducing the vulnerability of Florida's people and resources to impacts if such a spill occurred. Therefore, the proposed activities are consistent with Chapter 252.

3. Chapter 253 – State Lands

This chapter, in part, defines State-owned and State-managed lands and grants authority to acquire and lease lands and to grant rights-of-way and easements. The enforceable policies guide the management of State-owned and sovereign submerged lands and property by the Board of Trustees of the Internal Improvement Trust Fund (Trustees). Lands acquired for preservation, conservation, and recreation serve the public interest by contributing to the public health, welfare, and economy. In carrying out the requirements of this statute, the Trustees are directed to take necessary action to fully conserve and protect State lands, maintain natural conditions, protect and enhance natural areas and ecosystems, prevent damage and depredation, and preserve archaeological and historical resources. All submerged lands are considered single-use lands to be maintained in natural condition for the propagation of fish and wildlife and public recreation. Where multiple-uses are permitted, ecosystem integrity, recreational benefits, and wildlife values are conserved and protected.

During the operations along the pipeline/umbilical route between Desoto Canyon Block 618 and Desoto Canyon Block 621, APC will not seek to lease or acquire rights-of-way across Florida State lands. The proposed operations will be conducted offshore Alabama, and at existing dock and port facilities located in the Port Fourchon, Louisiana area and helicopter facilities at Galliano, Louisiana. There will be no pipeline construction requiring acquisition of rights-of-way or easements on Florida State lands. In addition, oil spill impacts on State-owned and managed lands are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies to fully conserve and protect State lands and other natural areas and ecosystems. Therefore, the proposed activities are consistent with Chapter 253.

4. Chapter 258 – State Parks and Preserves

State parks, aquatic preserves, and recreation areas are acquired to exemplify the State's natural values and to ensure that these values are conserved for all time. Parks and preserves are managed for the non-depleting use, enjoyment, and benefit of Floridians and visitors and to contribute to the State's tourist appeal. Aquatic preserves are recognized as having exceptional biological, aesthetic, and scientific value and are set aside for the benefit of future generations. Disruptive physical activities and polluting discharges are highly restricted in aquatic preserves. State managed wild and scenic rivers possess exceptionally remarkable and unique ecological,

fish and wildlife, and recreational values and are designated for permanent preservation and enhancement for both the present and future.

Chapter 258 specifies limitations on dredge-and-fill activities, discharges, erection of structures, and drilling for oil or gas within aquatic preserves. APC's proposed activities along the proposed pipeline and umbilical route are not within or adjacent to any State parks or aquatic preserves. Hydrostatic testing discharges for the proposed activity will be governed by the National Pollutant Discharge Elimination System (NPDES) General Permit or an Individual Permit; impacts will be localized in deep, offshore waters, and will not have any effect on State parks, aquatic preserves, and recreation areas. Finally, oil spill impacts in these coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of preserving and protecting the natural resources and aesthetic values of Florida's State parks, aquatic preserves, and recreation areas. Therefore, the proposed activities are consistent with Chapter 258.

5. Chapter 259 – Land Acquisitions for Conservation or Recreation

This chapter discusses the "Land Conservation Act" and the acquisition of lands or water areas for preservation, conservation, and recreational purposes. The chapter indicates an area is of special importance to the State if it involves an endangered or natural resource in imminent danger of development, is of unique value to the State, will result in irreparable loss to the State, or will impair the State's ability to manage or protect other State-owned lands. The enforceable policies guide the acquisition and management of lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities for the benefit of future generations. Florida's legislature and citizens have made a tremendous financial commitment to long-term land acquisitions that will preserve and restore unique ecosystems, habitats, water resources, and recreational lands.

APC will be using existing dock and port facilities in Port Fourchon, Louisiana and helicopter facilities in Galliano, Louisiana during the proposed activities. Therefore, there will be no new development, construction, dredging, or filling on Florida's lands or waters. In addition, hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not have any effect on Florida lands being acquired or managed for preservation, conservation, or recreational purposes. Finally, oil spill impacts in these coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of managing lands to conserve and maintain the State's unique natural resources, protect environmental quality, and provide recreation opportunities. Therefore, the proposed activities are consistent with Chapter 259.

6. Chapter 260 – Recreational Trails System

This chapter discusses the "Florida Greenways and Trails Act," and the State policies to conserve, develop, and use its natural resources for healthful and recreational purposes by the establishment of a "Florida Greenways and Trails System." The System serves to provide recreational opportunities, including, among others, canoeing, jogging, and historical and archaeological interpretation, by acquiring designated lands and waterways for open space to benefit environmentally sensitive lands and wildlife.

As APC will be using existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no new construction, dredging, or filling on Florida's lands or waters, and no motorized watercraft will conduct any operations within or adjacent to any defined canoe trail necessary to ensure the safe use of a water body for canoes. Therefore, the proposed activities are consistent with the core policies of Chapter 260.

7. Chapter 267 – Archives, History, and Records Management

This chapter discusses the "Florida Historical Resources Act," the State policy to locate, inventory, and evaluate historic properties, and the preservation by the Division of Historical Resources of the Department of State, of all historical property, including sunken or abandoned ships with intrinsic historical or archaeological value. The enforceable policies recognize the State's rich and unique heritage of historic resources and direct the State to locate, acquire, protect, preserve, operate, and interpret historic and archaeological resources for the benefit of current and future generations of Floridians. Objects or artifacts with intrinsic historic or archaeological value located on, or abandoned on, State-owned lands or State-owned submerged lands belong to the citizens of the State. The Act operates in conjunction with the National Historic Preservation Act of 1966 to require State and Federal agencies to consider the effect of their direct or indirect actions on historic and archaeological resources. These resources cannot be destroyed or altered unless no prudent alternative exists. Unavoidable impacts must be mitigated.

In compliance with MMS NTL 98-20, APC engaged C & C Technologies, Inc. (C&C) to evaluate 3-D seismic data in the preparation of a Shallow Hazards Report, in order to identify and assess the seafloor and shallow geologic conditions along the pipeline/umbilical route.

The blocks along the pipeline/umbilical route are not on the MMS list of blocks determined to have a high probability of either prehistoric or historical archaeological resources. Therefore, no archaeological survey or report is required under NTL 2002-G01. It is highly unlikely that objects or artifacts with intrinsic historic or archaeological value would be affected by APC's activities. Therefore, the proposed activities are consistent with the core policies of Chapter 267.

C&C delineated 18 unidentified sonar targets during the route survey. The locations of all unidentified side-scan sonar contacts as well as manmade features will be noted and avoided during the pipeline and umbilical installation.

8. Chapter 288 – Commercial Development and Capital Improvements

Chapter 288 establishes enforceable policies that promote and develop the general business, trade, and tourism components of the State economy. The policies include requirements to protect and promote the natural, coastal, historical, and cultural tourism assets of the State, foster the development of nature-based tourism and recreation, and upgrade the image of Florida as a quality destination. Natural resource-based tourism and recreational activities are critical sectors of Florida's economy. The needs of the environment must be balanced with the need for growth and economic development.

As APC will be using existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana during the proposed operations, there will be no activities conducted in Florida that would affect the general business, trade, or tourism components of the State economy. There will be no project-associated vessel or aircraft traffic in Florida waters, and there are no plans to purchase supplies or equipment in Florida. The project area is at least 136 miles from the nearest Florida shoreline, and activities will not be visible from the coast or Florida State waters. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently washing up on beaches. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of protecting the natural, coastal, historical, and cultural tourism assets of the State and maintaining the image of Florida as a quality destination. Therefore, the proposed activities are consistent with Chapter 288.

9. Chapter 370 – Saltwater Fisheries

The enforceable policies of this chapter direct the State to conserve and manage its renewable marine fishery resources through the protection and management of marine habitat and saltwater fisheries. The paramount conservation and management objective is the continuing health and abundance of the resource. Best available information must be used to manage and protect the State's marine, crustacean, shellfish, and finfish resources and to regulate the commercial and recreational use of the State's saltwater fisheries to ensure optimum sustained benefits to the people of the State.

Hydrostatic testing discharges will be in compliance with the standards imposed by the NPDES General Permit or an Individual Permit. Water quality is expected to quickly return to normal in the area after operations have been completed. Due to the low toxicity and rapid dispersion of discharges, little or no impact on water column biota is likely, including fish larvae that recruit to nearshore nursery areas.

APC's Sub-Regional OSRP outlines response actions for specific hypothetical spill events. The Sub-Regional OSRP makes provisions for the use of a dispersant by boat or aerial application, but notes that before a dispersant can be applied, Federal and State authorities must grant permission. Additional items that are addressed in the plan include provisions for inspection and maintenance of response equipment; required spill response drills; procedures for spill notification to government agencies; inventories of locally and nationally available response equipment; hierarchy of response team organization; provisions for disposal of wastes; and procedures for monitoring and predicting spill movement. If an oil spill should occur, APC's Sub-Regional OSRP addresses plans and procedures for containment, recovery, and removal. The precautions in APC's plan are consistent with the core policies of conserving and protecting marine habitat and saltwater fisheries and maintaining the continuing health and abundance of the resource. Therefore, APC's proposed activities are consistent with Chapter 370.

10. Chapter 372 – Wildlife

This chapter discusses the "Florida Endangered and Threatened Species Act" and its implementation by the Fish and Wildlife Conservation Commission to conserve and protect the fish and wildlife resources of the State, particularly those species defined as endangered or threatened. The Fish and Wildlife Conservation Commission has established a Wildlife Habitat Program, and a Conservation and Recreation Lands Program Trust Fund, for acquiring and managing lands for the conservation of fish and wildlife. The enforceable policies direct the State to conserve its diverse fish and wildlife resources. Florida has more endangered or threatened species than any other continental state; therefore, the protection of species defined as endangered or threatened is emphasized. State lands that provide habitat needed by these species shall be maintained and enhanced for their value as fish and wildlife habitat. Substances thrown, spilled, drained, or discharged into fresh waters that injure or kill fish are expressly prohibited.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no new construction, dredging, or filling on Florida's lands or waters to affect wildlife habitats or recreation lands. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently endangering Florida wildlife. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving Florida's fish and wildlife resources, including endangered or threatened species. Therefore, the proposed activities are consistent with Chapter 372.

11. Chapter 373 – Water Resources

This chapter establishes enforceable policies that guide the management and protection of water resources, water quality, and environmental quality. The policies address the conservation of surface and ground waters for full beneficial use; sustainable water management; preservation of natural resources, fish, and wildlife; protecting public land; and promoting the health and general welfare of Floridians. The State manages and conserves water and related natural resources by determining whether activities will unreasonably consume water, degrade water quality, or adversely affect environmental values such as protected species habitat, recreational pursuits, and marine productivity.

As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana, there will be no usage of Florida water resources and no new construction, dredging, or filling on Florida's lands or waters to affect water quality, protected habitat, recreational pursuits, or marine productivity. Hydrostatic testing discharges for the proposed activity will be governed by the NPDES General Permit or an Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters. In addition, oil spill impacts on Florida water resources are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving surface and ground waters for full beneficial use and protecting natural resources, fish, wildlife, and public lands. Therefore, the proposed activities are consistent with Chapter 373.

12. Chapter 375 – Outdoor Recreation and Conservation

This chapter discusses the "Outdoor Recreation and Conservation Act of 1963" and the responsibility of the Florida Department of Environmental Protection (FDEP) to implement a comprehensive outdoor recreation plan in cooperation with the Fish and Wildlife Conservation Commission and the water management districts. The FDEP participates in the land and water conservation fund program to acquire lands and water areas for outdoor recreation, natural resource conservation, wildlife and forestry management, and water conservation and control. The Act also empowers the Fish and Wildlife Conservation Commission to regulate motor vehicle access and traffic control on public lands.

APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area and helicopter facilities in Galliano, Louisiana. Therefore, there will be no new construction, dredging, or filling on Florida's lands or waters, and no new vehicle traffic on public lands. In addition, oil spill impacts on Florida conservation, recreation, or resource areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of preserving Florida's lands and water areas for outdoor recreation, conservation, and wildlife management. Therefore, the proposed activities are consistent with Chapter 375.

13. Chapter 376 – Pollution Discharge Prevention and Removal

Chapter 376 declares that the preservation of the seacoast as a source of public and private recreation and the preservation of water and certain lands are matters of the highest urgency and priority and shall be accomplished by maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands adjoining the seacoast in as close to a pristine condition as possible. The discharge of pollutants into or upon any coastal waters, estuaries, tidal flats, beaches, and lands adjoining the seacoast of the State is declared to be inimical to the paramount interests of the State and is prohibited. The statute provides for hazards and threats of danger and damages resulting from any pollutant discharge to be evaluated, requires the prompt containment and removal of pollution, provides penalties for violations, and ensures the prompt payment of reasonable damages from a discharge. Portions of Chapter 376 serve as a complement to the national contingency plan portions of the Federal Water Pollution Control Act.

APC has prepared a Sub-Regional OSRP as required for the Eastern Planning Area, which must be consistent with the National Contingency Plan, and with the Oil Pollution Act of 1990 (OPA), in order to obtain MMS approval. As APC will be using the existing dock and port facilities in the Port Fourchon, Louisiana area, there will be no transfers between vessels and Florida onshore facilities. As to transfers between offshore facilities and vessels, APC's Sub-Regional OSRP outlines response actions, inspection and maintenance of response equipment, required spill response drills, governmental notification procedures, inventories of response equipment, response team organization, spill movement monitoring, and contingency plans for oil spill containment, recovery, and removal. The precautions in APC's plan are consistent with the core policies of preventing unauthorized pollutant discharges and maintaining surface and ground water, coastal waters, estuaries, tidal flats, beaches, and public lands in as close to a pristine condition as possible. Therefore, the proposed activities are consistent with Chapter 376.

14. Chapter 377 – Energy Resources

The State's policy is to conserve and control the oil and gas resources in the State, including products made from these resources, and to safeguard the health, property, and welfare of Floridians. To accomplish this, Chapter 377 addresses the regulation, planning, and development of the energy resources of the State. The FDEP is authorized to regulate all phases of exploration, drilling, and production of oil, gas, and other petroleum products in the State. This chapter describes the permitting requirements and criteria necessary to drill for and develop oil and gas. FDEP rules ensure that all precautions are taken to prevent the spillage of oil or any other pollutant in all phases of extraction and transportation.

The State explicitly prohibits pollution resulting from drilling and production activities. No person drilling for or producing oil, gas, or other petroleum products may pollute land or water; damage aquatic or marine life, wildlife, birds, or public or private property; or allow any extraneous matter to enter or damage any mineral or freshwater-bearing formation. Penalties for violations of any provisions of this chapter are detailed.

The proposed project does not involve any activities in Florida that are regulated by the FDEP. Hydrostatic testing discharges will be in accordance with the NPDES General Permit or an

Individual Permit; impacts will be localized in deep, offshore waters and will not pollute Florida land or waters, damage wildlife or public or private property, or contaminate any mineral or freshwater-bearing formation. Disposal of trash and debris into the ocean is strictly prohibited, and waste management practices required by MMS under NTL 2003-G11 and Lease Stipulation No. 4 will minimize the chance of trash or debris being lost overboard and subsequently washing up on Florida shorelines or waters. Oil spill impacts in Florida coastal areas are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of safeguarding the health, property, and welfare of Floridians and preventing pollution during offshore activities. Therefore, the proposed activities are consistent with Chapter 377.

15. Chapter 403 – Environmental Control

Chapter 403 establishes enforceable policies that guide environmental control efforts by conserving State waters, protecting and improving water quality for consumption and for the propagation of fish and wildlife, and maintaining air quality to protect human health and plant and animal life. Statutory provisions are enacted to protect the health, peace, safety, and general welfare of the people of the State. The statute provides wide-ranging authority to address various environmental control concerns, including air and water pollution, resource recovery and management, solid and hazardous waste management, drinking water protection, pollution prevention, ecosystem management, and natural gas transmission pipeline siting. Chapter 403 declares that pollution of the air and waters is a menace to public health and is harmful to wildlife, fish, and other aquatic life; that the policy of the State is to conserve, maintain, and improve its waters and air quality, and to develop a comprehensive program for its prevention, abatement, and control of pollution by establishing ambient air and water quality standards.

Projected air emissions for the proposed activities fall well below allowable exemption levels and will not result in onshore ambient air concentrations above significant levels as prescribed in the regulations. Therefore, the proposed activities are consistent with the core policies of Chapter 403.

Hydrostatic testing discharges shall be in compliance with the standards imposed by the USEPA Region IV NPDES General Permit or an Individual Permit. Discharges from project activities may temporarily affect water quality in the immediate vicinity of the operations, but would not affect water quality or wildlife in Florida State waters. Pollution of coastal waters by an oil spill is highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill; and (2) the distance from shore (approximately 136 miles). The precautions in APC's plan are consistent with the core policies of conserving State waters and protecting water and air quality. Therefore, the proposed activities are consistent with Chapter 403.

16. Chapter 582 – Soil and Water Conservation

The enforceable policies in this chapter require the conservation, development, and use of soil and water resources to preserve natural resources and to control and prevent soil erosion. Soil stabilization preserves State and private lands, protects wildlife habitat, maintains water quality, assists in the maintenance of navigable waterways, and prevents the impairment of dams and reservoirs.

The proposed operations will be conducted offshore Alabama, and at APC's existing dock and port facilities located in the Port Fourchon, Louisiana area and helicopter facilities at Galliano, Louisiana. Routine operations will not involve any construction or other activities in Florida that could result in soil erosion. Oil spill impacts on Florida soils are highly unlikely due to (1) the measures detailed in APC's Sub-Regional OSRP, which addresses procedures for containment, recovery, and removal of an oil spill and (2) the distance from shore (approximately 136 miles). Any cleanup or recovery activities in Florida would be conducted using applicable best management practices to minimize soil erosion. The precautions in APC's plan are consistent with the core policies of preserving Florida's natural resources and preventing soil erosion. Therefore, the proposed activities are consistent with Chapter 582.

CERTIFICATION

The proposed activity complies with the enforceable policies of Florida's approved Coastal Management Program and will be conducted in a manner consistent with such Program.

ANADARKO PETROLEUM CORPORATION

L. Susan Hathcock

L. Susan Hathcock
Regulatory & Environmental Coordinator
May 25, 2005

Enclosure 1

	A	B	C	D	E	F	G
1	**Right-of-Way Pipeline Application**			Segment No.:			
2							
3	Instructions:						
4	1. Complete one form for the pipeline segment submitted in your application. A ROW						
5	application may only contain one proposed pipeline segment.						
6	2. Complete one form for each unattached umbilical submitted in your application.						
7	3. Provide response/data for all items that are shaded. Other items as required.						
8	4. Provide one original and three identical copies of all application materials.						
9							
10	**Pipeline Route Data**						
11	List all blocks and lease numbers contacted by the pipeline. (Insert rows as needed)	**Area**	**Block No.**	**Lease No.**	**Operator**		
12	(If block is unleased, so note.)	DC	618	OCS-G-23526	Anadarko Petroleum Company		
13		DC	619	OCS-G-23527	Anadarko Petroleum Company		
14		DC	620	OCS-G-23528	Dominion Exploration & Production, Inc.		
15		DC	621	OCS-G-23529	Dominion Exploration & Production, Inc.		
16	**Contact Information**						
17	Applicant company name (ROW permittee/holder)	Anadarko Petroleum Corporation					
18	Name of company representative signing application	Charles G. Hughes					
19	Phone No.	832-636-8715					
20	Fax	832-636-8208					
21	E-Mail	charles_hughes@anadarko.com					
22	Mailing address	1201 Lake Robbins Drive					
23		The Woodlands, TX 77380					
24	ROW holder's MMS code (five digit)	00981					
25							
26	Designated operator company name	Anadarko Petroleum Corporation					
27	Phone No.	832-636-8758					
28	Fax	832-636-8208					
29	E-Mail	susan_hathcock@anadarko.com					
30	Mailing address	1201 Lake Robbins Drive					
31		The Woodlands, TX 77380					
32	Operator's MMS code (five digit)	00981					
33							
34	Regulatory contact (Name)	Susan Hathcock					
35	Company name	Anadarko Petroleum Corporation					
36	Phone No.	832-636-8758					
37	Fax	832-636-8208					
38	E-Mail	susan_hathcock@anadarko.com					
39							
40	Technical contact (Name)	Dwayne Doiron					
41	Company name	Cypress Consulting					
42	Phone No.	713-816-0247					
43	Fax	281-955-2664					
44	E-Mail	doirond@cc-lc.net					
45							
46	**Fees**						
47	Application fee of $2,350 enclosed? (Required)	Yes					
48	Rental fee of $15 per mile or every fraction thereof enclosed? (Required)	Yes					
49	Right-of-way length (miles) e.g., 7.54	6.47					

	A	B	C	D	E	F	G
50	Total check amount	$2,875.00					
51	Check date	5/24/2005					
52	Check number	760187					
53	Name of financial institution upon which check is written	Mellon Bank N.A.					
54							
55	**Basic Pipeline Data**						
56	Line service, e.g., oil, gas, bulk gas, lift, injection, service, etc.	Bulk Gas					
57	Total pipeline length (feet) - excluding riser(s)	34,148					
58	Length of pipeline in Federal waters (feet)	34,148					
59	Length of pipeline in State waters (feet/NA)	NA					
60	Pipeline designed for bi-directional flow? (Y/N)						
61	Alternate line service, e.g., oil, gas, bulk gas, lift, injection, service, etc.	Yes					
62	Supervisor Control and Data Acquisition system for leak detection installed? (Y/N)	yes					
63	If yes, system type, e.g., over/short, pressure point analysis, volumetric, etc.	ppa					
64							
65	**Pipeline Origin**						
66	Type Facility, e.g., Platform, Well, Subsea Well, PLEM, Subsea Manifold, Subsea Tie-in	In Line Sled (ILS)					
67	Number/Identifier, e.g. A, 1, 4-B, 13336 (Number/Segment Number/Identifier/NA)	NA					
68	Manned platform? (Y/N/NA)	No					
69	Area	Desoto Canyon					
70	Block	618					
71	OCS Lease	OCS-G-23526					
72	Pig launcher? (Y/N)	No					
73	System designed for "smart" pigs? (Y/N/NA)	No					
74							
75	**Pipeline Destination**						
76	Type Facility, e.g., Platform, Well, Subsea Well, PLEM, Subsea Manifold, Subsea Tie-in	PLET					
77	Number/Identifier, e.g. A, 1, 4-B (Number/Segment Number/Identifier/NA)	NA					
78	Manned platform? (Y/N/NA)	No					
79	Area	Desoto Canyon					
80	Block	621					
81	OCS Lease	OCS-G-23529					
82	Pig receiver? (Y/N/NA)	No					
83							
84	**Pipeline Appurtenances**						
85	Manifold/subsea templates/etc. along pipeline other than at origin or destination? (Y/N)	yes					
86	If yes, specify appurtenant type	PLET, ILS					
87	If yes, specify appurtenant area and block location, e.g., MP 134	DC-618, DC-621					
88							
89	**Construction/Air Quality Data**						
90	Pipeline installation method, e.g., lay barge, DP vessel, jack up	DP Vessel					
91	Maximum anchor spread (feet or NA)	NA					
92	Onshore Facility Location	Fourchon					
93	Pipeline construction duration (days)	14					
94	Construction start date (projected)	3/1/2006					
95							
96	**Pipeline product data**						
97	Design maximum flow rate of gas (mmcf/d)	120					
98	Gravity of gas (Air = 1.0)	0.65					
99	Design maximum flow rate of oil/condensate (b/d)	120					
100	API or specific gravity of oil/condensate	TBD					
101	H2S concentration (ppm)	0					

	A	B	C	D	E	F	G
102	Maximum anticipated pipeline temperature (degrees F)	140					
103	CO_2 concentration (ppm)						
104	Inhibition program planned? (Y/N)						
105	Hydrates anticipated (Y/N)						
106	Paraffin anticipated (Y/N)						
107							
108	**Submerged Component Design Data**	**Diameter 1**	**Diameter 2**	**Diameter 3**			
109	Outside diameter (inches)	8 5/8					
110	Wall thickness (inches)	0.675					
111	Grade	API-5L X65					
112	Hydrostatic test pressure (psig)	10,125					
113	HTP duration (hours) (Must be equal to or greater than eight)	8					
114	Type external corrosion coating	Fusion Bonded Epoxy					
115	Corrosion coating thickness (mils)	18					
116	Concrete coating density (pcf)	NA					
117	Coating thickness (inches)	NA					
118	Type internal corrosion coating (Type/NA)	NA					
119	Coating thickness (mils) (Mils/NA)	NA					
120	Bare pipe specific gravity	2.21					
121	Weighted pipe specific gravity	2.21					
122	Pipe is non-standard? (Y/N)	NA					
123	If yes, note type, e.g., coil tubing, pipe-in-pipe, flexible pipe, other (specify) (Type/NA)						
124							
125	**Cathodic Protection Design Data**						
126	Design Type, e.g., bracelet anodes, anode sleds	Bracelet Anodes					
127	Anode Type, e.g. Galvalum III, Aluminum, etc	Aluminum					
128	Net anode weight (pounds)	72.7					
129	Spacing (feet)	480					
130	Number of anodes	83					
131	Anode life (years)	90.4					
132	Designs for systems other than bracelet anodes required. (Attached/NA)	NA					
133							
134							
135	**Departing Riser Design Data**	**Diameter 1**	**Diameter 2**	**Diameter 3**			
136	Outside diameter (inches)	NA					
137	Wall thickness (inches)	NA					
138	Grade	NA					
139	Hydrostatic test pressure (psig)	NA					
140	HTP duration (hours) (Must be equal to or greater than eight)	Na					
141	splash zone=S.Z.	**Below S.Z.**	**In S.Z.**	**Above S.Z.**			
142	Type external corrosion coating	NA					
143	Coating thickness (mils or inches)	NA					
144	Type internal corrosion coating (Type/NA)	NA					
145	Coating thickness (mils) (Mils/NA)	NA					
146	Riser guard design attached? Required if origin is caisson or platform (Y/NA)	NA					
147	Catenary riser? (Y/N)	NA					
148	If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA)	NA					
149							
150	**Receiving Riser Design Data**	**Diameter 1**	**Diameter 2**	**Diameter 3**			
151	Outside diameter (inches)	NA					
152	Wall thickness (inches)	NA					
153	Grade	NA					

	A	B	C	D	E	F	G
154	Hydrostatic test pressure (psig)	NA					
155	HTP duration (hours) (Must be equal to or greater than eight)	Na					
156	splash zone=S.Z.	**Below S.Z.**	**In S.Z.**	**Above S.Z.**			
157	Type external corrosion coating	NA					
158	Coating thickness (mils or inches)	NA					
159	Type internal corrosion coating (Type/NA)	NA					
160	Coating thickness (mils) (Mils/NA)	NA					
161	Riser guard design attached? Required if origin is caisson or platform (Y/NA)	NA					
162	Catenary riser? (Y/N)	NA					
163	If yes, VIV reduction, installation tension, anchoring, tension monitoring attached? (Y/NA)	NA					
164							
165	**Flange and Valve Data**						
166	Flange type (ANSI/API)	API					
167	Flange pressure rating (psig)	10,000					
168	Derated pressure rating (psig/NA)	10,000					
169	Valve type (ANSI/API)	API					
170	Valve pressure rating (psig)	10,000					
171	Derated pressure rating (psig/NA)	10,000					
172							
173	**Pipeline Burial Data**						
174	Buried minimum of three feet? Y/N/Self (Burial required if less than 200' water depth)	N					
175	Burial method (jet, plow, self, other(specify))	NA					
176	If self burial, provide seafloor strength in ksf. (Must be less than 0.2 ksf) (kips/NA)	NA					
177	Data supporting self burial attached? (Y/NA)	NA					
178							
179	**Miscellaneous Data**						
180	Non-discrimination in employment form attached? (Required)	Yes					
181							
182	**Oil Spill Financial Responsibility Requirement Determination**						
183	Static Pipeline Volume (Bbls.) If greater than 1,000 then WCD volume required	2714					
184	Worst case discharge volume (Bbls.) If greater than 1,000 then OSFR required	5					
185	Proposed Right-of-Way included under company OSFR coverage? (Yes/Pending/NA)	Yes					
186							
187	Certified plat attached? Plat is required.	Yes					
188	Diskette per NTL 98-09 attached? Diskette is required.	Yes					
189							
190	Does pipeline cross into State waters (Y/N)						
191	If yes, State permit required (Attached/Applied For/NA)	NA					
192	If yes, COE permit required (Attached/Applied For/NA)	NA					
193							
194	Minimum water depth (feet below sea level)	7783					
195	Maximum water depth (feet below sea level)	8080					
196							
197	Water depth greater than 400 meters? (Y/N)	Yes					
198	If Yes, Chemo study required (see NTL 2000-G20) (Attached/NA)	Attached					
199							
200	Deep Water Operations Plan submitted to MMS? (See NTL 2000-N06) (Y/NA)	Pending submittal					
201	If yes, date submitted (Date/NA)						
202							
203	Pipeline to be towed to location? (Y/N)	No					
204	If yes, dragged on bottom? (Y/N/NA)	NA					
205							

	A	B	C	D	E	F	G
206	Artificial reef in vicinity? (Y/N)	N					
207	If Yes and PL in La., PL must be > 500' away. Confirm Y/NA	NA					
208	Distance to reef (feet).	NA					
209	If Yes and PL in TX., PL must be > seven times water depth away. Confirm Y/NA	NA					
210	Distance to reef (feet).	NA					
211							
212	Hazard Report submitted? (Yes) Hazard Report is required.	Yes					
213							
214	Shallow Hazards Analysis Statement included? (Yes) SHAS is required in cover letter.	Yes					
215							
216	Umbilical associated with pipeline? (Y/N)	Yes					
217	Umbilical type, e.g., hydraulic, electric, other(specify) (Type or NA)	Electric/Hydraulic					
218	Umbilical outside diameter (inches) (Diameter or NA)	6.18					
219	Attached to pipeline? (Y/N/NA; If No, will be assigned a unique segment number)	Yes					
220	If no, separate application form attached? (Yes/NA)						
221							
222	Does pipeline contact anchorage area or fairways? (Y/N)	No					
223	If Yes, burial depth in anchorage areas or fairways consistent with COE permit? (Y/NA)	NA					
224	If yes, COE permit attached? (Y/NA/Pending)	NA					
225							
226	**Pipeline Crossing Data**						
227	Does proposed pipeline cross an existing pipeline (Y/N)	No					
228	If yes, enter noted data, adding data rows as required.	**Operator**	**Segment No.**	**Size (inches)**	**Service**	**Notified?**	
229							
230							
231							
232							
233	If yes, minimum clearance between lines must be 18". (Yes/NA)	NA					
234	If yes and < 500' water depth, must have 3' cover or concrete mats. (Confirm cover or concrete mat.)	NA					
235	If sand bags, slope is 3/1. (Confirm Yes/NA)	NA					
236	If concrete mat, specify manufacturer	NA					
237	If concrete mats, mat edges jetted below mudline. (Yes/NA)	NA					
238	Crossed pipeline operator notified? (Y/N/O O = crossed pipeline owned by applicant)	NA					
239							
240	**H_2S Contingency Plan and Modeling Data**						
241	H_2S Operations Contingency Plan attached as H_2S concentration greater than 20 ppm (Y/Pending/NA)	NA					
242	Air Dispersion Model attached as H_2S concentration greater than 500 ppm (Y/pending/NA)	NA					
243	H_2S Crossing Contingency Plan attached as crossed pipeline carries H_2S in concentrations greater than 20 ppm (Y/Pending/NA)	NA					
244							
245	**Subsea Tie-in Data**						
246	Does pipeline tie into a subsea pipeline? (Y/N)	Yes					
247	Ties to existing valve or hot tap? (Identify which/NA)	Jumper to Subsea Manifold					
248	Segment number of pipeline being tied in to (SN/NA)	Pending					
249	MAOP of pipeline being tied in to (MAOP/NA)	8100					
250	If existing valve, letter of no objection from tie-in operator attached? (Yes/NA)	Pending					
251	If hot tap, appurtenance application submitted to MMS? (Yes/NA)	NA					
252	Is assembly snag proofed? (Y/NA) Required if less than 500' water depth.	NA					
253	If sand bags used, slope is 3/1 (Y/NA)	NA					

	A	B	C	D	E	F	G
254	If sand bags used, 3' coverage required (Y/NA)	NA					
255							
256	**Surface Tie-in Data**						
257	Does pipeline tie directly into another pipeline at a surface location? (Y/N)	No					
258	Segment number of pipeline being tied in to (SN/NA)	NA					
259	MAOP of pipeline being tied in to (MAOP/NA)	NA					
260							
261	**Spill Response Plan Data**						
262	Type of spill response plan (OSCP/OSRP per NTL 98-30)	OSRP					
263	Date spill plan submitted to MMS						
264	Date spill plan approved (Actual Date or "Pending")	8/10/2004					
265							
266	**Safety Schematic Information**						
267	Pressure source identified? (well, separator, pump, etc.)	Wells					
268	MSP/MAWP/SITP of source shown? (psig)	7,716					
269	Origin/destination specification breaks shown on schematic. (Y/NA)	Yes					
270	Receiving segment number noted? (Segment Number or N/A)	Pending					
271	Receiving segment no. MAOP (psig) (MAOP or N/A)	8,100					
272	Calculated pipeline MAOP (psig)	8,100					
273	Operator responsibility transfer point shown? (Yes/NA)	Yes					
274							
275	**Collapse Information (Deepwater Pipelines Only)**	8" Flowline					
276	Water depth (feet)	8080					
277	External pressure (psig)	3951					
278	Collapse pressure (psig)	9658					
279	Safety factor	2.69					
280	Collapse calculations are required. (Attached/NA)	Attached					
281							
282	**Safety Design Review**						
283	**Pipeline Origin**						
284	PSHL required at departing end of pipeline (Confirm Yes)	Yes					
285	PSHL must be downstream of choke and/or flow restrictions (Confirm Yes)	Yes					
286	For a well, if MSP > MAOP, a redundant PSH and independent SDVs required (Confirm Yes)	NA					
287	For production equipment, if MSP > MAOP, a redundant PSH with independent SDV is required or a vented PSV is required (Confirm Yes/NA)	NA					
288	If bi-directional flow, SDV required (Confirm Yes/NA)	NA					
289	If pig trap present, safety equipment can not be bypassed (Confirm True)	NA					
290	If pump on line, must be consistent with API RP 14C A7 (Confirm Yes/NA)	NA					
291	**Pipeline Destination**						
292	If production facility and uni-directional flow, SDV and FSV required (Confirm Yes/NA)	NA					
293	If production facility and bi-directional flow, SDV and PSHL required (Confirm Yes/NA)	NA					
294	If subsea tie-in and uni-directional flow, FSV and block valve required (Confirm Yes/NA)	NA					
295	If subsea tie-in and bi-directional flow, block valve required (Confirm Yes/NA)	Yes					
296	If gas lift or water injection flowline on unmanned platform, FSV required (Confirm Yes/NA)	NA					
297	If gas lift or water injection flowline on manned platform, SDV required (Confirm Yes/NA)	NA					
298	If crossover platform (pipeline does not receive production), SDV required at boarding point and PSHL required at departing point (Confirm Yes/NA)	NA					
299	If crossover platform is non-manned and non-production, FSV required (Confirm Yes/NA)	NA					
300							

	A	B	C	D	E	F	G
301	**Departure Data**						
302	Waiver from NTL 98-20 (buoying of hazards) requested? (Y/N)	Yes					
303	Other departures requested? (Y/N)	Yes					
304	If yes, specify.	API 1111 For Collapse Resistance					
305		Waiver to exclude Magnetometer data. WD>600'					
306							
307							
308							
309							
310							
311							
312							
313							
314							
315	**Do Not Enter Data Below This Line -** **MMS Use Only**						
316							
317	**PIPELINE MASTER ENTRY SHEET**						
318	Name		MMS Engineer entry				
319	Date		MMS Engineer entry				
320	Segment Number		MMS Engineer entry				
321	Right-of-Way Number		MMS Engineer entry				
322	Right-of-Way Permittee						
323	Right-of-Way Permittee Code						
324	Operator	Anadarko Petroleum Corporation					
325	Operator Code	00981					
326	Approval Code	Right-of-Way					
327	Authority Code		MMS Engineer entry				
328	Pipe Size	8 5/8					
329	Product Code		MMS Engineer entry				
330							
331	ORIGIN						
332	Facility Type	In Line Sled (ILS)					
333	Identifier	NA					
334	Area	Desoto Canyon					
335	Block	618					
336	Lease	OCS-G-23526					
337							
338	DESTINATION						
339	Facility Type	PLET					
340	Identifier	NA					
341	Area	Desoto Canyon					
342	Block	621					
343	Lease	OCS-G-23529					
344							
345	OCS Segment Length	34,148					
346	State + Federal Pipeline Length	34,148					
347	Cathodic Code	Aluminum					
348	Cathodic Life Time (Years)		MMS Engineer entry				
349	Minimum Water Depth (feet)	7783					
350	Maximum Water Depth (feet)	8080					
351							
352	Buried Designator Flag	N					

	A	B	C	D	E	F	G
353	Bi-directional Flag	0					
354	Alternate Service	Yes					
355	Recv Segment No. (Sub-surface)	Pending					
356	Recv MAOP	8100					
357	Assigned MAOP		MMS Engineer entry				
358	Pipeline Status Code	Proposed					
359	Right-of-Way Status Code	Pending					
360							
361	Comments		MMS Engineer entry				

Anadarko Petroleum Corporation
P.O. Box 1330 - Houston, TX 77251-1330

Please refer to your vendor number in all correspondence about your account.
Accounts Payables Inquiries: (800) 370-9867

VENDOR NAME	VENDOR NO.	CHECK DATE	CHECK NUMBER	AMOUNT
MINERALS MANAGEMENT SERVICE	863389	05/24/05	760187	$2,875.00

VOUCHER/ BATCH#	VENDOR INV #/ REMARKS	INV DATE	TOTAL AMOUNT	PRIOR PMTS & DISCOUNTS	NET AMOUNT	H
05-AP-9446	CKRQ051805	05/18/05	2,875.00	0.00	2,875.00	
05-97182	APPLICATION FEE ($2,350.00) + 5-YEAR RENTAL ($525) FOR 8" PIPELINE & ASSOCIATED UMBILICAL FROM DC 618 (SAN JACINTO) TO DC 621 (SPIDERMAN) (6.47 MI, IN LENGTH)					
TOTAL INVOICES PAID					2,875.00	

THE FACE OF THIS DOCUMENT HAS A BLUE BACKGROUND AND THE WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW. DO NOT ACCEPT FOR CASH IF THESE FEATURES ARE NOT PRESENT.

Anadarko Petroleum Corporation
P.O. Box 1330 - Houston, TX 77251-1330

Mellon Bank N.A.
Pittsburgh, PA

60-160
433

CHECK NO.
760187

DATE
05/24/05

PAY EXACTLY **$2,875dols00cts**

AMOUNT
$2,875.00

TO THE ORDER OF:

MINERALS MANAGEMENT SERVICE
1201 ELMWOOD PARK BOULEVARD
NEW ORLEANS, LA 70123-2394

AUTHORIZED REPRESENTATIVE(S) OF THE COMPANY

⑈760187⑈ ⑆043301601⑆ 103⑈228 2⑈

Department of
Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

November 17, 2005

Mr. Michael Tolbert
Ms. Karen Dunlap
Ms. Michelle Griffitt Evans
Plan Coordinators
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Re: Independence Hub Project: Coastal Zone Management Act Consistency Review

Dear Mr. Tolbert, Ms. Dunlap and Ms. Evans:

Pursuant to Presidential Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, the Outer Continental Shelf Lands Act, U.S.C. § 1335 et. seq., as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, the State of Florida has completed its review of the Independence Hub project. The Independence Hub project is comprised of the following Eastern Gulf of Mexico Planning Area Initial Development Operations Coordination Documents (DOCD) and pipeline right-of-way applications submitted by Anadarko Petroleum Corporation (Anadarko) and Dominion Exploration & Production Company (Dominion). Applicable Sub-Regional Oil Spill Response Plans (OSRP) were also reviewed as part of the Independence Hub project.

Development Operations Coordination Documents:

Area/Block No.	Control Number	Operator
Lloyd Ridge 1 & 2	N-08415	Anadarko
Lloyd Ridge 5 & 50	N-08411	Anadarko
Desoto Canyon 620 & 621	N-08402	Anadarko
Lloyd Ridge 399	N-08419	Anadarko
Desoto Canyon 618	N-08430	Dominion

Pipeline Right-of-Way Applications:

Application No.	Row No.	Company	Project Association	Block(s) Association
P-15099	G26833	Anadarko	Spiderman	DC 621
P-15100	G26834	Anadarko	Spiderman	DC 621
P-15146	G26854	Anadarko	Atlas NW, Mondo, Atlas	LL 50, LL 2, LL 50
P-15149	G26855	Anadarko	Cheyenne, Jubilee	LL 399, AT 305
P-15152	G26856	Anadarko	Cheyenne	LL 399
P-15166	G26864	Anadarko	San Jacinto, Spiderman	DC 618, DC 621

The Department of Environmental Protection, designated as the State's lead coastal management agency pursuant to section 306(c) of the federal Coastal Zone Management Act, 16 U.S.C. section 1456(c), and section 380.22, Florida Statutes, hereby notifies the Minerals Management Service (MMS) that the state does not object to the consistency certifications provided by Anadarko and Dominion for the above referenced project.

The state's finding is based on initial and supplemental information provided by Anadarko and Dominion in the DOCDs and pipeline right-of-way applications, and in the Minerals Management Services' Environmental Assessment (EA) of the Independence Hub Project. This information includes a description of the activities being proposed and evaluations of the environmental impacts of the proposed activities. These evaluations indicate that planned activities will result in minimal environmental impact to Florida's coastal and marine resources and the MMS, Andarko and Dominion describe the potential for accidental releases as very low. Nonetheless, information and analyses accompanying the DOCDs provide assurances that a respond to any accidental event can be accomplished in a timely manner, thus minimizing or preventing impacts to Florida's coastal resources.

We appreciate the opportunity to review the Independence Hub Project. Florida will continue to work with the MMS, Anadarko and Dominion to monitor activities and impacts resulting from the project. If the activities conducted under the approved DOCDs and pipeline right-of-way applications, or the effects of those activities, differ from those described in the EA and the DOCDs and supporting documents, Florida will reevaluate its consistency decision. If there are any questions, please contact Debby Tucker or me at (850) 245-2163.

Cordially,

Lynn F. Griffin
Coastal Program Administrator

cc: Jennifer Fitzwater, DEP
George Henderson, FMRI
Phil Wieczynski, DEP
Joe Christopher, MMS
Bonnie Johnson, MMS
Judy Davidson, Anadarko
Kathy Gowland, Dominion

15166

State of Louisiana

KATHLEEN BABINEAUX BLANCO
GOVERNOR

SCOTT A. ANGELLE
SECRETARY

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL RESTORATION AND MANAGEMENT

June 15, 2005

Susan Hathcock
Anadarko Petroleum Corporation
P. O. Box 1330
Houston, Texas 77251-1330

RE: **C20050270,** Coastal Zone Consistency
Anadarko Petroleum Corporation
Minerals Management Service
Federal License or Permit
Installation of an 8-inch Bulk Gas Right-of-Way Pipeline and associated umbilical from Desoto Canyon, Block 618 Well No.1 to Desoto Canyon Block 621 Well No. 1 PLET, **Gulf of Mexico, Offshore Louisiana**

Dear Ms. Hathcock:

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. Fruge
Administrator

DWF/JH/bgm

cc: Alex Alvarado, MMS Pipeline Section
Bonnie Johnson, MMS 5412
Ronald Ventola, COE-NOD

15151-15166