



Williams Field Services
Gulf Coast Company, L.P.
P.O. Box 645
Tulsa, Oklahoma 74101-0645
1800 South Baltimore
Tulsa, Oklahoma 74119-5284
918/581-1800
918/560-9115 fax

April 20, 2001

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

Attention: Mr. Alex Alvarado - MS 5232

RE: Application for 12-Inch Natural Gas Right-of-Way Pipeline To Be Installed In Block 261,
Main Pass Area, OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

Pursuant to the authority granted in Section 5 (e) of the Outer Continental Shelf Lands Act (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, Williams Field Services - Gulf Coast Company, L. P., (Williams) is filing this application in quadruplicate (original and three copies) for a right-of-way easement two hundred feet (200') in width for the construction, maintenance and operation of a 16-inch natural gas right-of-way pipeline to be installed in Block 261, Main Pass Area, located in OCS Federal Waters, Offshore, Louisiana. Williams agrees that said right-of-way, if approved, will be subject to the terms and conditions of said regulations.

The proposed 12-inch pipeline will transport natural gas. It will originate at Williams' proposed platform in Block 261 (Lease OCS-G 13035) and proceed in a southeasterly direction approximately 5,739.00' feet (1.09 miles) to a subsea tie-in point on Viosca Knoll Gathering Company's existing 20-inch line (Segment No. 10711, OCS-G 14292), also in Block 261, all being located in Main Pass Area, for ultimate delivery to shore.

Williams Field Services - Gulf Coast Company, L.P. will employ Williams Field Services as operator of the subject right-of-way pipeline.

The calculated worst case discharge from the proposed pipeline is less than 1000 barrels. Therefore, Certification of Oil Spill Financial Responsibility is not required.

Additionally, a review of our Regional Oil Spill Response Plan to determine if installation of the subject right-of-way pipeline affects the current worst case discharge is not applicable.

Minerals Management Service
12-Inch Natural Gas Right-of-Way Pipeline
Block 261, Main Pass Area
April 20, 2001

Page Two

Installation of the proposed pipeline will be accomplished by utilizing a typical lay/bury barge(s). Water depth along the pipeline route varies from 299-feet to 306-feet. Therefore, the pipeline will be laid on the seafloor. There are no foreign pipeline crossings along the pipeline route.

The riser at Williams' proposed platform in Main Pass 261 will be installed inside a leg of the structure.

Williams 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, Williams will comply with the recommended avoidance criteria for the magnetic anomalies along the proposed pipeline route identified in the Fugro Geoservices, Inc. Pipeline Pre-Lay Survey Report.

The proposed construction operations will be supported by a crewboat and tug, each making approximately seven (7) trips per week, respectively, from an onshore facility located in Venice, Louisiana.

Williams anticipates commencing installation on approximately July 9, 2001, with an overall completion of project time being estimated at nine (9) days.

This application (and any amendments made hereto) is made with our full knowledge and concurrence with the OCS Lands Act (43 U.S.C. 1331, et. seq.), as amended (P.L. 95-372), including the following: Sec. 5(e) addressing pipeline rights-of-way, requirements of the Federal Energy Regulatory Commission relating to notice of hearing, transportation and purchase of oil and gas without discrimination; Sec. 5(f)(1) addressing operation of pipelines in accordance with competitive principles, including open and nondiscriminatory access to both owner and non-owner shippers; Sec. 5(f)(2) which may allow exemption of the requirements in Sec. 5(f)(1); Sec. 5(e) addressing the assuring of maximum environmental protection, including the safest practices for pipeline installation; and Sec. 5(f)(1)(B) which may require expansion of throughput capacity of any pipeline except for the Gulf of Mexico or the Santa Barbara Channel.

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

In accordance with applicable regulations, we have forwarded information regarding the proposed project by certified mail, return receipt requested, to each designated oil and gas lease operator, right-

of-way or easement holder whose lease, right-of-way or easement is so affected. A list of such
Minerals Management Service
12-Inch Gas Right-of-Way Pipeline
Block 261, Main Pass Area
April 20, 2001

Page Three

designated operators, right-of-way or easement holders is included as Attachment A and copies of the return receipts showing date and signature as evidence of service upon such operators, right-of-way or easement holders will be forwarded to your office when received.

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

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

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

1. Originally signed copy of Nondiscrimination in Employment Stipulation is attached to each copy of the application.
2. Designated Oil & Gas Lease Operators and Right-of-Way Holders (Attachment A).
3. General Information and Calculations for Design and Construction of 12-Inch Natural Gas Pipeline.
4. Plan and Profile Pipeline Route Map (Sheets 1 through 2 of 2).
6. Pipeline Safety Flow Schematic (Drawing No. 901).
7. Riser Detail Drawings at proposed Canyon Station Platform in Main Pass 261(Drawing Nos. 88-2365-S10-09-167 and 168).
8. Hot Tap Assembly Details for subsea tie-in on Viosca Knoll Gathering Company 20-inch Pipeline in Main Pass Block 261 (Drawing No. 9002).
9. Pipeline Clamp Details (Drawing No. 9003).
10. 3-1/2-inch diskette of the proposed pipeline route.

Minerals Management Service
12-Inch Natural Gas Right-of-Way Pipeline
Block 261, Main Pass Area
April 20, 2001

Page Four

11. 3 copies of the Archaeological, Engineering and Hazard Report Report prepared by Fugro Geoservices, Inc.

Note: This report covers Williams proposed Canyon Station Platform and all four departing pipelines in Main Pass Block 261

12. Check in the amount of \$2365.00 covers the application fee of \$2350 plus \$15.00 for the first year rental on 1.09miles of right-of-way.

Contact on technical points or other information:

Wanda E. Richmond
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
Telephone: (281) 578-3388; email address:wanda@jccteam.com

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

Please refer to your New Orleans Miscellaneous File No. 02385 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of Williams Field Services - Gulf Coast Company, L.P. Additionally, Williams Field Services - Gulf Coast Company, L.P. has an approved \$300,000 Right-of-Way Grant Bond on file with MMS, covering installation of right-of-way pipelines in Federal Waters, Gulf of Mexico.

Sincerely,

WILLIAMS FIELD SERVICES - GULF COAST COMPANY, L. P.



Alan S. Armstrong
Vice President/Midstream Gas and Liquids,
Asset Optimization

ASA:wer

Attachments and Enclosures
Minerals Management Service
12-Inch Natural Gas Right-of-Way Pipeline
Block 261, Main Pass Area
April 20, 2001

Page Five

cc: Devon SFS Operating Inc.
840 Gessner, Ste. 1400
Houston, TX 77024
Attn (Certified Mail No. Z-580-779-523)

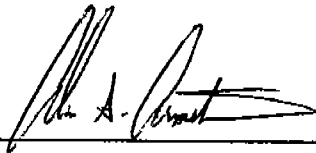
Viosca Knoll Gathering Company
1001 Louisiana St.
Houston, Texas 77002
(Certified Mail No. Z-580-779-524)

NONDISCRIMINATION IN EMPLOYMENT

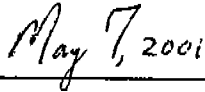
As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee, Williams Field Services - Gulf Coast Company, L.P. hereby agrees and consents to the following stipulation, which is to be incorporated into the application for said right-of-way.

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.



Signature



Date

ATTACHMENT A

The following Designated Oil & Gas Lease Operators and Right-of-Way Holders have been furnished information regarding the proposed pipeline installation by Certified Mail, Return Receipt Requested. (Note: The status of blocks listed below is current, per research of MMS records by J. Connor Consulting, Inc.).

MAIN PASS AREA

BLOCK 261

Devon SFS Operating Inc.	OCS-G 13035	Oil & Gas Lease
Viosca Knoll Gathering Partners	OCS-G 14292	Right-of-Way
Dauphin Island Gathering Partners	OCS-G 21022	Right-of-Way*
Equilon Pipeline Company, LLC	OCS-G 13408	Right-of-Way*
Transcontinental Gas Pipe Line Company	OCS-G 20503	Right-of-Way*
Williams Field Services, Gulf Coast Company, L.P.	OCS-G 21485	Right-of-Way*
Destin Pipeline Co. LLC	OCS-G11930	Right-of-Way*

*Not affected by proposed right-of-way.

Williams Field Services
Gulf Coast Company, L.P.
12" Gas Pipeline
Main Pass 261 "JP" to
Main Pass 261 VKGS 20" Pipeline
Rev. 0, 2/22/01

PIPELINE DESIGN INFORMATION

I. Pipeline and Riser Description

A. Nominal Pipeline:

Size:	12.750 Inch
Wall Thickness:	0.500 Inch
Grade:	API 5L Gr. X42, Seamless
Length:	5,739 Feet, 1.09 Miles
Bare Weight:	65.42 lbs/ft
Protection Coating Type and Thickness:	Fusion Bonded Epoxy; 12-14 mils
Weight Coating:	None
Specific Gravity of Pipe in Seawater (empty):	1.15

B. Riser:

Size:	12.750 Inch
Wall Thickness:	0.562 Inch
Grade:	API 5L Gr. X60, Seamless
Bare Weight:	73.15 lbs/ft
Protection Coating Type and Thickness:	
- Below Splash Zone:	Fusion Bonded Epoxy; 12-14 mils
- In Splash Zone:	Splashtron Coating; ½ Inch
- Above Splash Zone:	Fusion Bonded Epoxy; 12-14 mils and/or a three coat paint system; 12 mils DFT.
Weight Coating:	None

II. Cathodic Protection System

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

Pipeline and Riser Sacrificial Anodes System:

Design Life:	50 yrs.
Type of Anode:	Galvalum III
Spacing Interval:	500 ft.
Output:	1150 Amps - hrs./lb.
Efficiency:	0.85
Current Density:	2 ma/sq. ft.
% Assumed Bare Pipe:	5.0%
Minimum Required Weight of Anode:	N/A

$$\# = (.002)(3.14159)(12.750)(500)(.05)(50)(365)(24)/(1,150)(12)(.85) = 74.8 \text{ lbs.}$$

Use one (1) 80# net weight anode every 500 feet.

III. Water-Depth for Pipeline:

The water depth along the pipeline varies from approximately (-)299 feet to (-)306 feet.

IV. Description of Internal Protective Measures:

Internal Coating:	None
Corrosion Inhibitor Program:	As necessary
Pigging Program:	A Pigging Schedule has not been defined, however, depending on the analysis of the transported product, a program will be initiated as necessary.

V. Riser Protection

At Main Pass 261 "JP", the riser will be protected by the jacket framing.

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

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

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

Where:

$$W_p = \text{Weight of the pipe (lbs/ft)} = 65.42$$

$$W_{\text{CONC}} = \text{Weight of Concrete (lbs/ft)} = 0$$

$$W_{\text{H2O}} = \text{Displaced weight of the seawater (lbs/ft)} = 56.74$$

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

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

$$\text{Density of Seawater} = 64 \text{ lbs/ft}^3$$

$$\text{The specific gravity of the pipeline} = 1.15$$

VII. Specific Gravity of the Product:

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

$$\text{S.G. (Gas)} = 0.65 \text{ (Air} = 1.0) @ T = 80 \text{ Degrees}$$

VIII. Design Capacity:

The design flowing capacity of the pipeline is 280 MMSCFD. The total volume capacity of the pipeline is 770 bbls.

IX. Maximum Operating Pressure:

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

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

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

Where:

- P = Pressure as 100% SMYS (psig)
 P1 = Internal Design Pressure (psig)
 s = Specified Minimum Yield Strength (SMYS) (psi)
 t = Pipe Wall Thickness in Inches
 ca = Corrosion Allowance (use 0.03")
 D = Pipe Outside Diameter in Inches
 (F) = Design Factor
 0.50 for Risers
 0.72 for Pipeline
 (E) = Joint Factor
 1.0 for Seamless Pipe
 (T) = Temperature Derating Factor
 1.0 for Operating Temperatures below 250 Degrees Fahrenheit

1) Pipeline: 12.750" OD x 0.500" W.T. API 5L Gr. X42

- a) $P = (2)(42,000)(0.500)/12.750 = 3,294$ psig
 b) $P1 = (2)(42,000)(0.500-0.03)(0.72)(1.0)(1.0)/12.750 = 2,229$ psig
 c) Hydrostatic Test Pressure = HTP
 Maximum HTP = $0.95 P = (0.95)(3,294) = 3,129$ psig
 Minimum HTP will be 2,775 psig for 8 hour hold time.
 Rated MAOP = $2,775 \text{ psig}/1.25 = 2,220$ psig
 d) Maximum Allowable Operating Pressure (MAOP) = 1,500 psig

2) Riser Pipe: 12.750" OD x 0.562" W.T. API 5L Gr. X60

- a) $P = (2)(60,000)(0.562)/12.750 = 5,289$ psig
 b) $P1 = (2)(60,000)(0.562-0.03)(0.5)(1.0)(1.0)/12.750 = 2,503$ psig
 c) Hydrostatic Test Pressure = HTP
 Maximum HTP = $0.95 P = (0.95)(5,289) = 5,025$ psig
 Minimum HTP will be 3,330 psig for 8 hour hold time.
 Rated MAOP = $3,330 \text{ psig}/1.5 = 2,220$ psig
 d) Maximum Allowable Operating Pressure (MAOP) = 1,500 psig

B. MAOP of Flange, Fittings and Valves:

1) Under Water:

ANSI 900 class = 2,220 psig

2) Platform Facilities (See Safety Schematic):

ANSI 900 class = 2,220 psig

C. Summary

This pipeline and riser will have an MAOP of 1,500 psig.

X. Design Standard:

The design of the proposed pipeline is in accordance with Title 30 CFR, Part 250, Subparts H and J.

XI. Construction Information:

A) Anticipated Start Date:	July 9, 2001
B) Method of Construction:	Lay Barge
C) Method of Burial:	N/A
D) Time Required to Lay Pipe:	2 Days
E) Time Required to Complete the Project:	9 Days

MP261
OCS-G-13035
DEVON, VASTAR

MP260

00+00.00	Prop "JP" Pltfm
X=	3,029,600.00'
Y=	256,029.99'
Lat.	29° 19' 50.874"N
Lon.	88° 06' 06.821"W

Prop "JP" Pltfm

TOTAL LENGTH= 5,739.00' = 1.09 MI.

**PROPOSED
12" GAS PIPELINE**

57+39.00	Hot-tap into Existing 20"
X=	3,031,110.74'
Y=	250,493.40'
Lat.	29° 18' 55.661"N
Lon.	88° 05' 51.527"W

VIOSCA KNOLL 20"
MMS SEG #10711

S15° 15' 45"E
FLOW

GRID NORTH

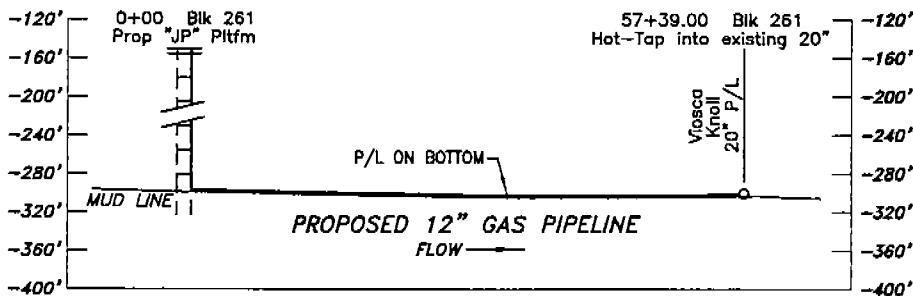
MP282

PLAN



DESIGN CHARACTERISTICS OF THIS PIPELINE ARE
IN COMPLIANCE WITH APPLICABLE REGULATIONS.

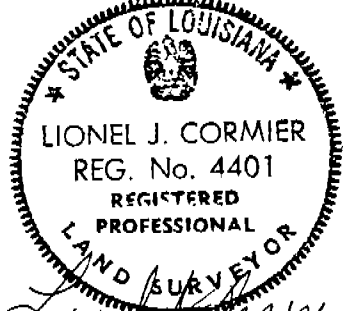
AREA ENGINEER



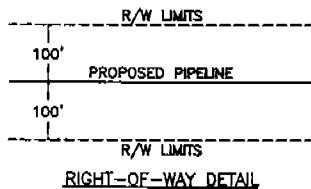
PROFILE



THE RIGHT OF WAY OF THE PROPOSED
PIPELINE IS ACCURATELY REPRESENTED.



REG. PROFESSIONAL LAND SURVEYOR NO. 4401
STATE OF LOUISIANA



WILLIAMS FIELD SERVICES-GULF COAST COMPANY, L.P.

**PROPOSED
12" GAS PIPELINE**

BLK 261-PROP "JP" PLTFM TO BLK 261-HOT TAP INTO 20"
MAIN PASS AREA
GULF OF MEXICO

JOHN E. CHANCE
& ASSOCIATES, INC.



GEODETIC DATUM: NAD 1927
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE AS SHOWN

Job No.: 00-3923

Date: 02/20/01

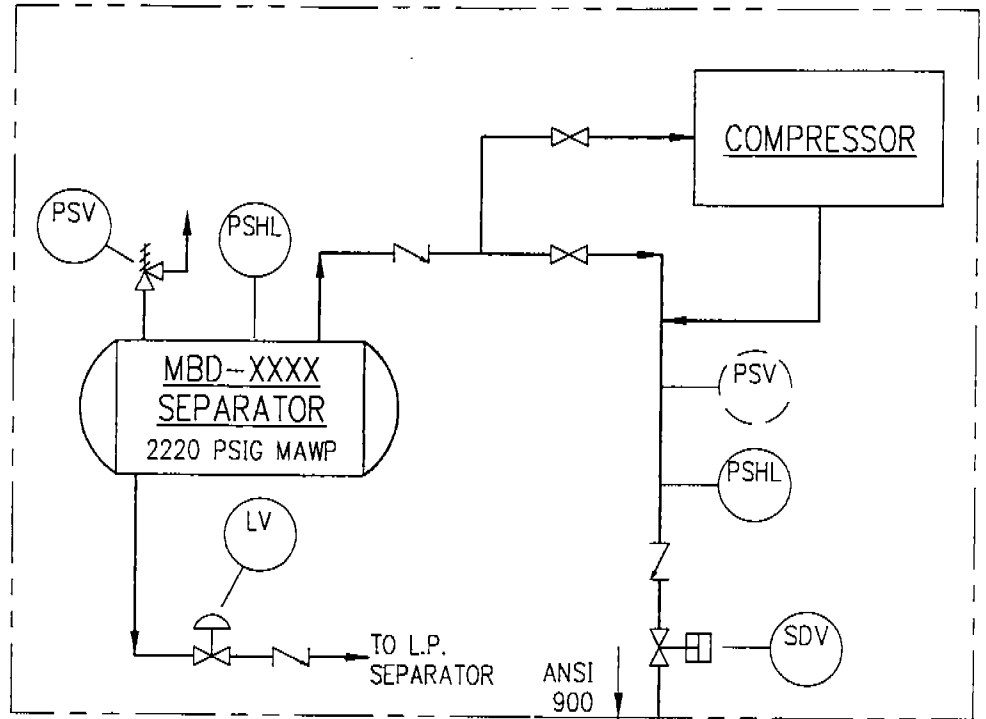
Drawn: MGK

Chart: 0f:

Dwgfile: H:\2000\003923\CAD\MARINE\003923PP (D)

2 2

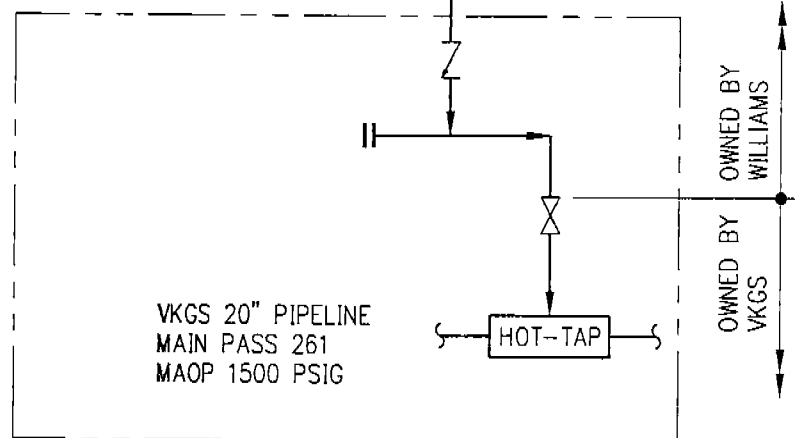
WILLIAMS FIELD SERVICES
 MAIN PASS 261 "JP"
 PRODUCTION PLATFORM
 OCS-G-13035



NOTES

1. THIS PIPELINE COMPLIES WITH DEPARTMENT OF INTERIOR SUBPARTS H & J PART 250, TITLE 30, OF THE CODE OF FEDERAL REGULATIONS.
2. THIS PIPELINE COMPLIES WITH API RP 1111 REGULATIONS.
3. ALL FACILITIES COMPLY WITH API RP 14E.
4. PSH AND PSL SENSORS SHALL BE SET NO MORE THAN 15% OR 5 PSIG, WHICH EVER IS GREATER, ABOVE & BELOW THE NORMAL OPERATING RANGE OF PIPELINE. THE PSH SETTING SHALL NOT EXCEED THE PIPELINE MAOP.
5. ANODES WILL BE ALUMINUM, 80 LB. BRACELET TYPE, GALVALUM III.
6. TOTAL PIPELINE LENGTHS = 5,739 FEET; 1.09 MILES.
7. PIPELINE MAOP = 1500 PSIG.

VIOSCA KNOLL GATHERING SYSTEM
 MAIN PASS 261
 SUBSEA TIE-IN
 SEGMENT No. 10232



PINNACLE ENGINEERING, INC.
 HOUSTON, TEXAS

WILLIAMS FIELD SERVICES
 GULF COAST COMPANY, L.P.



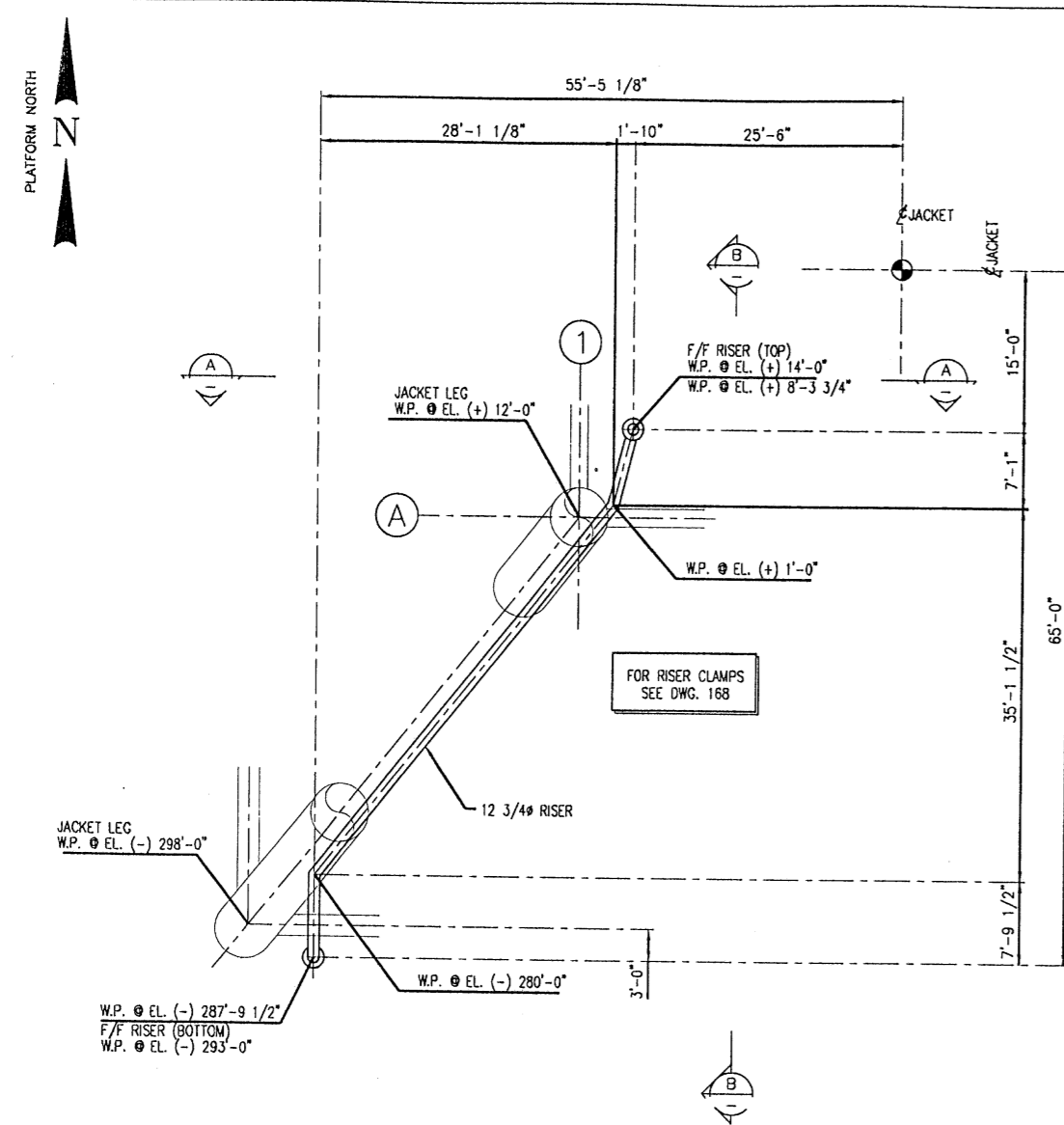
MAIN PASS 261 "JP" TO
 MAIN PASS 261 VKGS 20" PIPELINE

SCHEMATIC FOR 12.75" O.D. GAS PIPELINE

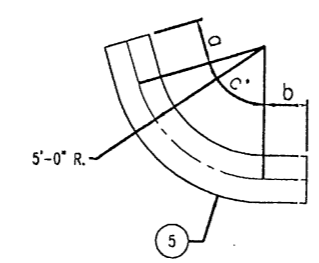
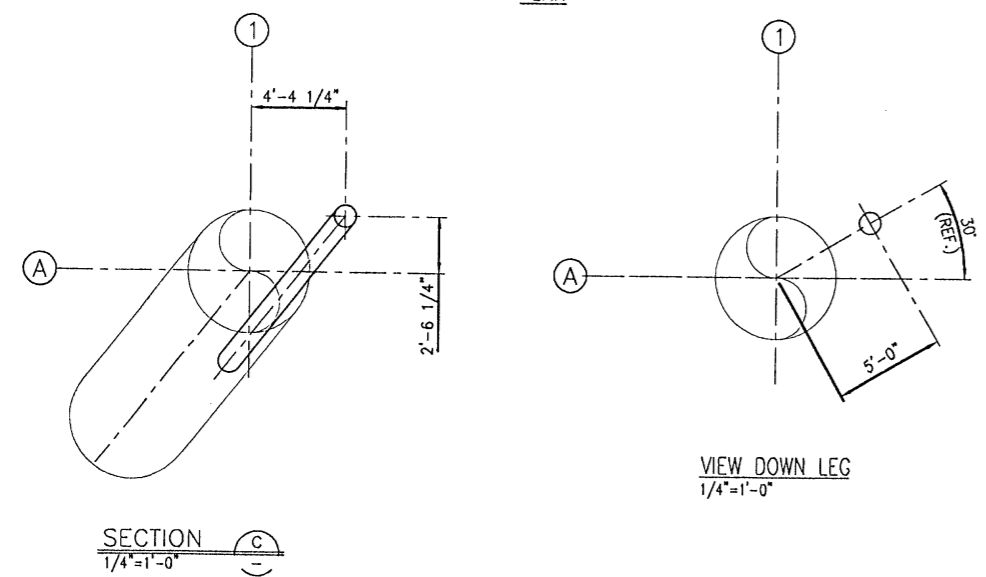
JOB NO. 490702

DWG NO. 901

REV. 0

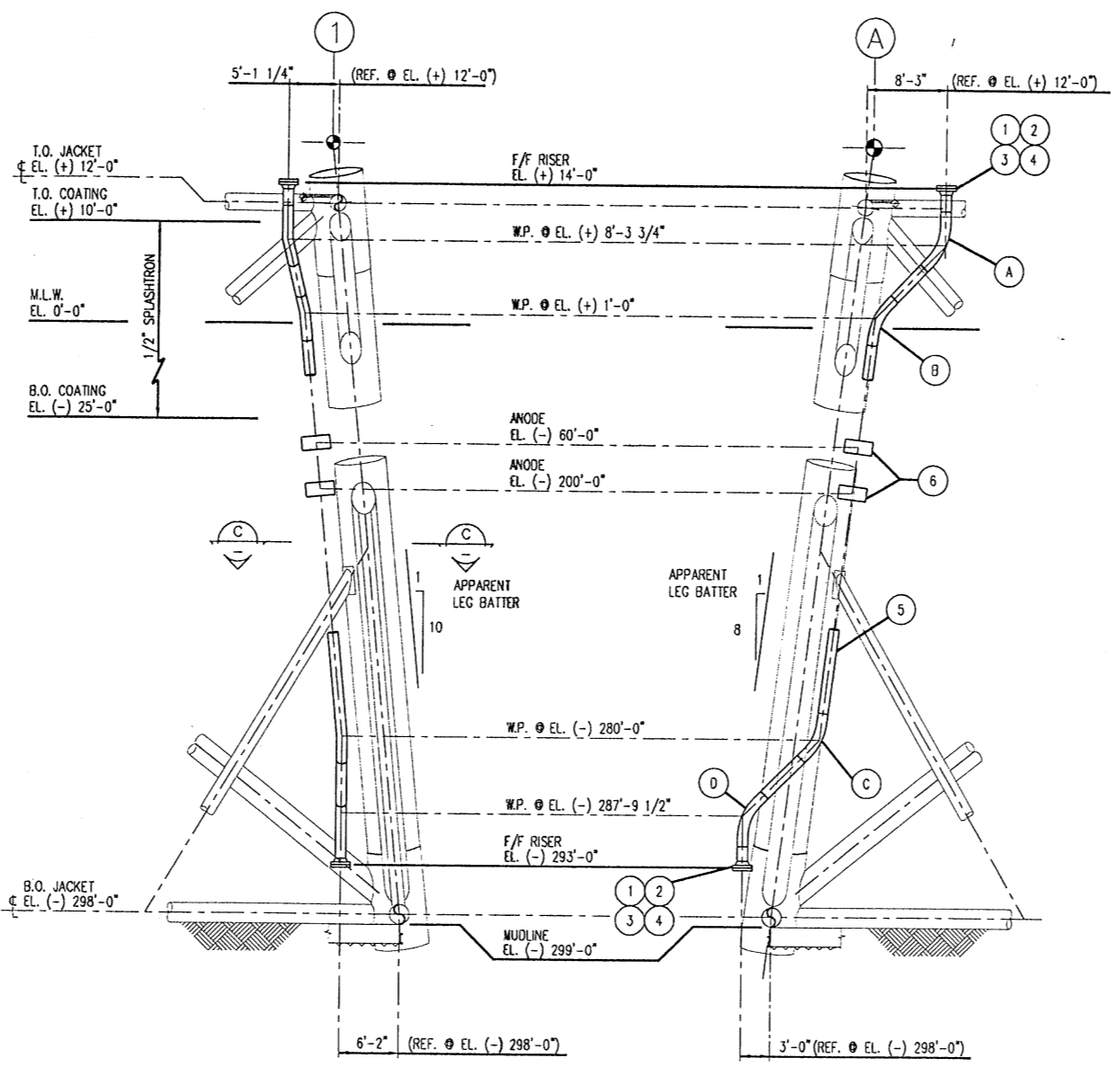


PLAN



ITEM	a*	b*	c*
A	1'-0"	1'-0"	45°
B	1'-0"	1'-0"	37.75°
C	1'-0"	1'-0"	38.24°
D	1'-0"	1'-0"	45°

* SEE NOTE 7



SECTION A

SECTION B

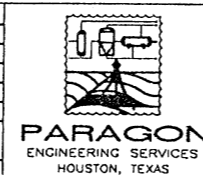
ITEM	NO. REQ'D	DESCRIPTION
1	2	12"-900# RTJ WN FLG.
2	2	12"-900# RTJ BLIND FLG. W/ 1" TAP AND PLUG
3	40	1 3/8" x 10 1/4" STUD BOLTS W/ NUTS
4	2	12"-900# RTJ TYPE R GASKET
5	320'	12 3/4" SMLS. PIPE API 5L OR. X-60
6	2	ANODE GALVALUM III FOR 12" PIPE

ISSUED FOR CONSTRUCTION
DATE: Mar. 09, 2001

- NOTES:
- FOR GENERAL NOTES, SEE DWG. 001.
 - RISER TO BE COATED WITH FBE 16 MILS NOMINAL (14 MIN./22 MAX.) BELOW SPLASHTRON.
 - RISER TO BE PAINTED ABOVE SPLASHTRON SAME AS JACKET COATING SYSTEM.
 - ANODES TO BE BRACELET-TYPE, GALVALUM III OR EQUAL. ANODES TO BE SUPPLIED BY COMPANY AND INSTALLED BY FABRICATOR.
 - ANODES TO BE CAD-WELDED TO RISER PER SUPPLIER RECOMMENDATIONS AND CLIENT SPECIFICATIONS.
 - HYDROTEST RISER TO 3300 PSIG FOR 8 HOURS. PRESSURE SHALL HOLD OR RISE OVER THE LAST 2 HOURS.
 - FABRICATOR MAY EXTEND TANGENT LENGTHS TO REDUCE NUMBER OF WELDS.

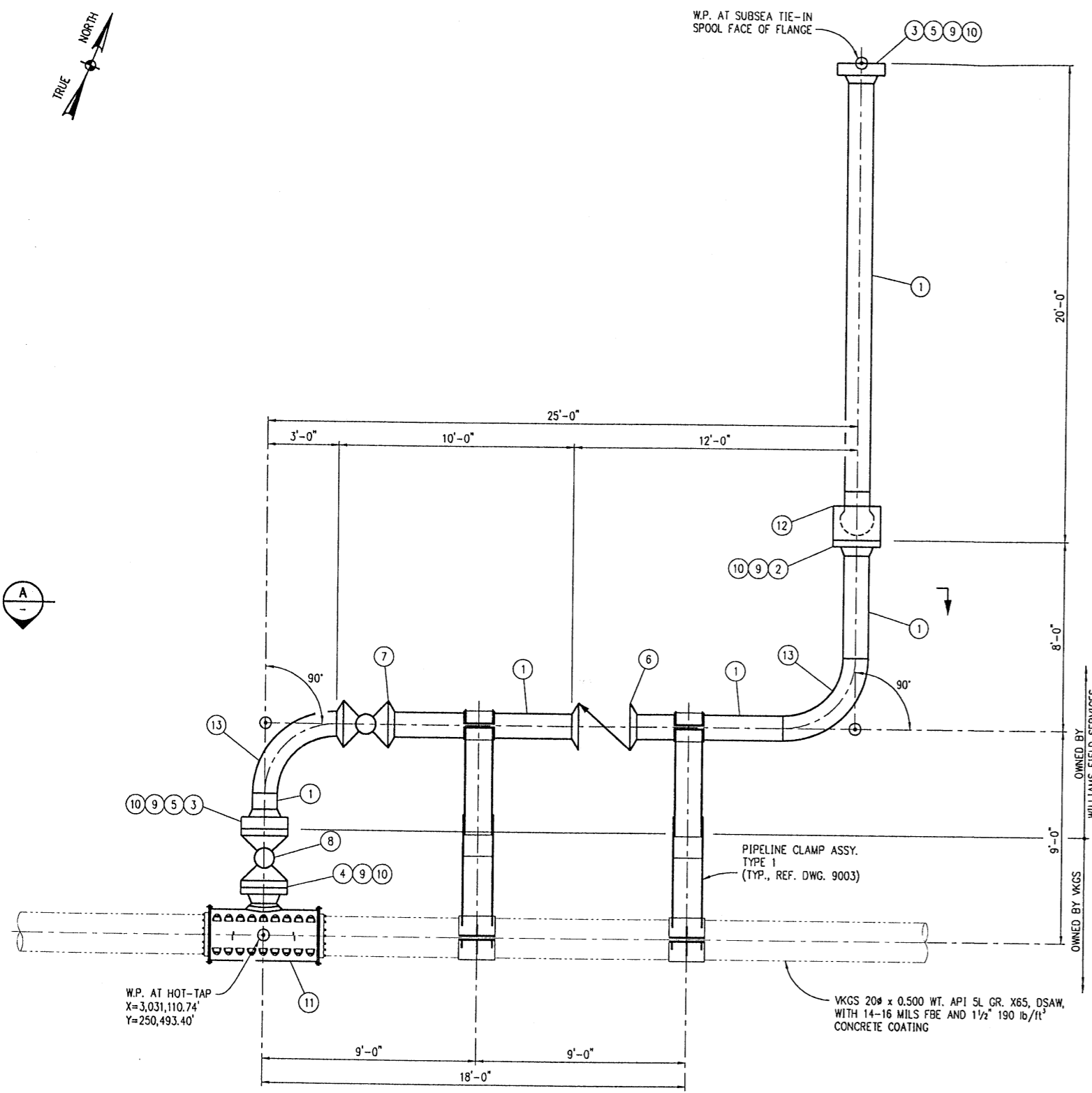
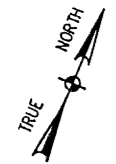
NO.	REVISION	DATE	DRAWN	CHK'D	APP'D	CLIENT AFE NO.
0	ISSUED FOR CONSTRUCTION	03/09/01	LC	MCK	LDD	WILLIAMS
A	ISSUED FOR MATERIAL ORDER	03/02/01	DFP	MCK	LDD	WILLIAMS

ENGINEER	MCK	DATE	03/09/01
DRAWN	CC	DATE	02/14/01
CHECKED	DFP	DATE	03/09/01
APPROVED	LDD	DATE	03/09/01
SCALE	1/8" = 1'-0"	SHEET	1 OF 1
JOB NO.	40177	CLIENT	WILLIAMS



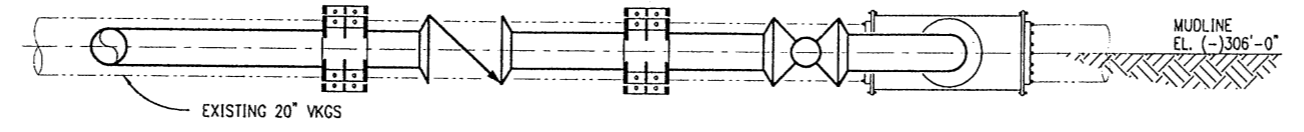
WILLIAMS ENERGY SERVICES
MP 261-JP "CANYON STATION"
12" WGS S. RISER
DRAWING NO. 88-2365-S10-09-167 REV. 0

THIS DRAWING CANNOT BE REPRODUCED WITHOUT THE PRIOR CONSENT OF THE PARAGON ENGINEERING SERVICES INC.



PLAN
SUBSEA TIE-IN ASSEMBLY AT MP 261
SCALE: 3/8"=1'-0"

OWNED BY VKGS
WILLIAMS FIELD SERVICES



SECTION
SCALE: 3/8"=1'-0"

MATERIAL SUMMARY		
ITEM	QTY.	DESCRIPTION
1	62 LF.	PIPE, 12 3/4" 0.562 WT., API 5L GR. X60, SEAMLESS, COATED w/ 12-14 MILS. D.F.T. FUSION BOND EPOXY, SCOTCHKOTE 206N
2	ONE	FLANGE, 12", WN RTJ, ANSI 900, BTM 0.562 WT GR X60 PIPE, ANSI B16.5, ASTM A105 (160)
3	2	FLANGE, 12", SWIVEL-RING, ANSI 900, BTM 0.562 WT GR X60 PIPE, ANSI B16.5, ASTM A105 (160)
4	20	BOLTS, 1 3/8" DIA. x 1'-1" LG. STUD ASTM A193 GR B7, w/ (2) ASTM A194 GR 2H HVY. HEX NUTS, IMF-3W COATED, ASSEMBLED AND TAGGED: 12" 900 RTJ
5	40	BOLTS, 1 3/8" DIA. x 1'-6 1/2" LG. STUD ASTM A193 GR B7, w/ (2) ASTM A194 GR 2H HVY. HEX NUTS, IMF-3W COATED, ASSEMBLED AND TAGGED: 12" 900 SWIVEL
6	ONE	VALVE, 12", CHECK, WHEATLEY, FULL OPENING, ANSI 900 WE x WE, BTM 0.562 WT. GR X60 PIPE, SWING TYPE, FULL OPEN, LOCK OPEN DEVICE, SUBSEA SERVICE
7	ONE	VALVE, 12", BALL, CAMERON, FULL PORT, ANSI 900, WE x WE, BTM 0.562 WT. GR X60 PIPE, w/ GEAR OPERATOR, SUBSEA SERVICE
8	ONE	VALVE, 12", BALL, CAMERON, FULL PORT, ANSI 900, RTJ x RTJ, w/ GEAR OPERATOR, SUBSEA SERVICE
9	4	GASKET, 12", ANSI 900, OCT. RING, R-57, 316 SS
10	4	PROTECTOR, 12" FLANGE, ADVANCE, ANSI 900, c/w INJECTION FITTING AND RELIEF VALVE, 316 SS
11	ONE	HYDROTAP, 20" x 12", ANSI 900, BIG INCH MARINE SYSTEMS, INC.
12	ONE	FLANGE, 12" BALL FLANGE CONNECTOR, WE x RTJ ASSEMBLY, ANSI 900, BTM 0.562 WT GR X60 PIPE, ANSI B16.5, ASTM A105, COMPLETE w/ STUDS AND NUTS, BIG INCH MARINE SYSTEMS, INC.
13	2	ELL, 12", 90", 3R, ASTM A234, GR. WPB

- GENERAL NOTES:**
- ALL WELDING AND MATERIAL SHALL BE IN ACCORDANCE WITH ANSI, API 1104 AS PER VKGS SPECIFICATIONS.
 - DESIGN SHALL MEET OR EXCEED D.O.T. REGULATIONS PART 192 AND ANSI B 31.8.
 - DESIGN PRESSURE: 2200 PSIG; DESIGN FACTOR 0.5; DESIGN TEMPERATURE 100 DEGREES F.
 - ALL PIPING FABRICATION SHALL BE 100% X-RAYED IN ACCORDANCE WITH API STANDARD 1104.
 - COMPLETE TIE-IN ASSEMBLY SHALL BE COATED AS PER VKGS SPECIFICATIONS.
 - HYDROSTATICALLY TEST ENTIRE ASSEMBLY TO 3300 PSIG MINIMUM FOR 8 HOURS. VALVES TO BE IN HALF OPEN POSITION THROUGHOUT TEST.
 - TIE-IN ASSEMBLY MAOP SHALL BE 1500 PSIG.
 - CONTRACTOR TO INSTALL FLANGE PROTECTORS AND FILL WITH SUITABLE GREASE.
 - SUPPORT SANDBAGS SHALL BE CEMENT STABILIZED. COVER SANDBAGS SHALL BE SAND ONLY.
 - CEMENT STABILIZED SANDBAGS SHALL BE FILLED WITH MIXTURE OF 1 PART CEMENT TO 3 PARTS SAND (BY WEIGHT).
 - BAGS SHALL BE MADE OF CLOSELY WOVEN MATERIAL WITH WICKING ACTION. AFTER FILLING BAGS, THEY SHALL BE CLOSED BY SEWING OR EQUAL, BUT NOT BY BUNCHING OR TYING END.
 - CONSTRUCTION SHALL BE GOVERNED BY THE CONTRACT AND SPECIFICATIONS FOR THE FABRICATION AND INSTALLATION OF MAIN PASS AREA PIPELINE, BY WILLIAMS ENERGY SERVICES.

LOREN FOWLER 02/28/01 12:53 48073902.DWG

NOTES

NO.	DATE	DESCRIPTION	BY	APPR.
A		ISSUED FOR PERMIT/APPROVAL		

PINNACLE ENGINEERING, INC.
HOUSTON, TEXAS

APPROVAL	
Drawn By	L. FOWLER
Date	01-29-01
Checked By	
Date	
Designed By	
Date	
Approved By	
Date	

WILLIAMS FIELD SERVICES
GULF COAST COMPANY, L.P.

12" PIPELINE
MAIN PASS 261 "JP" TO 20" VKGS PIPELINE

HOT-TAP ASSEMBLY DETAILS

JOB NO. 490702 SCALE: NOTED DWG. NO. 9002 REV. A

