BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION BY SCS CARBON TRANSPORT LLC FOR A PERMIT TO CONSTRUCT A CARBON DIOXIDE TRANSMISSION PIPELINE

HP22-001

SURREBUTTAL TESTIMONY OF RANDALL L. HARRIS ON BEHALF OF THE GREAT PLAINS LABORERS' DISTRICT COUNCIL

Q. Please state your name, affiliation, and address.

- A. My name is Randy Harris, my address is 1 North Old State Capitol Plaza, Suite 525,
- 3 Springfield, Illinois, 62701. I am the Director of the Laborers-Employer Cooperation and
- 4 Education Trust ("LECET") for the Laborers' International Union of North America's
- 5 ("LIUNA" or the "Laborers") Midwest Region. The Great Plains' Laborers' District Council
- 6 ("GPLDC"), which is the LIUNA affiliate in this case, covers Illinois, South Dakota, Iowa, and
- 7 Nebraska. LIUNA represents thousands of construction workers in the Midwest, and has local
- 8 offices in Sioux Falls, South Dakota. I am testifying on behalf of GPLDC.

Q. Are you the same Randy Harris who previously filed testimony in this case?

10 **A.** Yes.

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Q. What is the purpose of your surrebuttal testimony?

- A. I am presenting testimony in response to the rebuttal testimony of James Powell on behalf
- of SCS Carbon Transport, LLC ("Summit" or the "Applicant") as it relates to workforce
- development, contractor selection, local economic benefits, and other issues he raised in
- response to my direct testimony.

Q. Please summarize Mr. Powell's rebuttal.

- 17 A. First, Mr. Powell claims a unionized workforce is not more qualified than a non-union
- workforce in installing pipeline facilities. Second, Mr. Powell states that its chosen contractor,
- 19 Texas-based Pumpco, Inc., is qualified to build its Project in South Dakota, despite having
- 20 limited experience working in the Upper Midwest. Third, Mr. Powell testifies that South Dakota
- 21 lacks the labor pool to construct the Project. Fourth, Mr. Powell asserts that the economic
- 22 contributions arising from its capital investment in the Project is similar regardless of whether
- 23 the construction workforce building the Project are local and state residents, or out-of-state
- travelers. Lastly, it appears that Mr. Powell believes GPLDC has asked the Public Utilities
- 25 Commission ("PUC" or "Commission") to mandate the use of union labor on this Project. He
- 26 concludes his rebuttal by arguing that the PUC should not mandate the use of union labor –
- 27 which is a request we have not made in this case.

Q. What evidence did Mr. Powell provide in support of his assertion that union pipeline construction workers are not more qualified than non-union workers?

A. Mr. Powell's main evidence seems to be two-fold. First, he states that "top tier non-union contractors employ a core group of craftsmen who, in many cases, are retained for years and comprise the core group for all pipeline construction projects." He states that "these individuals hone their skills just as an individual in formal training or apprenticeship program." Second, he testifies that because non-union contractors allegedly perform the majority of pipeline construction work in the U.S., non-union personnel theoretically have more opportunity to hone their craft.

Q. What evidence has GPLDC presented to document the qualifications of union pipeline personnel?

A. Regarding Mr. Powell's statement that non-union contractors employ a core group of craftsmen, it should be noted that this employment model is inclusive of most major pipeline contractors, not just non-union contractors. All of the union pipeline contractors who are signatory to the National Pipeline Agreement use this model as well. In fact, the agreement explicitly permits pipeline contractors to use key personnel on projects. The key distinction is that in addition to key personnel, union contractors *also* have ready access to skilled local labor who have experience building pipelines or other major infrastructure projects. And, because union laborers have experience working for multiple pipeline contractors, performing various scopes of work in all regions of the country, they arguably have more opportunity to hone their craft as compared to a non-union laborer employed by a single contractor. In addition, Mr. Powell disputes our claim that union contractors have performed half of pipeline construction projects in the U.S., in part because union contractors have less of a presence in Texas, where many pipeline projects have been built. However, Mr. Powell does not provide any additional evidence in support of this claim.

Q. How did GPLDC calculate union market share in the pipeline industry?

A. As stated in my direct testimony, we estimate we have built approximately half of all major pipeline projects. To determine an approximate union market share, GPLDC reviewed actual project data available on Industrial Info, a leading commercial project database that tracks

heavy civil projects such as pipelines. Industrial Info's Global Market Intelligence Database Platform tracks projects from announcement to operation, with key data including: estimated cost of the project, project industry codes, project descriptions, key dates for procurement opportunities and construction milestones, key contacts at the operator and vendor level, names of companies that bid for a particular project, and names of general contractors and subcontractors awarded the project, if available. At present, Industrial Info's database is tracking 276,000 plant locations with 213,000 active projects worth \$19.72 trillion. The Industrial Info database covers the Oil & Gas Pipeline industry, which provides project details on major capital and maintenance of crude oil, refined products, natural gas, NGL, hydrogen and carbon dioxide pipelines and ancillary station projects. Industrial Info's Oil & Gas Pipeline industry coverage is currently tracking 6,712 active pipeline capital and maintenance projects totaling \$434 billion, and including 5,165 contractor awards. Industrial Info categorizes projects by scopes of work. For example, if a pipeline project is awarded in segments, each segment is considered a separate project. If a pipeline project includes compressor stations, each station is considered a separate project.

To my knowledge, there is not one master source for all pipeline projects in the U.S., much less a source that has identified the contractors awarded to build each project. But, Industrial Info has the most comprehensive and up-to-date project database. In order to determine union market share in the pipeline industry, we analyzed major pipeline project awards, tracked by Industrial Info, since 2011, and found nearly 500 pipeline projects where a pipeline contractor was identified. We excluded stations from the analysis. In 49% of the projects, a union contractor was identified. In 1% of the projects, a union contractor and a non-union contractor were awarded the project. LIUNA also tracks major interstate natural gas transmission projects regulated by the Federal Energy Regulatory Commission ("FERC"). When reviewing FERC-regulated projects, union market share is even higher. To do this, we identified major projects listed on FERC's website. Then, we identified the contractor for the project by either using the Industrial Info database, other pipeline industry sources, news searches, or information contained in the docket on the FERC website. In cases where a contractor could be identified, 63% of those projects were built by union contractors. Of all major FERC projects, a union contractor built 54% of

¹ See, https://www.industrialinfo.com/database/pipelines/.

those projects. These data correspond with our own experience, which is that the more complex, regulated, higher pressure and larger diameter the transmission pipeline, the more likely it will be built by union contractors. Historically, prior to the increase in onshore oil and gas production tied to fracking, union contractors dominated in building major interstate pipeline projects. Since onshore oil and gas production require extensive gathering and smaller diameter pipelines to transport oil and natural gas from the production site to a transportation network, smaller, non-union pipeline contractors grew to meet that demand. In any event, the question is not whether union or non-union contractors have built the most pipeline miles across the U.S., but rather, which contractors have more experience building major, larger-diameter, interstate pipeline facilities in conditions similar to Summit's proposed 2,000-mile pipeline network. And the most similar pipeline projects to Summit's are the Dakota Access Pipeline, the Keystone Pipeline, and Enbridge's Line 3. Those three projects located in the Upper Midwest were built by union contractors, and union laborers.

Q. Did Mr. Powell provide any additional information regarding training available to the pipeline workforce employed to build the proposed pipeline in South Dakota?

A. No. Mr. Powell's rebuttal did not contain any additional information as to the training, certification, or operation qualification of construction labor employed on the Project. In response to a data request, Summit states, "the training and certifications necessary to conduct the work will be commensurate with other pipeline projects constructed in South Dakota." And other than a general comment likening a worker's own individual experience honing their skills to formal training and apprenticeship, he did not provide evidence to support how the two are equivalent. Regardless, union pipeline laborers also have individual experiences honing their skills. The difference is that union pipeline laborers are also supported by significant training and apprenticeship infrastructure. And, because union laborers are compensated fairly and receive portable quality health insurance and pension benefits, they are more likely than a low-wage construction worker to actually make construction a career that can sustain themselves and their families over the long-term.

² South Dakota Public Utilities Commission, Docket No. HP22-001, SCS Carbon Solutions, LLC's Responses to First Set of Interrogatories of the Great Plains Laborers District Council, Oct. 5, 2022.

In my direct testimony, I describe the extensive training union members receive. This training is *in addition* to any operator or project specific training a construction laborer would receive at the jobsite. The training is administered and funded by joint labor-management training funds, and updated regularly to reflect industry trends. LIUNA has been training pipeline laborers for nearly 30 years, our trainers are third-party certified. Moreover, the training is a hybrid of classroom and on-the-job instruction to support the needs of adult learners. In addition to pipeline training, our Construction Craft Laborer registered apprenticeship program requires 288 hours of classroom training, and 4,000 work hours. LIUNA views our training apparatus as another tool to advocate for the pipeline industry, because we have a vested interest in ensuring safe construction practices not only for our members, and the communities where they reside, but because our members rely on the success and preservation of the industry. We believe a commitment to the highest standards of workforce development is central to success, especially as it relates to new technologies such as carbon capture.

Q. What evidence did Mr. Powell provide to support Summit's claim that its pipeline contractor, Pumpco, has the requisite experience to install pipelines in South Dakota?

A. Mr. Powell's primary argument is that Pumpco has installed more pipeline miles than any other contractor. He did not, however, provide a reference source for this claim. When GPLDC requested a list of Pumpco's pipeline projects, Summit objected to the request. What Mr. Powell did not rebut is the fact that, by Summit's own admission, the vast majority of Pumpco's pipeline projects have been located in its home state of Texas. Only 1.5% of Pumpco's total installed mileage has occurred in states that are similar in climate and terrain to South Dakota.³ Considering the fact that Pumpco will be building the largest diameter, highest pressure transmission segment of the South Dakota pipeline network, and lack of training and Pumpco project disclosures by the Applicant, GPLDC stands by our concern regarding its ability to safely construct pipelines in the state. Moreover, Mr. Powell did not rebut the evidence I presented of documented instances of construction issues on past projects where Pumpco was the contractor.

³ According to Summit, Pumpco has installed a total of 7,500 pipeline miles in the U.S., and 115 miles of pipeline in North Dakota and Wyoming. South Dakota Public Utilities Commission, Docket No. HP22-001, SCS Carbon Solutions, LLC's Responses to Second Set of Interrogatories of the Great Plains Laborers District Council, March 31, 2023.

Q. Has Mr. Powell provided testimony regarding the experience of Precision Pipeline?

A. Yes. In the North Dakota proceedings, at the Gwinner public hearing on March 14th, Mr. Powell extolled the experience of Precision Pipeline in building pipeline facilities across the

Upper Midwest. He stated:

When it comes to construction, especially in Sargent and Dickey Counties and along this lateral, we're gonna employ a contractor that's a very, what I would consider a top tier contractor in the pipeline industry. They're based out of Wisconsin. They have constructed extensive miles – a lot of miles of pipeline in the Midwest in this part of the country where it's cold and the conditions are not similar to other parts of the country where a lot of pipeline activity is going on. So that contractor is very qualified, experienced in the area.⁴

Indeed, Precision Pipeline built segments of the Dakota Access Pipeline, and has significant experience installing pipelines in the Midwest. If Sargent and Dickey Counties in North Dakota are good enough for this level of top tier contractor, why can't the same pedigree of contractor install the larger and higher-consequence mainline pipeline in South Dakota? As I state in my direct testimony, our members generated 2.4 million work hours building the Dakota Access Pipeline. Our decades of experience mean there are thousands of union members who have experience installing pipelines in similar terrain and under similar conditions to the Summit Project.

Q. Did Mr. Powell provide any new information regarding the pipeline contractors Summit has hired to build the Project in South Dakota?

A. Yes. Mr. Powell disclosed that Holloman Corporation has also been selected to build portions of the Project in the state.

Q. Did Mr. Powell provide any evidence regarding Holloman's experience building pipelines in the Upper Midwest?

A. No. Mr. Powell simply identified Holloman Corporation as the third contractor selected to build portions of the Project in the state.

⁴ Cross examination of James Powell for Summit Carbon Solutions, North Dakota Public Service Commission, PU-22-391.212, Electronic recording of 14 March 2023 Formal Hearing - part 1 and part 2, https://apps.psc.nd.gov/webapps/cases/psdocketdetail?getId=22&getId2=391&getId3=78#.

Q. What is Holloman's experience building pipelines in the Upper Midwest?

A. As far as I can tell, Holloman, which is a Texas-based contractor, also has limited experience building pipelines in conditions that are similar to the Summit Project. For instance, we researched past pipeline projects by Holloman on Industrial Info, and found that nearly all of the pipeline projects Holloman has built were in Texas. Indeed, Industrial Info only identified one Holloman pipeline project outside of the southern region of the U.S. It built an 8.2-mile, 20-inch gathering pipeline in Wyoming. Like Pumpco, Holloman is primarily a Texas-based contractor. I have attached the project list of Holloman Oil & Gas pipeline projects that are tracked by Industrial Info as Attachment 1.

Q. Why is contractor selection and qualifications a relevant factor for Commission consideration?

A. Proper installation and construction practices are a risk mitigation measure. From trench construction, pipe handling and storage, welding and coating, to backfilling, all these activities affect pipeline integrity and safe operations. Summit's own pipeline safety expert has testified to this fact.⁵

Q. Do other stakeholders share GPLDC's concern regarding the employment of pipeline contractors with limited experience building in the Upper Midwest?

A. Yes. During the May 9th hearing in Linton, North Dakota that was conducted as part of North Dakota proceeding, Curtis Jundt, a former director for WBI Gas Services with pipeline construction responsibilities, and 40-year construction veteran, testified on behalf of Intervenor, the John H. Warford, Jr. Revocable Trust. At the hearing, Mr. Jundt testified that risk mitigation measures include selecting a contractor who has experience building pipelines under similar conditions as the Summit Project. In response to questioning regarding what kind of contractor should be selected to build the Project, Mr. Jundt stated:

Well that's a pretty easy question, because it was the position I always took, do you have any experience building a pipeline, excavating and building a pipeline in the state? I had to deal with Montana, Wyoming, and South Dakota. So my input was always I want folks

⁵ Cross examination of John Godfrey, DNV, for Summit Carbon Solutions, North Dakota Public Service Commission, PU-22-391.212, Electronic recording of 09 May 2023 Formal Hearing - part 1 and part https://apps.psc.nd.gov/webapps/cases/psdocketdetail?getId=22&getId2=391&getId3=212#.

who are familiar with construction practices, the soil, the weather challenges are significant in this state. Nobody from Texas can imagine what it's like, like I can, to be in southeast Montana in a raging snow storm clearing four feet of snow so we can lay a gathering line at 20 below zero weather. So if we're talking about bringing contractors up from Texas I don't think they even own any wooly underwear, but they're gonna need more than just that. So we want folks who are experienced. In my opinion, dealing with the challenges of construction, soils, weather, etc. in North Dakota.⁶

Q. Mr. Powell asserts that South Dakota lacks the local labor pool to build the Project. What is your response?

A. Mr. Powell is correct that union contractors typically source half of their workforce from the local community. And although it is true that the Summit Project is larger than the Dakota Access Pipeline in terms of mileage, he has not provided any specific evidence regarding the lack of local labor. For instance, as I state in my direct testimony, Summit disclosed in a data response that the forecasted demand for construction workers in 2024 and 2025 will exceed South Dakota resources, and it has completed a labor study to identify potential deficiencies. Summit, however, has objected to GPLDC data requests of that study. Importantly, S.D. Admin. R. 20:10:22:2 requires the Applicant to assess the adequacy of local manpower to meet construction labor requirements, and the estimated percentage of labor that will remain within the state after construction is complete.

In any event, it is our experience that with sufficient planning, and by working in coalition with labor stakeholders, it is possible to grow a local base of skilled labor. GPLDC, for example, has significant experience recruiting, training, and dispatching local workers for major infrastructure projects across the Upper Midwest.

Q. What evidence did Mr. Powell present as it relates to the cumulative economic impacts of the Project being comparable regardless of whether local or state residents build the Project versus out-of-state workers?

A. Mr. Powell did not provide any evidence to support the claim. He just asserts that "regardless of whether a contractor is union or non-union, the demand for local services (food, lodging, supplies, fuel, etc.) will be similar." This is simply wrong. First, he conflates local

⁶ Cross examination of Curtis Jundt for the John H. Warford, Jr. Revocable Trust, North Dakota Public Service Commission, PU-22-391.212, Electronic recording of 09 May 2023 Formal Hearing - part 1 and part https://apps.psc.nd.gov/webapps/cases/psdocketdetail?getId=22&getId2=391&getId3=212#.

workers with union workers to muddy the issue. We have not argued that being a local union member in and of itself creates greater economic benefits than employing a local non-union worker. Rather, the issue is whether a local worker contributes more to the local and state economy than a non-resident. The evidence I provided in my direct testimony illustrates that employment of local workers generates economic benefits that are four- to five-times greater than the benefits generated through employment of out-of-state travelers. Indeed, a report by North Star Policy Action appended to my direct testimony, provides a detailed account of the difference between the economic contributions of local and non-local workers. The analysis is supported by academic research which found local workers spend 95% of their earnings in their home communities, while out-of-state travelers typically limit their local spending to their daily per diem rate which covers food and lodging. Specifically, North Star Policy Action found that if half of all construction jobs in South Dakota are filled by local workers, the total economic impact of the project would be \$180 million. In comparison, if only 10% of workers are local, the economic impact decreases by half to \$94 million. Mr. Powell has not, in fact, rebutted the findings of this report. Summit's Ernst & Young economic impact report, by contrast, relies on the wildly unrealistic assumption that 96% of the workforce will be South Dakota residents, and 94% are from the counties traversed by the proposed Project.

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Q. Mr. Powell asks if the PUC should require Summit to use union contractors. What is your response to this?

A. GPLDC has not asked the PUC to mandate Summit utilize union contractors. The recommendations in my direct testimony relate to transparency and reporting of construction workforce metrics and training disclosures for the construction workforce. Labor metrics relate specifically to Summit's claim that the Project will contribute significant economic and tax impacts across the project footprint. Indeed, its Ernst & Young report alleges Summit's capital investment will create \$1.3 billion of economic output in South Dakota. As I stated above, and which Summit did not rebut, the Ernst & Young analysis relies on the unrealistic assumption that nearly all the workforce will come from host counties, and the state. Now, Summit is saying the state doesn't have the labor pool required to build the project, which is why it is relying on a

⁷ Jake Schwitzer and Lucas Franco, North Star Policy Action, "Capturing the Moment: A Roadmap to High-Road Carbon Capture Development," https://media.websitecdn.net/sites/949/2022/12/Capturing-the-Moment.pdf.

traveling workforce to build the transmission segment of the pipeline network. Summit cannot have it both ways. It cannot, on the one hand, claim enormous economic benefits associated with utilizing local and state labor, and, on the other hand, claim there is insufficient local and state labor to build the project. I reiterate our recommendations, which are as follows:

GPLDC recommends the Commission require Summit to provide information regarding the hiring of South Dakota residents employed to build the Project. These disclosures will enable a complete record in this case, and provide the Commission and stakeholders vital data to evaluate community impacts. Specifically, Summit should include in its regular reports to the Commission: 1) the number of and percent of total construction workers who are South Dakota residents, and how this rate compares to other Project states, and 2) the number of and percent of total registered apprentices who are South Dakota residents, and how this rate compares to other Project states. In addition to these metrics, in order to ascertain potential uncompensated care impacts to local health facilities, GPLDC recommends the Commission require Summit to provide before construction begins, the percentage of construction workers in South Dakota who are covered by employer-sponsored health insurance. Finally, in relation to training, GPLDC recommends the Commission require Summit provide more detailed training disclosures prior to the start of construction, including the minimum hours of training required for pipeline contractor personnel, and the specific tasks in which personnel will be trained on. GPLDC also recommends Summit certify in its regular reports to the Commission, the number of and percent of workers who have undergone required training. We believe training disclosures are needed to ensure all workers on the Project have the training and certifications needed to build the pipeline facilities safely and efficiently, and because Summit's pipeline contractor, Pumpco, has limited experience building pipelines in the Upper Midwest.

Q. Does this conclude your testimony?

A. Yes, it does.

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Dated this 31st day of August, 2023.

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282 /s/ Randy Harris

283 Randy Harris

ATTACHMENT 1: LIST OF HOLLOMAN CORPORATION'S OIL AND GAS PIPELINE PROJECTS, INDUSTRIAL INFO

Project Name EVANSTON PHASE II GRASSROOT SAGEBRUSH PIPELINE NORTH

Umbrella Project Name SPIRE CLEAR CREEK EXPANSION PROJECT PHASE II

Project ID: 300663544

PEC Activity Diagram

Umbrella Project Count 3

Umbrella Project Summary As Phase II of the Clear Creek Expansion Project, it consists of the following in Uinta County, Wyoming: (2) compressor units at the Clear Creek Plant; 7 new injection/withdrawal wells, 1.2 mile 20" well gathering pipeline, 7-miles of 20"

Last Update 08-Jun-2023

diameter pipeline.

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 7,000,000

SIC Code 4922 Natural Gas Transmission

SIC Product 4922*0004 Natural Gas Pipelines

Status Active
Environmental Air (A) Land (L)

Sector Natural Gas Pipelines

Project Type Grassroot

Initial Release 15-Jan-2021

Construction Labor Preference Unconfirmed
Operations Labor Preference Union, Non-Union

Project Capacity Planned 500 MMSCF of Natural Gas Storage, Gaseous

Pipeline Installation Details Pipeline Length Unit of Measure Installation Type **Pipeline Diameter Unit of Measure** Greenfield 7 Miles (mi) 20 Inches (in) Plant Parent Spire Inc Plant Owner Spire Storage West LLC Plant Name Clear Creek NG Metering Station **Unit Name** Plant ID 3443600 Location Carter Creek Road, 9.8 mi NE of Phone +1 314 342 0500 Evanston: NW/4 SW/4 Sec 9 T16N R119W City/State Evanston, Wyoming 82930 Zone/County WY*05, Uinta U.S.A.

Project Responsibility	Project Company	Project Contact
Project Manager	Spire Inc	Tom Reese
	700 Market Street	Construction Supervisor
	Saint Louis, Missouri 63101	[Tel.] +1 314 342 0500
	U.S.A.	[E-Mail] thomas.reese@spireenergy.com; [LinkedIn] tom-reese-35578016
Consultant	AECOM	Molly Giere
	1601 Prospect Parkway	Environmental Project Manager
	Fort Collins, Colorado 80525	[Tel.] +1 970 530 3349
	U.S.A.	[E-Mail] molly.giere@aecom.com
EPC	Holloman Corporation	Jason McDaniel
	333 North Sam Houston Parkway East Suite 600	Superintendent
	Houston, Texas 77060	[Tel.] +1 281 878 2600
	U.S.A.	[E-Mail]

PEC® Timing C1

Project Probability High (81-99%)

PEC® Activity Construction - Merit Shop

Scope Spire Incorporated awards AECOM (Environmental Consultants) and Holloman Corporation (EPC) and continues with Construction for a Grassroot Natural Gas Pipeline. DETAILS: As part of Phase III of the Clear Creek Expansion Project, Construct a 7-mile, 20" diameter natural gas pipeline known as the Sagebrush Pipeline North to transport 500MMSCFD of natural gas between the Canyon Creek Compressor Station (3180096) and the Clear Creek Gas Plant (3333625). REQUIRES: Trenching, Excavating, 20" Diameter Transmission Pipe, Cathodic Protection, Automatic Control Systems, Pig Launching & Receiving, Custody Transfers, Coatings, Block/Control Valves, Metering, MCC Mods, Tap Valves, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Leak Detection, Flares; (L) Leak Containment, Liners.

Schedule Spire with AECOM and Holloman continues with Construction Activities and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors as needed 2Q23 (Jun) through 3Q23 (Jul). Construction Commenced 2Q23 (Jun). Scheduled Project Completion 4Q23 (Dec).

Project Milestones

AFE 202301 Sub Bid Doc 202307 Completion 15-Dec-2023 Precision QUARTER

Long-Lead 202105 Equip RFQ 202306 Kick-Off 202306 Kickoff Slippage 20 Months Duration 7 Months

Engineering

Contracting Electrical Environmental Instrumentation Mechanical

Project Key Needs Civil/Site

 Instrumentation
 Electrical
 Mechanical
 NDE

 Piping/Fittings
 Insulation/Coatings
 Environmental Utilities
 Valves
 Pumps

 Communications
 Transportation

Matter Phase Gas

Energy

Buy Electricity

Sell

Historical Reports			
Project Name Report Date TIV Phase			
SPIRE CLEAR CREEK NATURAL GAS GRASSROOT TRANSMISSION PIPELINE	15-Jan-2021	12,000,000 USD	Permitting (P2 - 18)

SPIRE CLEAR CREEK NATURAL GAS GRASSROOT TRANSMISSION PIPELINE	13-Aug-2021	12,000,000 USD	Permitting (P2 - 18)
SPIRE CLEAR CREEK NATURAL GAS GRASSROOT TRANSMISSION PIPELINE	04-Oct-2021	12,000,000 USD	Permitting (P2 - 18)
SPIRE CLEAR CREEK NATURAL GAS GRASSROOT TRANSMISSION PIPELINE	07-Apr-2022	12,000,000 USD	Permitting (P2 - 18)
SPIRE CLEAR CREEK NATURAL GAS GRASSROOT TRANSMISSION PIPELINE	11-Apr-2022	12,000,000 USD	Permitting (P2 - 18)
EVANSTON PHASE II GRASSROOT SAGEBRUSH PIPELINE NORTH	27-Jun-2022	7,000,000 USD	Permitting (P2 - 18)
EVANSTON PHASE II GRASSROOT SAGEBRUSH PIPELINE NORTH	27-Jan-2023	7,000,000 USD	Planning and Scheduling (E2 - 25)
EVANSTON PHASE II GRASSROOT SAGEBRUSH PIPELINE NORTH	06-Jun-2023	7,000,000 USD	Planning and Scheduling (E2 - 25)
EVANSTON PHASE II GRASSROOT SAGEBRUSH PIPELINE NORTH	08-Jun-2023	7,000,000 USD	Construction - Merit Shop (C1 - 36)

Project Name ARNAUDVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS Industry Code 03 Oil & Gas Pipelines

Project Type Upgrade

TIV (USD) 8.000.000

Environmental Air (A) Land (L)

SIC Code 4922 Natural Gas Transmission

Sector Natural Gas Pipelines

PEC Activity Diagram

SIC Product 4922*0006 Natural Gas Compressor Stations

Status Complete / Done

Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Project Capacity Planned 75 MMSCFD of Natural Gas, Gaseous (Methane)

Plant Owner Gulf South Pipeline Company LP

Plant Name Arnaudville Natural Gas

Compressor Station

Plant ID 1039577

Location 304 Par Road 3-60

City/State Arnaudville, Louisiana 70512

Plant Parent Boardwalk Pipeline Partners LP

Initial Release 26-May-2021

Unit Name

Phone +1 337 988 6898 Zone/County LA*01, Saint Landry

U.S.A.	
Project Responsibility Project Company	Project Contact
Project Manager Gulf South Pipeline Company LLC	Keith Freeman
9 Greenway Plaza Suite 2800	Facilities Engineer
Houston, Texas 77046	[Tel.] +1 713 479 8139
U.S.A.	[E-Mail] keith.freeman@bwpipelines.com; [LinkedIn] keith-freeman-44924582
Project Manager Gulf South Pipeline Company LLC	Cale LeBlanc
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Houston, Texas 77046	[Tel.] +1 225 282 0389
U.S.A.	[E-Mail] cale.leblanc@bwpipelines.com
Compliance Gulf South Pipeline Company LLC	Juan Eligio
9 Greenway Plaza Suite 2800	Permit Engineer
Houston, Texas 77046	[Tel.] +1 713 479 3480
U.S.A.	[E-Mail] juan.eligio@bwpmlp.com
G/C Holloman Corporation	Justin Schwausch
333 North Sam Houston Parkway East Suite 600	Project Estimator
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	[E-Mail] justinschwausch@hollomancorp.com (!)
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Last Update 15-Sep-2022

PEC® Timing C1

Project Probability Completed (100%)

PEC® Activity Completion/Start-Up

Scope Gulf South Pipeline (Subsidiary of Boardwalk Pipeline) awards Holloman Corporation (G/C) and proceeds with Construction on Arnaudville Natural Gas Compressor Station Modifications. DETAILS: Modify station piping and aux equipment (Pig Launcher & Receiver facilities), add impellers, re-stage centrifugal compressors and install new valve assemblies to permit bi-directional flow of natural gas southbound on Gulf South existing 12" mainline pipeline system in LA. REQUIRES: Foundations, MCC Modifications, Headers, Station Piping, Control Valves, SCADA, Manifolds, Condensers, Coatings, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gulf South in Conjunction with Holloman continues with Construction Activities and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors 1Q22 (Mar) through 2Q22 (Apr). Construction Commenced 1Q22 (Mar). Scheduled Project Completion 3Q22 (Sep).

AFE 202201 Sub Bid Doc 202204 Completion 01-Sep-2022 **Precision QUARTER Project Milestones** Kick-Off 202203 Long-Lead 202104 Equip RFQ 202203 Kickoff Slippage 2 Months **Duration 7 Months**

Engineering

Electrical Instrumentation Mechanical Contracting **Environmental**

Project Key Needs Civil/Site Control Room

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts			
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager Brian Johnson	[Phn.] +1 337 224 1832 / [Alt.] +1 337 988 7105	Aug-2023	
Area Manager brian.johnson@bwpipelines.com	No		
Maintenance Manager Brian Johnson	[Phn.] +1 337 224 1832 / [Alt.] +1 337 988 7105	Aug-2023	
Area Manager brian.johnson@bwpipelines.com	No		
Purchasing Manager Rhonda Matthews	[Phn.] +1 713 479 8000	Aug-2023	

	rhonda.matthews@bwpmlp.com	No	rhonda-matthews-1972158
Engineering Manager	Erek Rhinewalt	[Phn.] +1 713 479 8000	Aug-2023
Project Manager		No	
Environmental Manager	Daniel O'Chery	[Phn.] +1 337 988 7106	Aug-2023
Supervisor, Environmental Compliance	Daniel.OChery@bwpipelines.com	No	daniel-o-b0898582
Safety Manager	Garry Dick	[Phn.] +1 713 479 8108	Aug-2023
Regional Safety Leader	garry.dick@bwpipelines.com	No	garry-dick-csho-2296b320
11/11/21 8.0	D: 11		
Utilities Manager	Brian Johnson	[Phn.] +1 337 224 1832 / [Alt.] +1 337 988 7105	Aug-2023
•		[Phn.] +1 337 224 1832 / [Alt.] +1 337 988 7105 No	Aug-2023
•	brian.johnson@bwpipelines.com		Aug-2023 Aug-2023

Historical Reports					
Project Name	Report Date	TIV	Phase		
ARNAUDVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-May-2021	8,000,000 USD	Permitting (P2 - 18)		
ARNAUDVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-Oct-2021	8,000,000 USD	Planning and Scheduling (E2 - 25)		
ARNAUDVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	15-Mar-2022	8,000,000 USD	Construction - Merit Shop (C1 - 36)		
ARNAUDVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	15-Sep-2022	8,000,000 USD	Completion/Start-Up (C1 - 41)		

Project Name CENTERVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS Industry Code 03 Oil & Gas Pipelines

Project Type Upgrade

TIV (USD) 8.000.000

SIC Code 4922 Natural Gas Transmission

Sector Natural Gas Pipelines

PEC Activity Diagram

SIC Product 4922*0006 Natural Gas Compressor Stations

Status Complete / Done Environmental Air (A) Land (L)

Last Update 08-Aug-2022 Initial Release 26-May-2021 Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Project Capacity Planned 75 MMSCFD of Natural Gas, Gaseous (Methane)

Plant Owner Gulf South Pipeline Company

Plant Parent Boardwalk Pipeline Partners LP

LLC

Plant Name Bayou Sale Natural Gas Compressor Station

Unit Name

Plant ID 1039554

Location Highway 90 East Service Road City/State Centerville, Louisiana 70522

Phone +1 225 869 3367 Zone/County LA*01, Saint Mary

0.0.7 (.		
Project Responsibility Project (Company	Project Contact
Project Manager Gulf Sou	th Pipeline Company LLC	Keith Freeman
9 Green	way Plaza Suite 2800	Facilities Engineer
Houston	, Texas 77046	[Tel.] +1 713 479 8139
U.S.A.		[E-Mail] keith.freeman@bwpipelines.com; [LinkedIn] keith-freeman-44924582
Project Manager Gulf Sou	th Pipeline Company LLC	Cale LeBlanc
20 East	Greenway Plaza Suite 900	Environmental Project Manager
Houston	, Texas 77046	[Tel.] +1 225 282 0389
U.S.A.		[E-Mail] cale.leblanc@bwpipelines.com
Compliance Gulf Sou	th Pipeline Company LLC	Juan Eligio
9 Green	way Plaza Suite 2800	Permit Engineer
Houston	, Texas 77046	[Tel.] +1 713 479 3480
U.S.A.		[E-Mail] juan.eligio@bwpmlp.com
G/C Holloma	n Corporation	Justin Schwausch
333 Nort	h Sam Houston Parkway East Suite 600	Project Estimator
Houston	, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.		[E-Mail] justinschwausch@hollomancorp.com (!)

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Gulf South Pipeline (Subsidiary of Boardwalk Pipeline) awards Holloman Corporation (G/C) and proceed with Construction on Centerville Natural Gas Compressor Station Modifications. DETAILS: Modify station piping and aux equipment (Pig Launcher & Receiver facilities), add impellers, re-stage centrifugal compressors and install new valve assemblies to permit bi-directional flow of natural gas southbound on Gulf South existing 12" mainline pipeline system in LA. REQUIRES: Foundations, MCC Modifications, Headers, Station Piping, Control Valves, SCADA, Manifolds, Condensers, Coatings, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gulf South in Conjunction with Holloman continues with Construction Activities and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors 1Q22 (Mar) through 2Q22 (Apr). Construction Commenced 1Q22 (Mar). Scheduled Project Completion 3Q22 (Aug).

AFE 202110 Sub Bid Doc 202204 Completion 01-Aug-2022 Precision QUARTER **Project Milestones** Long-Lead 202104 Equip RFQ 202203 Kick-Off 202203 **Kickoff Slippage 2 Months Duration 6 Months**

Engineering

Contracting Electrical Environmental Instrumentation Mechanical

Project Key Needs Control Room

> Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Froject Fuel Type Natural Gas			
Plant Standard Contacts			
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager Robert 'Bobby' Wade	[Phn.] +1 225 869 3367	Oct-2022	
	No	robert-wade-b092b83b	
Maintenance Manager Robert 'Bobby' Wade	[Phn.] +1 225 869 3367	Oct-2022	
Area Manager - Baton Rouge, LA	No	robert-wade-b092b83b	

Purchasing Manager	Darren Gray	[Phn.] +1 318 878 5279 / [Alt.] +1 318 376 2092	Oct-2022
	darren.gray@bwpmlp.com	No	
Engineering Manager	Bobby Wade	[Phn.] +1 337 585 6045 x1001	Oct-2022
		Yes	
Environmental Manager	Rodney Lee	[Phn.] +1 713 479 3400	Oct-2022
	rodney. Iee @bwpipelines.com	No	
Safety Manager	Garry Dick	[Phn.] +1 713 479 3400	Oct-2022
	garry.dick@bwpipelines.com	No	garry-dick-csho-2296b320
Utilities Manager	Robert 'Bobby' Wade	[Phn.] +1 225 869 3367	Oct-2022
Area Manager - Baton Rouge, LA		No	robert-wade-b092b83b
Human Resource Manager	Bridget Harris	[Phn.] +1 713 479 3400	Oct-2022
		No	

Historical Reports					
Project Name	Report Date	TIV	Phase		
CENTERVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-May-2021	8,000,000 USD	Permitting (P2 - 18)		
CENTERVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-Oct-2021	8,000,000 USD	Planning and Scheduling (E2 - 25)		
CENTERVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	31-Mar-2022	8,000,000 USD	Construction - Merit Shop (C1 - 36)		
CENTERVILLE NATURAL GAS COMPRESSOR STATION MODIFICATIONS	08-Aug-2022	8,000,000 USD	Completion/Start-Up (C1 - 41)		

Project Name DELHI NATURAL GAS COMPRESSOR STATION MODIFICATIONS

Industry Code 03 Oil & Gas Pipelines **Project Type** Plant Expansion

TIV (USD) 8.000.000

SIC Code 4922 Natural Gas Transmission

SIC Product 4922*0006 Natural Gas Compressor Stations

Last Update 15-Jul-2022 Status Complete / Done

Environmental Air (A) Land (L) Construction Labor Preference Unconfirmed **Operations Labor Preference** Non-Union

Project Capacity Planned 75 MMSCFD of Natural Gas, Gaseous (Methane)

Plant Parent Boardwalk Pipeline Partners LP Plant Owner Gulf South Pipeline Company

Plant Name Delhi Natural Gas Compressor **Unit Name**

Station

Plant ID 1071174 Location 7285 Highway 17

Phone +1 318 878 5674 City/State Delhi, Louisiana 71232 U.S.A. Zone/County LA*04, Richland

Project Responsibility Project Company **Project Contact** Project Manager Gulf South Pipeline Company LLC Keith Freeman 9 Greenway Plaza Suite 2800 Facilities Engineer Houston, Texas 77046 [Tel.] +1 713 479 8139 U.S.A. [E-Mail] keith.freeman@bwpipelines.com; [LinkedIn] keith-freeman-44924582 Project Manager Gulf South Pipeline Company LLC Cale LeBlanc 20 East Greenway Plaza Suite 900 **Environmental Project Manager** Houston, Texas 77046 [Tel.] +1 225 282 0389 U.S.A. [E-Mail] cale.leblanc@bwpipelines.com Compliance Gulf South Pipeline Company LLC Juan Eligio 9 Greenway Plaza Suite 2800 Permit Engineer Houston, Texas 77046 [Tel.] +1 713 479 3480 U.S.A. [E-Mail] juan.eligio@bwpmlp.com Justin Schwausch G/C Holloman Corporation 333 North Sam Houston Parkway East Suite 600 Project Estimator Houston, Texas 77060 [Tel.] +1 281 878 2600

PEC® Timing C1

Project Probability Completed (100%)

U.S.A.

PEC® Activity Completion/Start-Up

[E-Mail] justinschwausch@hollomancorp.com (!)

Sector Natural Gas Pipelines

Initial Release 26-May-2021

PEC Activity Diagram

Scope Gulf South Pipeline (Subsidiary of Boardwalk Pipeline) awards Holloman Corporation (G/C) and proceeds with Construction on Delhi Natural Gas Compressor Station Modifications. DETAILS: Modify station piping and aux equipment (Pig Launcher & Receiver facilities), add impellers, restage centrifugal compressors and install new valve assemblies to permit bi-directional flow of natural gas southbound on Gulf South existing 12" mainline pipeline system in LA. REQUIRES: Foundations, MCC Modifications, Headers, Station Piping, Control Valves, SCADA, Manifolds, Condensers, Coatings, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gulf South in Conjunction with Holloman continues with Construction Activities and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors 1Q22 (Feb) through 1Q22 (Mar). Construction Commenced 1Q22 (Feb). Scheduled Project Completion 3Q22 (Jul).

AFE 202110 Sub Bid Doc 202203 Completion 01-Jul-2022 **Precision QUARTER Project Milestones** Long-Lead 202104 Equip RFQ 202202 Kick-Off 202202 Kickoff Slippage 1 Months **Duration 6 Months**

Instrumentation Engineering

Electrical Instrumentation Mechanical Contracting Civil **Environmental**

Control Room **Project Key Needs**

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts			
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID
Plant Manager	Darren Gray	[Phn.] +1 318 878 5279 / [Alt.] +1 318 376 2092	Nov-2022
	darren.gray@bwpmlp.com	No	
Maintenance Manager	Darren Gray	[Phn.] +1 318 878 5279 / [Alt.] +1 318 376 2092	Nov-2022
	darren.gray@bwpmlp.com	No	
Purchasing Manager	Darren Gray	[Phn.] +1 318 878 5279 / [Alt.] +1 318 376 2092	Nov-2022

	darren.gray@bwpmlp.com	No	
Engineering Manager	Sidney Varnell	[Phn.] +1 318 253 7108 / [Alt.] +1 270 688 6276	Nov-2022
	sidney.varnell@bwpmlp.com	No	
Environmental Manager	Kerry Bruce	[Phn.] +1 713 479 8076	Nov-2022
	carrie.bruce@bwpmlp.com	No	kerry-bruce-99860693
Safety Manager	Garry Dick	[Phn.] +1 713 479 8000	Nov-2022
	garry.dick@bwpipelines.com	No	garry-dick-csho-2296b320
Utilities Manager	Darren Gray	[Phn.] +1 318 878 5279 / [Alt.] +1 318 376 2092	Nov-2022
Utility Manager	darren.gray@bwpmlp.com	No	
Human Resource Manager	Suzanne Gilbert	[Phn.] +1 713 479 8000	Nov-2022
	suzanne.gilbert@bwpmlp.com	No	suzannegilbert

	Historical Reports		
Project Name	Report Date	TIV	Phase
DELHI NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-May-2021	8,000,000 USD	Permitting (P2 - 18)
DELHI NATURAL GAS COMPRESSOR STATION MODIFICATIONS	26-Oct-2021	8,000,000 USD	Planning and Scheduling (E2 - 25)
DELHI NATURAL GAS COMPRESSOR STATION MODIFICATIONS	09-Feb-2022	8,000,000 USD	Construction - Merit Shop (C1 - 36)
DELHI NATURAL GAS COMPRESSOR STATION MODIFICATIONS	15-Jul-2022	8,000,000 USD	Completion/Start-Up (C1 - 41)

Project Name MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS

Industry Code 03 Oil & Gas Pipelines Project Type Upgrade

TIV (USD) 8.000.000

SIC Code 4922 Natural Gas Transmission

SIC Product 4922*0006 Natural Gas Compressor Stations

Status Complete / Done

Environmental Air (A) Land (L)

Initial Release 27-May-2021 Last Update 12-Jul-2022

Unit Name

Construction Labor Preference Unconfirmed **Operations Labor Preference** Non-Union

Sector Natural Gas Pipelines

Plant Parent Boardwalk Pipeline Partners LP

Project Capacity Installed 75 MMSCFD of Natural Gas, Gaseous (Methane)

Plant Owner Gulf South Pipeline Company

Plant Name Airport Junction Natural Gas Compressor Station

Plant ID 1074805

Location 13451 Airport Boulevard

Phone +1 713 479 8000

City/State Mobile, Alabama 36602 U.S.A.	Zone/County AL*01, Mobile
Project Responsibility Project Company	Project Contact
Project Manager Gulf South Pipeline Company LLC	Keith Freeman
9 Greenway Plaza Suite 2800	Facilities Engineer
Houston, Texas 77046	[Tel.] +1 713 479 8139
U.S.A.	[E-Mail] keith.freeman@bwpipelines.com ; [LinkedIn] keith-freeman-44924582
Project Manager Gulf South Pipeline Company LLC	Cale LeBlanc
20 East Greenway Plaza Suite 900	Environmental Project Manager
Houston, Texas 77046	[Tel.] +1 225 282 0389
U.S.A.	[E-Mail] cale.leblanc@bwpipelines.com
Compliance Gulf South Pipeline Company LLC	Juan Eligio
9 Greenway Plaza Suite 2800	Permit Engineer
Houston, Texas 77046	[Tel.] +1 713 479 3480
U.S.A.	[E-Mail] juan.eligio@bwpmlp.com
G/C Holloman Corporation	Justin Schwausch
333 North Sam Houston Parkway East Suite 600	Project Estimator
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	[E-Mail] justinschwausch@hollomancorp.com (!)

PEC® Timing C1

Project Probability Completed (100%)

PEC® Activity Completion/Start-Up

Scope Gulf South Pipeline (Subsidiary of Boardwalk Pipeline) awards Holloman Corporation (G/C) and proceeds with Construction on Mobil Natural Gas Compressor Station Modifications. DETAILS: Modify station piping and aux equipment (Pig Launcher & Receiver facilities), install multiple piping upgrades, replace control valve equipment, add extension to suction headers and valves assemblies and modify valves and yard piping to permit bi-directional flow of natural gas southbound on Gulf South existing 12" mainline pipeline system in LA. REQUIRES: Foundations, MCC Modifications, Headers, Station Piping, Control Valves, SCADA, Manifolds, Condensers, Coatings, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gulf South in Conjunction with Holloman continues with Construction Activities and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors 1Q22 (Jan) through 1Q22 (Feb). Construction Commenced 1Q22 (Jan). Scheduled Project Completion 3Q22 (Jul).

AFE 202108 Sub Bid Doc 202102 Completion 07-Jul-2022 Precision QUARTER **Project Milestones** Long-Lead 202104 Equip RFQ 202201 Kick-Off 202201 Kickoff Slippage 0 Months **Duration 7 Months**

Engineering

Contracting Electrical Environmental Instrumentation Mechanical

Project Key Needs Civil/Site Control Room

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts				
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID		
Plant Manager Mitch Whitehead	[Phn.] +1 713 479 8000	Oct-2022		
Gas Control mitch.whitehead@bwpmlp.com	No	mitch-whitehead-71283015		
Maintenance Manager Kimberly Tarr	[Phn.] +1 713 479 8069	Oct-2022		
Engineering Manager kimberly.tarr@bwpipelines.com	No	kimberly-tarr-97492818		

PEC Activity Diagram

Purchasing Manager	Mitch Whitehead	[Phn.] +1 270 688 6840	Oct-2022
Gas Control	mitch.whitehead@bwpmlp.com	No	mitch-whitehead-71283015
Engineering Manager	Julie Mondelli	[Phn.] +1 713 479 8000	Oct-2022
VP, BLM Operations & Engineering	julie_mondelli@bwpmlp.com	No	julie-mondelli-17b98a4
Environmental Manager	Rodney Lee	[Phn.] +1 713 479 8114	Oct-2022
	rodney.lee@bwpipelines.com	No	
Safety Manager	Gary Dick	[Phn.] +1 713 479 8108	Oct-2022
	garry.dick@bwpmlp.com	No	
Utilities Manager	Kimberly Tarr	[Phn.] +1 713 479 8069	Oct-2022
Engineering Manager	kimberly.tarr@bwpipelines.com	No	kimberly-tarr-97492818
Human Resource Manager	Suzanne Gilbert	[Phn.] +1 713 479 8000	Oct-2022
	suzanne.gilbert@bwpipelines.com	No	suzannegilbert

	Historical Reports		
Project Name	Report Date	TIV	Phase
MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS	27-May-2021	8,000,000 USD	Permitting (P2 - 18)
MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS	15-Jul-2021	8,000,000 USD	Permitting (P2 - 18)
MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS	10-Aug-2021	8,000,000 USD	Preliminary Engineering (E2 - 22)
MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS	14-Feb-2022	8,000,000 USD	Construction - Merit Shop (C1 - 36)
MOBIL NATURAL GAS COMPRESSOR STATION MODIFICATIONS	12-Jul-2022	8,000,000 USD	Completion/Start-Up (C1 - 41)

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Project Name HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOF

PEC Activity Diagram

[G/C]

Umbrella Project Count 2

Project ID: 3005744

Umbrella Project Summary The lamar county expansion is 3.4 miles of 20" pipeline lateral at 200MMSCFD of nat gas capacity and a new 5,000 hp compressor station in Forrest County, MS.

Industry Code 03 Oil & Gas Pipelines

Status Complete / Done

Umbrella Project Name LAMAR COUNTY EXPANSION

TIV (USD) 30,000,000 SIC Code 4922 Natural Gas Transmission

SIC Product 4922*0006 Natural Gas Compressor Stations

Last Update 14-Jan-2022 Initial Release 17-Jan-2020

Project Type Grassroot

Environmental Air (A) Land (L)

Construction Labor Preference Unconfirmed Operations Labor Preference Union, Non-Unior

Project Capacity

Planned 200 MMSCFD of Natural Gas, Gaseous (Methane)

Plant Owner Gulf South Pipeline Company

HC

Plant Name Black Creek Natural Gas

Compressor Station

Plant ID 3396023

Location 5.5 miles NE of Purvis City/State Hattiesburg, Mississippi 39401 Plant Parent Boardwalk Pipeline Partners LP

Sector Natural Gas Pipelines

Unit Name Black Creek 01 IC Black Creek 02 IC

Phone +1 713 479 8000 Zone/County MS*01. Forrest

U.S.A.	Zone/County Wis 01, Follest
Project Responsibility Project Company	Project Contact
Project Manager Gulf South Pipeline Company LLC	Clayton Marshall
9 Greenway Plaza Suite 2800	Project Manager
Houston, Texas 77046	[Tel.] +1 713 479 8000
U.S.A.	[E-Mail] clayton.marshall@bwpipelines.com
Compliance Gulf South Pipeline Company LLC	Juan Eligio
9 Greenway Plaza Suite 2800	Permit Engineer
Houston, Texas 77046	[Tel.] +1 713 479 3480
U.S.A.	[E-Mail] juan.eligio@bwpmlp.com
Consultant Perennial Environmental Services LLC	Marshall Olson
13100 Northwest Freeway, Suite 160	Environmental Project Manager
Houston, Texas 77040	[Tel.] +1 713 462 7121
U.S.A.	[E-Mail] molson@perennialenv.com
Eng Mott MacDonald	Chris Fields
101 Crosley Street	Project Manager
Monroe, Louisiana 71291	[Tel.] +1 318 329 0095
U.S.A.	[E-Mail] chris.fields@mottmac.com
G/C Holloman Corportion	David Norris
190 SE Loop 338	Project Manager
Odessa, Texas 79766	[Tel.] +1 432 381 2000
U.S.A.	[E-Mail]
DEC® Timing C4	DEC® Activity Completion/Start Lin

PEC® Timing C1

Project Probability Completed (100%)

PEC® Activity Completion/Start-Up

Scope Gulf South Pipeline Company (subsidiary of Boardwalk Pipelines) awards Perennial Environmental Services (Consultants), Mott MacDonald (Engineering) and Holloman Corporation (G/C) and performs Construction on a Grassroot Natural Gas Compressor Station. DETAILS: As part of the Lamar County Expansion Project, construct buildings and install (2) 2,500 hp Caterpillar (G-3608) with Ariel JGK/6 engine-driven compressor gas packages with auxiliary equipment to support Gulf South's grassroot pipeline lateral (Project ID: 300574634) currently being designed to transport up to 200MMSCFD of natural gas from Forrest County, MS to Lamar County, MS. REQUIRES: Buildings, Engine-Driven Compressor Gas Packaged, Gear Box, Station Piping, Pipeline Interconnect, Pipe Yard, Pipe Racks, Control Valves, Headers, Manifolds, MCC, Coatings plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gulf South with Perennial, Mott MacDonald and Holloman Corporation continue with Construction 1Q21 (Jan). Gulf South with Holloman Corporation release remaining Bid Documents plus review and select Subcontractors through 2Q21 (Apr). Construction Kick-Off 1Q21 (Jan). Scheduled Project Completion 4Q21 (Dec).

AFE 202007 Sub Bid Doc 202104 Completion 27-Dec-2021 **Precision QUARTER Project Milestones** Long-Lead 202001 Equip RFQ 202012 Kick-Off 202101 **Kickoff Slippage 2 Months Duration 12 Months**

Electrical Engineering Civil Environmental HVAC Instrumentation Mechanical Structural **Environmental HVAC** Contracting Civil Electrical Instrumentation Mechanical Structural General

Project Key Needs Civil/Site Structural Control Room

> Instrumentation Electrical Mechanical HVAC. NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Energy

Buy Electricity

D : . F . T	10						
Project Fuel Type Natu	urai Gas						
	Plant Standard Contacts						
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID				
Plant Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
		No					
Maintenance Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
Plant Manager		No					
Purchasing Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
Plant Manager		No					
Engineering Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
Plant Manager		No					
Environmental Manager	Cale LeBlanc	[Phn.] +1 225 282 0389 / [Alt.] +1 985 791 8395	Jan-2023				
Environmental Project Manager		No					
Safety Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
Plant Manager		No					
Utilities Manager	John Scarborough	[Phn.] +1 601 684 5592	Jan-2023				
Plant Manager		No					
Human Resource Manager	Tom Reggi	[Phn.] +1 713 479 8000	Jan-2023				
Human Resource Director	tom.reggi@bwpmlp.com	No	tom-reggi-5b0a46b				

Historical Reports					
Project Name	Report Date	TIV	Phase		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	17-Jan-2020	30,000,000 USD	Permitting (P2 - 18)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	27-May-2020	30,000,000 USD	Permitting (P2 - 18)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	15-Sep-2020	30,000,000 USD	Permitting (P2 - 18)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	17-Sep-2020	30,000,000 USD	Planning and Scheduling (E2 - 25)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	05-Jan-2021	30,000,000 USD	Planning and Scheduling (E2 - 25)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	21-Jan-2021	30,000,000 USD	Construction - Merit Shop (C1 - 36)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	07-Jun-2021	30,000,000 USD	Construction - Merit Shop (C1 - 36)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	30-Nov-2021	30,000,000 USD	Construction - Merit Shop (C1 - 36)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	15-Dec-2021	30,000,000 USD	Construction - Merit Shop (C1 - 36)		
HATTIESBURG LAMAR COUNTY GRASSROOT NATURAL GAS COMPRESSOR STATION	14-Jan-2022	30,000,000 USD	Completion/Start-Up (C1 - 41)		

Project Name PINEVILLE M100 MARKSVILLE COMPRESSOR STATION UNIT ADDITION

Industry Code 03 Oil & Gas Pipelines

Project Type Unit Addition

TIV (USD) 35.000.000

SIC Code 4922 Natural Gas Transmission

Sector Natural Gas Pipelines

Status Complete / Done

Last Update 15-Dec-2021

Initial Release 29-Apr-2021 Construction Labor Preference Unconfirmed

Environmental Air (A) Land (L)

Operations Labor Preference Non-Union

Project Capacity Installed 150 MMSCFD of Natural Gas, Gaseous (Methane)

SIC Product 4922*0006 Natural Gas Compressor Stations

Plant Owner Gulf South Pipeline Company

Plant Parent Loews Pipeline Holding Corporation

LLC

Plant Name Marksville Natural Gas Compressor Station

Unit Name Marksville 01 CT

Plant ID 1039083

Location 195 United Gas Lane

Phone +1 318 253 7108 City/State Pineville, Louisiana 71360-1109

Zone/County LA*01, Avoyelles

0.0		
Project Responsibility Project Company	Project Contact	
Project Manager Gulf South Pipeline Company LLC	Roger Heycraft	
9 Greenway Plaza Suite 2800	Construction Engineer	
Houston, Texas 77046	[Tel.] +1 713 479 8000	
U.S.A.	[E-Mail] roger.haycraft@bwpmlp.com	
Project Manager Gulf South Pipeline Company LLC	Cale LeBlanc	
20 East Greenway Plaza Suite 900	Environmental Project Manager	
Houston, Texas 77046	[Tel.] +1 225 282 0389	
U.S.A.	[E-Mail] cale.leblanc@bwpipelines.com	
G/C Holloman Corporation	Jared Harris	
333 North Sam Houston Pkwy	Project Manager-Ops Mgmnt	
Houston, Texas 75050	[Tel.] +1 940 482 3442	
U.S.A.	[E-Mail] jaredharris@hollomancorp.com	

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Gulf South Pipeline (subsidiary of Boardwalk Pipelines) awards Holloman Corporation (G/C) and proceeds with Construction on Marksville Compressor Station Unit Addition. DETAILS: M100 Project, replace four reciprocating compressor units totaling 13,200 HP with (1) 13,058 HP Solar Mars 90 turbine-driven compressor gas package with auxiliary equipment to transport up to 150MMSCFD of natural gas at Marksville Compressor Station in Avoyelles Parish, LA. REQUIRES: Steel-Frame Building, Turbine-Driven Compressor Gas Package, Coatings, MCC Mods, Flanges, Piping, Block/Control Valves, Mainline Taps, Utilities and Controls. ENVIRONMENTAL. (A) Leak Detection, (L) Containment.

Schedule Gulf South in conjunction with Holloman continues with Construction Activities and releases remaining Equipment RFQs and Bid Documents plus review and select Subcontractors 2Q21 (Apr) through 2Q21 (Jun). Construction Commenced 2Q21 (Apr). Scheduled Project Competition 4Q21 (Dec).

AFE 202102 Sub Bid Doc 202106 Precision QUARTER Completion 02-Nov-2021 **Project Milestones** Long-Lead 202008 Equip RFQ 202104 Kick-Off 202104 Kickoff Slippage 0 Months **Duration 8 Months**

Engineering

Environmental Mechanical **Flectrical** Contracting

Project Key Needs Civil/Site Structural

NDE Instrumentation Electrical Mechanical Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps**

Communications

Matter Phase Gas

Turbine Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts				
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID		
Plant Manager Frank Wilhite	[Phn.] +1 318 495 3272	Nov-2022		
frank.wilhite@bwpmlp.com	Yes			
Maintenance Manager Larry Estis	[Phn.] +1 318 495 3272	Nov-2022		
larry.estis@bwpmlp.com	Yes			
Purchasing Manager Frank Wilhite	[Phn.] +1 318 495 3272	Nov-2022		
frank.wilhite@bwpmlp.com	Yes			
Engineering Manager Frank Wilhite	[Phn.] +1 318 495 3272	Nov-2022		
frank.wilhite@bwpmlp.com	Yes			

PEC Activity Diagram

Environmental Manager	Rodney Lee	[Phn.] +1 713	3 479 8114	Nov-2022		
	rodney.lee@bwpipelines.com	No				
Safety Manager	Garry Dick	[Phn.] +1 713	3 479 8000	Nov-2022		
	garry.dick@bwpipelines.com	No		garry-dick-c	sho-2296b320	
Utilities Manager	Larry Estis	[Phn.] +1 318	3 495 3272	Nov-2022		
	larry.estis@bwpmlp.com	Yes				
Human Resource Manager	Suzanne Gilbert	[Phn.] +1 713	3 479 8000	Nov-2022		
	suzanne.gilbert@bwpipelines.com	No		suzannegilb	ert	
		Histori	cal Report	s		
Project Name			Report Da	ate	TIV	Phase
PINEVILLE M100 MARKSVI	LLE COMPRESSOR STATION UNI	T ADDITION	29-Apr-20	21	35,000,000 USD	Construction - Merit Shop (C1 - 36)

35,000,000 USD Completion/Start-Up (C1 - 41)

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PINEVILLE M100 MARKSVILLE COMPRESSOR STATION UNIT ADDITION 15-Dec-2021

Umbrella Project Name CACTUS PIPELINE PROJECT

Project Name MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE

Project ID: 30011622

Umbrella Project Count 3

PEC Activity Diagram

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 300,000,000

SIC Code 4612 Crude Petroleum Pipelines SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Project Type Grassroot

Sector Crude Pipelines

Last Update 09-Dec-2020 Initial Release 25-Apr-2013

> Construction Labor Preference Unconfirmed **Operations Labor Preference** Non-Union



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Pipeline Installation Details				
Installation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure		
Greenfield	310 Miles (mi)	20 Inches (in)		
Plar	nt Owner Plains All American Pipeline LP	Plant Parent Plains All American Pipeline LP		
Pla	Int Name Rock Springs Crude Oil Pump Station	Unit Name		
	Plant ID 3088763			
	Location Southwest of Rock Springs, Just west of 277 and East of 163	Phone +1 713 646 4100		
C	City/State Del Rio, Texas 78880 U.S.A.	Zone/County TX*09, Val Verde		
Project Respo	onsibility Project Company	Project Contact		
Project	Manager Plains All American Pipeline LP	William Crochet		
	333 Clay Road Suite 1600	Project Manager		
	Houston, Texas 77002	[Tel.] +1 713 646 4100		
	U.S.A.	[LinkedIn] william-crochet-50a25b146		
Project	Manager Plains All American Pipeline LP	Mark Sides		
	333 Clay Road Suite 1600	Project Manager		
	Houston, Texas 77002	[Tel.] +1 713 646 4100		
	U.S.A.	[E-Mail] mgsides@paalp.com		
	Eng Willbros Engineering	Jennifer Banks		
	400 Inverness Suite 400	Project Manager		
	Englewood, Colorado 80112	[Tel.] +1 303 790 1200		
	U.S.A.			
	Eng Willbros Engineering	Steve Beier		
	400 Inverness Suite 400	Project Manager		
	Englewood, Colorado 80112	[Tel.] +1 303 790 1200		
	U.S.A.	[E-Mail]		
	G/C Holloman Corporation	Shannon Driver		
	333 North Sam Houston Parkway East Suite 600	Project Manager		
	Houston, Texas 77060	[Tel.] +1 281 878 2600		
	U.S.A.			
PEC	® Timing C1	PEC® Activity Completion/Start-Up		
Dunite at Du	1 1 1111 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

Project Probability Completed (100%)

Scope Plains All American awards Willbros Engineering (Engineering) and Holloman Corporation (Pipe G/C) and continues with Construction on a Grassroot Crude Oil Pipeline. DETAILS: As part of the \$350 Million Cactus Pipeline Project, construct 310 miles of 20" diameter transmission pipeline to transport up to 200,000 BBL/d of sweet and sour Permian Basin crude oil from McCamey to Gardendale, La Salle County, TX. REQUIRES: Trenching, 20" Diameter Transmission Pipe, SCADA, Cathodic Protection, Coatings, Custody Transfers, Pig Launching, Metering, Road/Rail Crossings, Control/Block Valves, Utilities and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment, EIS.

Schedule Plains All American with Willbros and Holloman continue Construction through 1Q15 (Mar). Plains with Willbros and Holloman releases remaining Equipment RFQ's and Subcontractor Bid Documents through 3Q14 (Jul). Construction Commenced 2Q14 (Apr). Expected Project Completion 1Q15 (Mar).

AFE 201403 Sub Bid Doc 201407 Completion 15-Mar-2015 **Precision MONTH Project Milestones** Equip RFQ 201407 Kick-Off 201404 Kickoff Slippage 0 Months **Duration 12 Months**

Engineering

Instrumentation Mechanical Contracting **Flectrical** Environmental

Project Key Needs Civil/Site Structural

> Instrumentation Electrical Mechanical Storage NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

Matter Phase Liquid

Energy

Buy Electricity

Sell

Plant Standard Contacts

Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID
Plant Manager		[Phn.] +1 432 687 6900	Feb-2023
Operations Manager		No	bill-gilliland-6ab4a3113
Maintenance Manager	Bill Gilliland	[Phn.] +1 432 687 6900	Feb-2023
Operations Manager		No	bill-gilliland-6ab4a3113
Purchasing Manager	Bill Gilliland	[Phn.] +1 432 687 6900	Feb-2023
Operations Manager		No	bill-gilliland-6ab4a3113
Engineering Manager	William Crochet	[Phn.] +1 713 646 4100	Feb-2023
Senior Director of Engineering, Capital Projects	william.crochet@epicmid.com	No	william-crochet-50a25b146
Environmental Manager	Dean Gore	[Phn.] +1 713 646 4100	Feb-2023
Vice President Environmental & Regulatory Compliance	dgore@paalp.com (!)	No	dean-gore-76972a16
Safety Manager	Jerry Green	[Phn.] +1 432 638 3172	Feb-2023
		No	
Utilities Manager	Bill Gilliland	[Phn.] +1 432 687 6900	Feb-2023
Operations Manager		No	bill-gilliland-6ab4a3113
Human Resource Manager	Kenneth 'Ken' Martin	[Phn.] +1 713 646 4100	Feb-2023
HR Manager		No	ken-martin-0747193

Historical Reports					
Project Name	Report Date	TIV	Phase		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	25-Apr-2013	300,000,000 USD	Detailed Design (P1 - 09)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	14-Nov-2013	300,000,000 USD	Project Justification (P1 - 16)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	18-Feb-2014	300,000,000 USD	Permitting (P2 - 18)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	29-Apr-2014	300,000,000 USD	Construction - Merit Shop (C1 - 36)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	31-Jul-2014	300,000,000 USD	Construction - Merit Shop (C1 - 36)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	14-Jan-2015	300,000,000 USD	Construction - Merit Shop (C1 - 36)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	25-Mar-2015	300,000,000 USD	Completion/Start-Up (C1 - 41)		
MCCAMEY CACTUS PIPELINE GRASSROOT CRUDE OIL PIPELINE	09-Dec-2020	300,000,000 USD	Completion/Start-Up (C1 - 41)		



Project Name WINK LONE STAR EXPRESS (LSX2) NATURAL GAS LIQUIDS PIPELINE EXPAI

Umbrella Project Name LONE STAR EXPRESS EXPANSION (LSX2)

PEC Activity Diagram

Project ID: 300489009

Umbrella Project Count 6

Umbrella Project Summary Lone Star is expanding its Lone Star Express Pipeline system by adding a new 352-mile 24" pipeline extending from Lone Stars existing pipeline system near Wink, Tx to its existing 30" line south of Fort Worth, Tx. This new pipeline will provide capacity for transportation commitments Lone Star has secured from the Delaware and Permian Basins. Completion date is slated for 4Q20.

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 550,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0010 Natural Gas Liquids Pipeline

Status Complete / Done

Environmental Air (A) Land (L) Water (W)

Initial Release 12-Dec-2018 Last Update 02-Sep-2020

> Construction Labor Preference Unconfirmed **Operations Labor Preference** Non-Union

Project Capacity

Planned 400,000 BBL/d of Natural Gas Liquids (NGL)

Pipeline Installation Details				
Installation Type Pipeline Length Unit of Measure		Pipeline Diameter Unit of Measure		
Market Extension	24 Inches (in)			
Plar	nt Owner Energy Transfer Partners LP	Plant Parent Energy Transfer LP		
Pla	Int Name Wink WT2 NGL Pump Station	Unit Name		
	Plant ID 3348108			
	Location East of Wink	Phone +1 210 403 7300		
C	City/State Wink, Texas 79789 U.S.A.	Zone/County TX*06, Winkler		
Project Respo	onsibility Project Company	Project Contact		
Project E	xecutive Energy Transfer Operating LP	Matthew Ramsey		
	8111 Westchester Drive	VP Operations & Engineering		
	Dallas, Texas 75225	[Tel.] +1 713 989 7000		
	U.S.A.	[E-Mail] matt.ramsey@energytransfer.com		
Project	Manager Energy Transfer Operating LP	Kevin Smith		
	8111 Westchester Drive	Sr Construction Engineer		
	Dallas, Texas 75225	[Tel.] +1 713 989 7000		
	U.S.A.	[E-Mail] kevin.smith@energytransfer.com		
Project Manager Energy Transfer Operating LP 1300 Main Street		Jonathan Minton		
		Environmental Project Manager		
	Houston, Texas 77002	[Tel.] +1 713 989 7000		
	U.S.A.	[E-Mail] jonathan.minton@energytransfer.com		
	G/C Pumpco Incorporated	Derek Kieschnick		
	P O Box 742	Project Estimator		
	Giddings, Texas 78942	[Tel.] +1 979 542 9054		
	U.S.A.	[E-Mail] derek.kieschnick@pumpco.cc		
	G/C Troy Construction LLC	Tim Johnson		
	P O Box 450862	Field Superintendent		
	Houston, Texas 77245	[Tel.] +1 281 437 8214		
	U.S.A.	[E-Mail] tjohnson@troyconstruction.com		
	G/C Holloman Corporation	Ryan Kelly		
	333 North Sam Houston Parkway East Suite 600	Project Manager		
	Houston, Texas 77060	[Tel.] +1 281 878 2600		
	U.S.A.	[E-Mail]		
	G/C Precision Pipeline LLC	Jake Breunig		
	1119 Regis Court Ste 210	Project Manager		
	Eau Claire, Wisconsin 54701	[Tel.] +1 715 874 4510		
	U.S.A.	[E-Mail] jbreunig@precisionpipelinellc.com		
DEC® Timing C4				

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Lone Star NGL Pipeline LLC (subsidiary of Energy Transfer LP) awards Pumpco Incorporated (Spread 1), Troy Construction (Spread 2), Hollomon Corporation (Spread 3) and Precision Pipeline (Spread 4) and proceed with Construction on LSX2 NGL Pipeline Expansion. DETAILS: As part of Lone Star Express pipeline Expansion from the Permian Basin, install 352 miles of 24" diameter transmission pipeline to transport 400,000 BBL/d of NGL's from Wink, TX to connect to Lone Star existing 30" pipeline at Morgan Junction in Bosque County, TX. REQUIRES: Trenching, Excavating, 24" Diameter Transmission Pipe, Cathodic Protection, Road/River Crossings, Coatings, Custody Transfers, Metering, Block/Control Valves, Pig Launching, Piping and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment; (W) River Crossings.

Schedule Lone Star in Conjunction with G/C's continues with Construction Activities (Clearing and Grading) and releases remaining Equipment RFQ's and Bid Documents plus review and select Subcontractors 4Q19 (Dec) through 2Q20 (May). Construction Commenced 4Q19 (Dec). Scheduled Project Completion 3Q20 (Sep).

Details Apr-2020 No current impact.

Project Milestones AFE 201908 Sub Bid Doc 202005 Completion 01-Sep-2020 Precision QUARTER
Long-Lead 201901 Equip RFQ 201912 Kick-Off 201912 Kickoff Slippage 3 Months Duration 10 Months

Engineering

Contracting Electrical Environmental Instrumentation Mechanical

Project Key Needs Control Room

 Instrumentation
 Electrical
 Mechanical
 NDE

 Piping/Fittings
 Insulation/Coatings
 Environmental Utilities
 Valves
 Pumps

 Communications
 Transportation

Material Handling

Liquid

Matter Phase Gas

Energy

Buy Electricity

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts					
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID		
Plant Manager	Michael 'Mike' McCracken	[Phn.] +1 817 302 9806 / [Alt.] +1 505 217 5034	Aug-2023		
Senior Director of Operations	michael.mccracken@energytransfer.com	No	mike-mccracken- 485b9741		
Maintenance Manager	Michael 'Mike' McCracken	[Phn.] +1 214 981 0700 / [Alt.] +1 505 217 5034	Aug-2023		
Senior Director of Operations	michael.mccracken@energytransfer.com	No	mike-mccracken- 485b9741		
Purchasing Manager	Michael 'Mike' McCracken	[Phn.] +1 817 302 9806 / [Alt.] +1 505 217 5034	Aug-2023		
Senior Director of Operations	michael.mccracken@energytransfer.com	No	mike-mccracken- 485b9741		
Engineering Manager	Mark Vedral	[Phn.] +1 210 489 4300	Aug-2023		
	mark.vedral@energytransfer.com	No			
Environmental Manager	Christopher Hansen	[Phn.] +1 214 840 5650 / [Alt.] +1 972 658 8157	Aug-2023		
	christopher.hansen@energytransfer.com	No	chris-hansen- a2273166		
Safety Manager	Keith Morris	[Phn.] +1 214 981 0700	Aug-2023		
Senior Safety Manager	keith.morris@energytransfer.com	No	keith-morris-csp- 3a5b9919		
Utilities Manager	Michael 'Mike' McCracken	[Phn.] +1 817 302 9806 / [Alt.] +1 505 217 5034	Aug-2023		
Senior Director of Operations	michael.mccracken@energytransfer.com	No	mike-mccracken- 485b9741		
Human Resource Manager	Erica Brandt	[Phn.] +1 210 403 7300	Aug-2023		
Human Resource Director	erica.brandt@energytransfer.com	No	erica-brandt- 1ba85937		

Historical Reports				
Project Name	Report Date	TIV	Phase	
WINK NATURAL GAS LIQUIDS PIPELINE EXPANSION	12-Dec-2018	550,000,000 USD	Permitting (P2 - 18)	
WINK NATURAL GAS LIQUIDS PIPELINE EXPANSION	28-Aug-2019	550,000,000 USD	Permitting (P2 - 18)	
WINK LONE STAR EXPRESS (LSX2) NATURAL GAS LIQUIDS PIPELINE EXPANSION	04-Oct-2019	550,000,000 USD	Planning and Scheduling (E2 - 25)	
WINK LONE STAR EXPRESS (LSX2) NATURAL GAS LIQUIDS PIPELINE EXPANSION	20-Dec-2019	550,000,000 USD	Construction - Merit Shop (C1 - 36)	
WINK LONE STAR EXPRESS (LSX2) NATURAL GAS LIQUIDS PIPELINE EXPANSION	08-Apr-2020	550,000,000 USD	Construction - Merit Shop (C1 - 36)	
WINK LONE STAR EXPRESS (LSX2) NATURAL GAS LIQUIDS PIPELINE EXPANSION	02-Sep-2020	550,000,000 USD	Completion/Start-Up (C1 - 41)	

Project Name EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO

Industry Code 03 Oil & Gas Pipelines **Project Type** Conversion

TIV (USD) 600.000.000

SIC Code 4612 Crude Petroleum Pipelines

SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Sector Crude Pipelines

PEC Activity Diagram

Last Update 28-May-2020 Initial Release 31-Jan-2019

Construction Labor Preference Unconfirmed Operations Labor Preference Union, Non-Unior

Project Capacity Planned 400 000 BBI /d of Crude Oil

Project Ca	pacity Planned 400,000 BBL/d of Cru	ide Oil
	Pipeline Installation D	etails
Installation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure
Conversion	400 Miles (mi)	16 Inches (in)
Plant (Owner EPIC Midstream Holdings, LP	Plant Parent EPIC Midstream Holdings, LP
Plant	Name Crane NGL Pump Station	Unit Name
P	lant ID 3278544	
Lo	cation Old Girvin Road	Phone +1 210 920 2255
City	//State Crane, Texas 79743 U.S.A.	Zone/County TX*06, Crane
Project Respons	sibility Project Company	Project Contact
Project Ma	nager EPIC Midstream Holdings, LP	Grant Terry
	18615 Tuscany Stone, Suite 275	Project Engineer - Pipeline
	San Antonio, Texas 78258	[Tel.] +1 210 569 6696
	U.S.A.	[E-Mail] ; [LinkedIn] grant-terry-35974311a
Project Di	rector EPIC Midstream Holdings, LP	Justin Gordon
	18615 Tuscany Stone, Suite 275	Vice President Engineering & Operations
	San Antonio, Texas 78258	[Tel.] +1 210 569 6696
	U.S.A.	[E-Mail] justin.gordon@epicmid.com ; [LinkedIn] justin-gordon-2a213241
Project Exe	cutive Southcross Energy Partners LP	Phillip Mezey
	18615 Tuscany Stone Suite 300	Chief Operating Officer
	San Antonio, Texas 78258	[Tel.] +1 210 495 5577
	U.S.A.	[E-Mail] phil.mezey@epicmid.com
	G/C MPG Pipeline Contractors LLC	Bruce Ainsworth
	16770 Imperial Valley, Suite 105	Operations Manager
	Houston, Texas 770660	[Tel.] +1 713 904 1168 x9910
	U.S.A.	[E-Mail] bainsworth@mpg-plc.com
	G/C Holloman Corporation	Jared Harris
	333 North Sam Houston Pkwy	Project Manager-Ops Mgmnt
	Houston, Texas 75050	[Tel.] +1 281 878 2600
	U.S.A.	[E-Mail] coyharris@hollomancorp.com
PEC® 1	Fiming C1	PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Epic NGL Pipeline (indirect subsidiary of Texstar Midstream) with MPG Pipeline (Pipeline Construction G/C) and Holloman Corporation (G/C) continues Construction on an NGL Pipeline being temporarily converted to carry Crude Oil. DETAILS: As part of the EPIC NGL pipeline, Convert @ 400 miles of 16"-diameter transmission pipe to carry 400,000 BBL/d Crude Oil from Crane NGL Pump Station (Plant ID: 3278544) to Robstown NGL Pump Station (Plant ID: 3278596). REQUIRES: Trenching, Cathodic Protection, Coatings, MCC, Pig Launching/Receiving, Utilities, Metering, Block Valves, Control Valves plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Epic NGL Pipeline (indirect subsidiary of Texstar Midstream) with MPG Pipeline (Pipeline Construction) and Holloman Corporation (G/C) continues Construction through 1Q19 (Mar). Construction Commenced 2Q18 (Jun). Scheduled Project

Completion 4Q19 (Dec).

AFE 201709 Sub Bid Doc 201806 Completion 02-Dec-2019 **Precision MONTH Project Milestones** Equip RFQ 201806 Kick-Off 201806 Kickoff Slippage 0 Months **Duration 19 Months**

Electrical Engineering

Instrumentation Contracting Environmental

Project Key Needs Civil/Site Structural

NDE Instrumentation Electrical Mechanical

Piping/Fittings Insulation/Coatings Environmental Utilities Valves

Communications Transportation

Matter Phase Liquid

> Energy Buy

Sell

Plant Standard Contacts				
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID		
Plant Manager Jeremy Vest	[Phn.] +1 210 920 2255 Dec-2022			

Maintenance Manager	jeremy.vest@epicmid.com	No	jeremy-vest-105883163
Maintenance Manager	Jeremy Vest	[Phn.] +1 210 920 2255	Dec-2022
	jeremy.vest@epicmid.com	No	jeremy-vest-105883163
Purchasing Manager	Jeremy Vest	[Phn.] +1 210 920 2255	Dec-2022
Maintenance Manager	jeremy.vest@epicmid.com	No	jeremy-vest-105883163
Engineering Manager	Jeremy Vest	[Phn.] +1 210 920 2255	Dec-2022
Maintenance Manager	jeremy.vest@epicmid.com	No	jeremy-vest-105883163
Environmental Manager	Juan Tascon	[Phn.] +1 210 920 2255	Dec-2022
	juan.tascon@epicmid.com	No	juan-ramon-tascon-36886a27
Safety Manager	Juan Tascon	[Phn.] +1 210 920 2255	Dec-2022
Environmental Manager	juan.tascon@epicmid.com	No	juan-ramon-tascon-36886a27
Utilities Manager	Jeremy Vest	[Phn.] +1 210 920 2255	Dec-2022
Maintenance Manager	jeremy.vest@epicmid.com	No	jeremy-vest-105883163
Human Resource Manager	Amy Dufault	[Phn.] +1 210 920 2255	Dec-2022
Administrative Assistant	amy.dufault@epicmid.com	No	amy-dufault

Historical Reports					
Project Name	Report Date	TIV	Phase		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	31-Jan-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	13-Mar-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	24-Apr-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	28-Jun-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	28-Aug-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	27-Sep-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	15-Oct-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	13-Dec-2019	600,000,000 USD	Construction - Merit Shop (C1 - 36)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	15-Jan-2020	600,000,000 USD	Completion/Start-Up (C1 - 41)		
EPIC MIDSTREAM CRANE TO ROBSTOWN NGL PIPELINE CONVERSION TO CRUDE OIL	28-May-2020	600,000,000 USD	Completion/Start-Up (C1 - 41)		



Project Name ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE

Umbrella Project Name GRAY OAK CRUDE OIL PIPELINE

Project ID: 300406628 **PEC Activity Diagram**

Umbrella Project Count 14

Umbrella Project Summary 800,000 BBL/d Crude Oil Pipeline from multiple origin points in the Permian to the Gulf Coast via the Eagle Ford.

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 1,500,000,000

SIC Code 4612 Crude Petroleum Pipelines

SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Project Type Grassroot

Sector Crude Pipelines

Last Update 14-May-2020 Initial Release 21-Dec-2017 Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Project Capacity Planned 900.000 BBL/d of Crude Oil

Pipeline Installation Details				
Installation Type	Pipeline Length Unit of Measure Pipeline Diameter Unit of Measure			
Greenfield	850 Miles (mi) 42 Inches (in)			
Plant Ov	vner Phillips 66	Plant Parent Phillips 66		
	ame Orla Crude Oil Pump Station at ID 3292948	Unit Name		
Loca	tion 10.38 Miles Northwest of Orla	Phone +1 281 293 6600		
City/S	tate Mentone, Texas 79770 U.S.A.	Zone/County TX*06, Loving		
Project Responsib	oility Project Company	Project Contact		
Project Execu	titve Phillips 66 PO Box 4428 Houston, Texas 77210 U.S.A.	Corey Leonard Business Dev. Manager - Pipelines [Tel.] +1 281 293 6600 [E-Mail] corey.leonard@p66.com		
Project Mana	ager Phillips 66 PO Box 4428 Houston, Texas 77210 U.S.A.	Manny Cortez Pipeline Operation Manager [Tel.] +1 832 765 1711 [E-Mail] manny.m.cortez@p66.com; [LinkedIn] manny-cortez-304b9218		
Project Manager Phillips 66 PO Box 4428 Houston, Texas 77210 U.S.A.		David Bevill Project Manager [Tel.] +1 281 293 6600 [E-Mail] david.f.bevill@p66.com		
G/C Holloman Corporation 333 North Sam Houston Parkway East Suite 60 Houston, Texas 77060 U.S.A.		Justin Schwausch Project Manager [Tel.] +1 281 878 2600 [E-Mail] justinschwausch@hollomancorp.com (!)		
	G/C Pumpco Incorporated P O Box 742 Giddings, Texas 78942 U.S.A.	Derek Kieschnick Project Estimator [Tel.] +1 979 542 9054 [E-Mail] derek.kieschnick@pumpco.cc		
D T00 T	G/C MPG Pipeline Contractors LLC 16770 Imperial Valley, Suite 105 Houston, Texas 770660 U.S.A.	Bruce Ainsworth Operations Manager [Tel.] +1 713 904 1168 [E-Mail] bainsworth@mpg-plc.com		

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Gray Oak Pipeline LLC (subsidiary of Phillips 66 - 75% Owner) and Marathon Petroleum Company (formerly Andeavor -25% Owner) awards Holloman Corporation (Spread 1), Pumpco (Spread 2) and MPG Contractors (Spread 3) and continues with Construction for a Grassroot Crude Oil Pipeline. DETAILS: As part of the 850 Mile Gray Oak Pipeline Project, Dig trenches and lay approximately 850 miles of 36" and 42" diameter transmission pipeline to transport up to 900,000 BBL/d (expandable to 1MM BBL/d) of crude oil from origination points in the Permian Basin near Orla, Wink, and Crane, TX to the Eagle Ford Shale area near Corpus Christi, Sweeny, and Freeport, TX. REQUIRES: Trenching, Excavation, 36" and 42" Diameter Transmission Pipe, SCADA, Coatings, Custody Transfers, Pig Launching & Receiving, Block/Control Valves, Piping, MCC, HDD, Road/River Crossings, Metering, Utilities and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Gray Oak Pipeline in Conjunction with Holloman, Pumpco and MPG continues with Construction Activities and continues to release remaining Equipment RFQ's and Sub Contractor Bid Documents through 3Q19 (Aug). Construction Commenced 4Q18 (Oct). Expected Project Completion 2Q20 (May).

Sub Bid Doc 201809 **AFE 201808** Completion 27-Apr-2020 **Precision MONTH Project Milestones** Long-Lead 201807 **Equip RFQ 201809** Kick-Off 201810 **Kickoff Slippage 3 Months Duration 19 Months**

Engineering

Contracting Electrical Environmental Instrumentation Mechanical Structural

Project Key Needs Civil/Site

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves

Communications Transportation

Liquid

Matter Phase

Energy

Buy Electricity

Sell

	Plant Standard Contacts			
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager	Scott Gilmore	[Phn.] +1 806 318 9268	Apr-2023	
Operations Superintendent	scott.gilmore@p66.com	No		
Maintenance Manager	Scott Gilmore	[Phn.] +1 806 318 9268	Apr-2023	
Operations Superintendent	scott.gilmore@p66.com	No		
Purchasing Manager	Scott Gilmore	[Phn.] +1 806 318 9268	Apr-2023	
Operations Superintendent	scott.gilmore@p66.com	No		
Engineering Manager	Manny Cortez	[Phn.] +1 832 765 1711	Apr-2023	
Manager Pipelines	manny.m.cortez@p66.com	No	manny-cortez-304b9218	
Environmental Manager	David 'Clint' Gill	[Phn.] +1 281 293 6600	Apr-2023	
EHS Manager		No	Duplicate ID	
Safety Manager	David 'Clint' Gill	[Phn.] +1 281 293 6600	Apr-2023	
EHS Manager		No	Duplicate ID	
Utilities Manager	Scott Gilmore	[Phn.] +1 806 318 9268	Apr-2023	
Operations Superintendent	scott.gilmore@p66.com	No		
Human Resource Manager	Sonya Reed	[Phn.] +1 281 293 6600	Apr-2023	
SVP Human Resources		No	sonya-reed-b051144	

Historical Reports					
Project Name	Report Date	TIV	Phase		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	21-Dec-2017	700,000,000 USD	Owner Review of Issue (P2 - 19)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	27-Apr-2018	700,000,000 USD	Owner Review of Issue (P2 - 19)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	11-Jul-2018	700,000,000 USD	Purchasing (E2 - 21)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	31-Jul-2018	700,000,000 USD	Purchasing (E2 - 21)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	15-Nov-2018	700,000,000 USD	Purchasing (E2 - 21)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	06-Dec-2018	700,000,000 USD	Planning and Scheduling (E2 - 25)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	14-Dec-2018	700,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	28-Feb-2019	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	19-Sep-2019	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	15-Nov-2019	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	13-Dec-2019	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	27-Feb-2020	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	16-Apr-2020	1,500,000,000 USD	Construction - Merit Shop (C1 - 36)		
ORLA GRASSROOT GRAY OAK CRUDE OIL PIPELINE	14-May-2020	1,500,000,000 USD	Completion/Start-Up (C1 - 41)		

Project Name CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2)

Umbrella Project Name EPIC CRUDE OIL PIPELINE

Project ID: 300426965 **PEC Activity Diagram**

Umbrella Project Count 21

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 375,000,000

SIC Code 4612 Crude Petroleum Pipelines

SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Project Type Grassroot

Sector Crude Pipelines

Last Update 23-Apr-2020 Initial Release 15-Mar-2018

> Construction Labor Preference Union, Non-Unior Operations Labor Preference Union, Non-Unior

Project Capacity Planned 590.000 BBL/d of Crude Oil

i rojest oup	i lamica 000,000 BBL/a or orado		
	Pipeline Installation Deta	ils	
nstallation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure	
Greenfield	215 Miles (mi)	16 Inches (in)	
Plant Owner EPIC Midstream Holdings, LP		Plant Parent EPIC Midstream Holdings, LP	
Plant Name Crane Meter Station		Unit Name	
Pla	ant ID 3308872		
Location West of Crane		Phone +1 210 569 6696	
City/	State Crane, Texas 79731 U.S.A.	Zone/County TX*06, Crane	
Project Responsi	bility Project Company	Project Contact	
Project Dir	ector EPIC Midstream Holdings, LP	Grant Terry	
	18615 Tuscany Stone, Suite 275	Project Engineer - Pipeline	
San Antonio, Texas 78258		[Tel.] +1 210 569 6696	
	U.S.A.	[E-Mail]; [LinkedIn] grant-terry-35974311a	
Project Exec	utive EPIC Midstream Holdings, LP	Justin Gordon	
	18615 Tuscany Stone, Suite 275	Vice President Engineering & Operations	
San Antonio, Texas 78258		[Tel.] +1 210 569 6696	
U.S.A.		[E-Mail] justin.gordon@texstarlogistics.com; [LinkedIn] justin-gordon-2a213241	
Project Exec	utive EPIC Midstream Holdings, LP	Phillip Mezey	
	18615 Tuscany Stone, Suite 275	Chief Executive Officer	
San Antonio, Texas 78258		[Tel.] +1 210 569 6696	
	U.S.A.	[E-Mail] phil.mezey@epicmid.com	
	G/C Holloman Corporation	Mick Maidens	
	333 North Sam Houston Parkway East Suite 600	Project Manager	
	Houston, Texas 77060	[Tel.] +1 281 878 2600	
	U.S.A.	[E-Mail]	
PEC® Ti	ming C1	PEC® Activity Completion/Start-Up	

Project Probability Completed (100%)

Scope EPIC Midstream awards Holloman Corporation (G/C) and proceeds with Construction for a Grassroot Crude Oil Pipeline. DETAILS: Construct 215 miles of 30"-diameter crude oil transmission pipe (Spread 2) to transport 600,000 BBL/d (expandable to 900,000 BBL/d) Permian Basin and Eagle Ford Shale crude oil from origin points in Orla, Saragosa, and Crane, TX to Midland, TX in the Permian Basin. REQUIRES: Excavation, Trenching, Transmission Pipe, SCADA, Block & Control Valves, Cathodic Protection, Coatings, Pig Launching, Piping, Metering, Utilities, and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule EPIC Midstream in Conjunction with Holloman continues with Construction Activities (Clearing and Grading) and releases remaining Equipment RFQ's and Subcontractor Bid Packages 4Q18 (Oct) through 2Q19 (Apr). Construction Commenced 4Q18 (Oct). Scheduled Project Completion 1Q20 (Feb).

AFE 201809 Sub Bid Doc 201904 **Precision QUARTER** Completion 28-Feb-2020 **Project Milestones** Long-Lead 201711 Equip RFQ 201810 Kick-Off 201810 Kickoff Slippage -2 Months **Duration 17 Months**

Engineering Contracting Electrical Environmental Mechanical Structural

Project Key Needs Instrumentation Electrical Mechanical

> Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

> > Material Handling

Matter Phase Liquid

Energy

Buy Electricity

Sell

Historical Reports				
Project Name	Report Date	TIV	Phase	
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2)	15-Mar-2018	375,000,000 USD	Construction - Merit Shop (C1 - 36)	

CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 2	27-Jun-2018	375,000,000 USD	Permitting (P2 - 18)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 2	26-Oct-2018	375,000,000 USD	Construction - Merit Shop (C1 - 36)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 1	10-Dec-2018	375,000,000 USD	Construction - Merit Shop (C1 - 36)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 1	12-Dec-2019	375,000,000 USD	Construction - Merit Shop (C1 - 36)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 1	15-Jan-2020	375,000,000 USD	Construction - Merit Shop (C1 - 36)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 1	13-Feb-2020	375,000,000 USD	Construction - Merit Shop (C1 - 36)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2)	04-Mar-2020	375,000,000 USD	Final Commissioning (C1 - 40)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2)	07-Apr-2020	375,000,000 USD	Final Commissioning (C1 - 40)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 1	13-Apr-2020	375,000,000 USD	Final Commissioning (C1 - 40)
CRANE GRASSROOT EPIC CRUDE OIL PIPELINE (SPREAD 2) 2	23-Apr-2020	375,000,000 USD	Completion/Start-Up (C1 - 41)

Project Name MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE

Umbrella Project Name SAND HILLS EXPANSION 2018

Project ID: 300398193 **PEC Activity Diagram**

Umbrella Project Count 6

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 60,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0010 Natural Gas Liquids Pipeline

Status Complete / Done Environmental Air (A) Land (L) Water (W) Last Update 15-May-2019 Initial Release 15-Nov-2017

Construction Labor Preference Union, Non-Unior

Operations Labor Preference Union, Non-Unior

Project Capacity

Planned 85,000 BBL/d of Natural Gas Liquids (NGL)

Pipeline Installation Details				
Installation Type	Pipeline Length Unit of Measure	Р	ipeline Diameter Unit of Measure	
Greenfield	25 Miles (mi)		20 Inches (in)	
Plant Owner	r DCP Midstream LP	Plant Parent	: Enbridge Incorporated	
Plant Name	Midkiff NGL Metering Station	Unit Name		
Plant ID	3280319			
Location	0.51 Miles North of FM 1555	Phone	+1 713 735 3600	
City/State	Midkiff, Texas 79755 U.S.A.	Zone/County	TX*06, Upton	
Project Responsibility	Project Company		Project Contact	
Project Manager	r DCP Midstream LP		Leslie Kelton	
	370 17th Street Suite 2500		Project Engineer	
	Denver, Colorado 80202		[Tel.] +1 303 595 3331	
	U.S.A.		[E-Mail]; [LinkedIn] leslie-k-897797189	
Project Manager	r DCP Midstream LP		David Byrnes	
,	370 17th Street Suite 2500		Engineering Manager	
	Denver, Colorado 80202		[Tel.] +1 303 595 3331	
	U.S.A.		[E-Mail] dbyrnes@dcpmidstream.com; [LinkedIn david-byrnes-p-e-75ba6a1	
Project Manager	r DCP Midstream LP		Steve Nelson	
	370 17th Street Suite 2500		Engineering Manager	
	Denver, Colorado 80202		[Tel.] +1 303 595 3331	
	U.S.A.		[E-Mail]	
Inspection/Validation/Startup	DCP Midstream LP		Tony Beck	
·	370 17th Street		Pipeline Area Manager	
	Denver, Colorado 80802		[Tel.] +1 303 595 3331	
	U.S.A.		[E-Mail]; [LinkedIn] tony-beck-01064a2a	
G/C	Holloman Corporation		Mick Maidens	
	333 North Sam Houston Parkway East Suite 600		Project Manager	
	Houston, Texas 77060		[Tel.] +1 281 878 2600	
	U.S.A.		[E-Mail]	
PEC® Timing	ı C1	PEC® Activity	Completion/Start-Up	

Project Probability Completed (100%)

Scope DCP Midstream with Holloman Corporation (G/C) continues with Construction for Grassroot Natural Gas Liquids Pipeline Loops. DETAILS: As part of the Sand Hills Pipeline Expansion 2018, dig trenches and lay (6) 20"-diameter pipeline loops between 10 and 25 miles long to facilitate an expansion of the Sand Hills pipeline up to 450,000 BBL/d of natural gas liquids. REQUIRES: Trenching, Site Preparation, Transmission Pipe, Cathodic Protection, Pig Launching/Receiving, Coatings, Custody Transfers, Metering, Control/Block Valves plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment; (W) River Crossings.

Schedule DCP Midstream with Holloman continues Construction and releases remaining Equipment RFQ's and Subcontractor Bid Documents 4Q18 (Nov). Scheduled Construction Kick-Off 4Q18 (Nov). Scheduled Completion Date 1Q19 (Feb).

AFE 201710 Sub Bid Doc 201901 Completion 01-May-2019 **Precision MONTH Project Milestones** Long-Lead 201711 Equip RFQ 201812 Kick-Off 201812 Kickoff Slippage 10 Months **Duration 6 Months**

Engineering

Electrical Instrumentation Contracting **Environmental**

Project Key Needs Civil/Site

NDE Instrumentation Electrical Mechanical

Piping/Fittings Insulation/Coatings Environmental Utilities Valves

Communications Transportation

Matter Phase Liquid

Energy

Buy

Project Name	Report Date	TIV	Phase
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	15-Nov-2017	60,000,000 USD	Purchasing (E2 - 21)
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	10-Apr-2018	60,000,000 USD	Preliminary Engineering (E2 - 22)
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	11-Jul-2018	60,000,000 USD	Planning and Scheduling (E2 - 25)
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	04-Oct-2018	60,000,000 USD	Planning and Scheduling (E2 - 25)
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	07-Feb-2019	60,000,000 USD	Construction - Merit Shop (C1 - 36)
MIDKIFF GRASSROOT SAND HILLS NATURAL GAS LIQUIDS (NGL) PIPELINE LOOPS	15-May-2019	60,000,000 USD	Completion/Start-Up (C1 - 41)



Project Name MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL P

Umbrella Project Name SUNRISE PERMIAN - CUSHING CRUDE OIL PIPELINE

Project ID: 300354461 **PEC Activity Diagram**

Umbrella Project Count 4

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 80,000,000

SIC Code 4612 Crude Petroleum Pipelines

SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Project Type Grassroot

Sector Crude Pipelines

Last Update 11-Dec-2018 Initial Release 10-May-2017 Construction Labor Preference Unconfirmed

Operations Labor Preference Union, Non-Unior

Brainet Canacity Planned 250 000 PPI /d of Crudo Oil

Project Capacity	Planned 350,000 BBL/d of Crude	Oil
	Pipeline Installation Deta	ils
nstallation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure
Greenfield	80 Miles (mi)	24 Inches (in)
Plant Owner	Plains All American Pipeline LP	Plant Parent Plains All American Pipeline LP
Plant Name	Midland Crude Oil Pump Station	Unit Name
Plant ID	3119866	
Location	1301 S County Road 1150	Phone +1 432 687 6900
City/State	Midland, Texas 79706 U.S.A.	Zone/County TX*06, Midland
Project Responsibility	Project Company	Project Contact
Project Manager	Plains All American Pipeline LP	Nimish Modha
	333 Clay Street Suite 1600	Project Manager
	Houston, Texas 77002	[Tel.] +1 713 646 4100
	U.S.A.	[E-Mail]
Project Director	Plains All American Pipeline LP	Bill Keener
	333 Clay Street Suite 1600	Director Pipeline Business Development
	Houston, Texas 77002	[Tel.] +1 713 646 4100
	U.S.A.	[E-Mail] wkeener@paalp.com (!)
Contracts Administrator	Plains All American Pipeline LP	Christopher Etter
	333 Clay Street Suite 1600	Contracts Manager
	Houston, Texas 77002	[Tel.] +1 713 646 4100
	U.S.A.	[E-Mail] cnetter@paalp.com (!)
Procurement - Purchasing	Plains All American Pipeline LP	Kevin Howard
	333 Clay Street Suite 1600	Purchasing Manager
	Houston, Texas 77002	[Tel.] +1 713 646 4100
	U.S.A.	[LinkedIn] kevin-howard-c-p-m-b801b133
G/C	Holloman Corporation	Shannon Driver
	333 North Sam Houston Parkway East Suite 600	Project Manager
	Houston, Texas 77060	[Tel.] +1 281 878 2600
	U.S.A.	[E-Mail]
PEC® Timing	C1	PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Plains All American awards Holloman (Pipeline Construction) and continues Construction for a Grassroot Permian -Cushing Crude Oil Pipeline. DETAILS: Dig trenches and lay approx. 440 miles of 24" crude oil transmission pipe in (3) loops (Midland to Colorado City - 80 miles., Colorado City to Wichita Falls - 180 miles, and Wichita Falls to Cushing - 180 miles) along the existing Midland-to-Cushing Basin Pipeline (Pipeline ID 3505521) to carry 350,000 BBL/d of Permian Basin crude oil from Midland and Colorado City, TX to Plains' Cushing Terminal (Plant ID: 1009085). REQUIRES: Trenching, 24"-Transmission Pipe, Coatings, Custody Transfers, Pig Launching & Receiving, Block/Control Valves, Piping, MCC, Metering Utilities and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Plains All American with Holloman continues Construction through 4Q19 (Dec). Scheduled Construction Commenced 2Q18 (Apr). Expected Project Completion 4Q18 (Dec).

AFE 201801 Sub Bid Doc 201802 Completion 12-Nov-2018 **Precision QUARTER Project Milestones** Equip RFQ 201802 Kick-Off 201804 **Duration 8 Months** Long-Lead 201712 Kickoff Slippage 0 Months

Engineering

Environmental Instrumentation Contracting

Project Key Needs Civil/Site

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

Matter Phase Liquid

Energy

Buy Electricity

Sell

Plant Standard Contacts

Functional/Actual Title Contact Name/E-maiTelephone/On-site

QC Date/LinkedIn ID

Plant Manager	Danny Kea	[Phn.] +1 432 558 3601 / [Alt.] +1 432 215 9001	Dec-2022
		No	
Maintenance Manager	Ross Hataway	[Phn.] +1 432 687 6900 x78931 / [Alt.] +1 432 940 5009	Dec-2022
Operations Supervisor	rhataway@paalp.com (!)	No	
Purchasing Manager	James 'Jimmy' Ferrel	[Phn.] +1 713 646 4100	Dec-2022
Vice President Supply Chain Management	jlferrell@paalp.com (No	james-jimmy-ferrell-cpsm-cpim-53a88a2
Engineering Manager	Dwayne Koehn	[Phn.] +1 432 687 6900 x34293	Dec-2022
Vice President Operations - North Region		No	dwayne-koehn-9bab14105
Environmental Manager	Wayne Roberts	[Phn.] +1 432 687 6900 x27926	Dec-2022
Director Environmental and Regulatory Compliance		No	wayne-roberts-51303732
Safety Manager	Paul Paget	[Phn.] +1 432 687 6900 x78906	Dec-2022
Senior Division Safety Manager		No	
Utilities Manager	•	[Phn.] +1 432 687 6900 x78931 / [Alt.] +1 432 940 5009	Dec-2022
Operations Supervisor	rhataway@paalp.com	No	
Human Resource Manager	Linda Wallace	[Phn.] +1 432 687 6900 x34541	Dec-2022
		No	

Historical Reports			
Project Name	Report Date	TIV	Phase
MIDLAND GRASSROOT PERMIAN - CUSHING CRUDE OIL PIPELINE	10-May-2017	400,000,000 USD	Project Scope (P1 - 03)
MIDLAND GRASSROOT PERMIAN - CUSHING SUNRISE CRUDE OIL PIPELINE	25-Jul-2017	400,000,000 USD	Project Scope (P1 - 03)
MIDLAND GRASSROOT PERMIAN - CUSHING SUNRISE CRUDE OIL PIPELINE LOOPS	15-Aug-2017	400,000,000 USD	Permitting (P2 - 18)
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	15-Sep-2017	80,000,000 USD	Permitting (P2 - 18)
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	20-Nov-2017	80,000,000 USD	Permitting (P2 - 18)
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	21-Dec-2017	80,000,000 USD	Permitting (P2 - 18)
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	26-Feb-2018	80,000,000 USD	Planning and Scheduling (E2 - 25
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	24-Apr-2018	80,000,000 USD	Construction - Merit Shop (C1 - 3
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	06-Sep-2018	80,000,000 USD	Construction - Merit Shop (C1 - 3
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	21-Sep-2018	80,000,000 USD	Construction - Merit Shop (C1 - 3
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	15-Oct-2018	80,000,000 USD	Construction - Merit Shop (C1 - 3
MIDLAND GRASSROOT MIDLAND - COLORADO CITY SUNRISE CRUDE OIL PIPELINE LOOP	11-Dec-2018	80,000,000 USD	Completion/Start-Up (C1 - 41)

Umbrella Project Name EPIC Y-GRADE NGL PIPELINE

Project Name ORLA GRASSROOT EPIC NGL PIPELINE PHASE I TX PORTION

PEC Activity Diagram

Project ID: 300389706

Umbrella Project Count 19

in Robstown, Texas.

Industry Code 03 Oil & Gas Pipelines TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0010 Natural Gas Liquids Pipeline

Status Complete / Done Environmental Air (A) Land (L)

Initial Release 12-Oct-2017 Last Update 10-Dec-2018

> Construction Labor Preference Unconfirmed **Operations Labor Preference** Non-Union

Pipeline Installation Details			
Installation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure	
Greenfield	27 Miles (mi)	12 Inches (in)	
Plant	Owner DCP Midstream LP	Plant Parent Enbridge Incorporated	
Plant	t Name Ramsey Junction	Unit Name	
P	Plant ID 3240172		
Lo	ocation 231 County Road 452	Phone +1 432 248 3702	
Cit	y/State Orla, Texas 79770 U.S.A.	Zone/County TX*06, Reeves	
Project Respon	sibility Project Company	Project Contact	
Project M	anager EPIC Midstream Holdings, LP	Grant Terry	
	18615 Tuscany Stone, Suite 275	Project Engineer - Pipeline	
	San Antonio, Texas 78258	[Tel.] +1 210 569 6696	
	U.S.A.	[E-Mail]; [LinkedIn] grant-terry-35974311a	
Project D	Pirector EPIC Midstream Holdings, LP	Justin Gordon	
	18615 Tuscany Stone, Suite 275	Vice President Engineering & Operations	
	San Antonio, Texas 78258	[Tel.] +1 210 569 6696	
	U.S.A.	[E-Mail] justin.gordon@epicmid.com ; [LinkedIn] justin-gordon-2a213241	
Project Exe	ecutive EPIC Midstream Holdings, LP	Phillip Mezey	
•	18615 Tuscany Stone, Suite 275	Chief Executive Officer	
	San Antonio, Texas 78258	[Tel.] +1 210 569 6696	
	U.S.A.	[E-Mail] phil.mezey@epicmid.com	
	G/C Holloman Corporation	Jared Harris	
	333 North Sam Houston Pkwy	Project Manager-Ops Mgmnt	
	Houston, Texas 75050	[Tel.] +1 281 878 2600	
	U.S.A.	[E-Mail] coyharris@hollomancorp.com	
DEC® 1	Timing C1	PEC® Activity Completion/Start-I In	

Umbrella Project Summary The Y-Grade Pipeline project will connect 170,000 barrels per day of fractionation capacity at the terminus of the pipeline

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Epic NGL Pipeline (indirect subsidiary of Texstar Midstream) with Holloman Corporation (Pipeline Construction) continues Construction for a Grassroot NGL Pipeline. DETAILS: As part of the EPIC NGL pipeline, construct 650 miles of 12"- and 16"-diameter transmission pipe (27 miles of 12" in TX as Phase I between DLK's Black River Gas Plant (Plant ID 3218569) to Delaware Basin Midstream's Ramsay Plant (Plant ID 3046063) near Orla, TX) to transport 350,000 BBL/d of Permian Basin and Eagle Ford natural gas liquids from DLK's Black River Processing Plant near Malaga, NM to Corpus Christi, TX. REQUIRES: Trenching, Transmission Pipe, Cathodic Protection, Coatings, MCC, Pig Launching/Receiving, Utilities, Metering, Block Valves, Control Valves plus Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Epic NGL with Holloman continues Construction through 2Q18 (May). Construction Commenced 4Q17 (Oct). Scheduled

Completion 2Q18 (Apr).

AFE 201709 Sub Bid Doc 201709 Completion 30-Apr-2018 **Precision MONTH Project Milestones** Equip RFQ 201709 Kick-Off 201710 Kickoff Slippage 0 Months **Duration 7 Months**

Engineering Contracting

Project Key Needs Civil/Site

NDE Instrumentation Electrical Mechanical

Piping/Fittings Insulation/Coatings Environmental Utilities Valves

Communications Transportation

Matter Phase Liquid

Energy

Buy Electricity

Historical Reports					
Project Name Report Date TIV Phase					
PECOS GRASSROOT EPIC NGL PIPELINE PHASE I	12-Oct-2017	30,000,000 USD	Construction - Merit Shop (C1 - 36)		

PECOS GRASSROOT EPIC NGL PIPELINE PHASE I	12-Apr-2018	30,000,000 USD	Construction - Merit Shop (C1 - 36)
PECOS GRASSROOT EPIC NGL PIPELINE PHASE I	31-May-2018	30,000,000 USD	Construction - Merit Shop (C1 - 36)
ORLA GRASSROOT EPIC NGL PIPELINE PHASE I TX PORTION	25-Jun-2018	30,000,000 USD	Completion/Start-Up (C1 - 41)
ORLA GRASSROOT EPIC NGL PIPELINE PHASE I TX PORTION	10-Dec-2018	30,000,000 USD	Completion/Start-Up (C1 - 41)

Project Name CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION Umbrella Project Name WILLIAMS APPALACHIAN GATHERING COMPRESSOR STATIONS

Project ID: 300398938 **PEC Activity Diagram**

Umbrella Project Count 4

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 10,000,000

SIC Code 4922 Natural Gas Transmission

SIC Product 4922*0006 Natural Gas Compressor Stations

Status Complete / Done

Last Update 27-Sep-2018 Initial Release 15-Nov-2017 Environmental Air (A) Land (L) Construction Labor Preference Unconfirmed

Operations Labor Preference Union

Project Type Grassroot

Plant Owner Appalachia Midstream Services

LLC

Plant Name Blake Ridge Natural Gas

Gathering Compressor Station

Plant ID 3286171

Location 546 Blake Ridge County Road 1/14

City/State New Martinsville, West Virginia

26155 U.S.A.

Plant Parent Williams Companies Incorporated

Sector Natural Gas Pipelines

Unit Name IC 01

Phone +1 304 517 1416

Zone/County WV*03, Wetzel

Project Responsibility Project Company	Project Contact
Project Manager Williams Ohio Valley Midstream LLC	Clem Collins
RD4 Box 397	Project Manager
Cameron, West Virginia 26033	[Tel.] +1 570 222 2340
U.S.A.	[E-Mail] clem.collins@williams.com ; [LinkedIn] clem-collins-1129737
Project Manager Williams Ohio Valley Midstream LLC	Nathan Salsi
RD4 Box 397	Project Manager
Cameron, West Virginia 26033	[Tel.] +1 304 845 5050 x5034
U.S.A.	
G/C Holloman Corporation	Waylon Bowery
1000 Cliff Mine Road, Suite 400	Project Manager
Pittsburgh, Pennsylvania 15317	[Tel.] +1 724 514 5900

PEC® Timing C1

PEC® Activity Completion/Start-Up

[E-Mail]

Project Probability Completed (100%)

U.S.A.

Scope Williams Partners with Holloman Corporation (G/C) proceeds with Construction on a Grassroot Natural Gas Compressor Station for a Gathering System. DETAILS: Construct buildings and install Caterpillar/Ariel Engine-Driven compressor packages, to maintain field pressure of natural gas sourced from Marcellus and Upper Devonian. REQUIRES: Buildings, Compressors (Gas & Air), Headers, Manifolds, Flanges, NG/H2O/Air Piping, Pipe Racks, Pipe Yard, Control Valves, Metering, Separator, Emergency Generator, MCC, Fire Protection, Transformers, Switchgear, Breakers, Electrical Distribution, Coatings plus Controls. ENVIRONMENTAL: (A) Flare, CEMS, Leak Detection; (L) Containment.

Schedule Williams Partners with Holloman Corporation proceeds with Construction through 3Q18 (Aug). Williams Partners releases remaining Equipment RFQ's and Holloman Corporation releases remaining Bid Document plus reviews and Selects Subcontractors as needed 1Q18 (Mar)-2Q18. Construction Commenced 1Q18 (Mar). Expected Project Completion 3Q18 (Sep).

AFE 201801 Sub Bid Doc 201803 Completion 21-Sep-2018 Precision QUARTER **Project Milestones** Equip RFQ 201803 Kick-Off 201802 Kickoff Slippage -1 Months **Duration 8 Months**

Engineering

Environmental Mechanical **Flectrical** Contracting

Structural Project Key Needs Civil/Site Control Room

Instrumentation Electrical Mechanical **HVAC** NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves Pumps Communications Transportation

Matter Phase Gas

Energy

Buy

Sell

Project Fuel Type Natural Gas

Plant Standard Contacts			
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID
Plant Manager	Josh Archer	[Phn.] +1 304 843 3100	Aug-2023
	josh.archer@williams.com	No	josh-archer-51251a17
Maintenance Manager	Josh Archer	[Phn.] +1 304 843 3100	Aug-2023
Maintenance Coordinator	josh.archer@williams.com	No	josh-archer-51251a17
Purchasing Manager	Josh Archer	[Phn.] +1 304 843 3100	Aug-2023

Utilities Manager	josh.archer@williams.com	No	josh-archer-51251a17
Engineering Manager	Austin Day	[Phn.] +1 412 787 3132	Aug-2023
	austin.day@williams.com	No	austin-day-102b2655
Environmental Manager	Josh Muth	[Phn.] +1 304 517 1416	Aug-2023
Supervisor EH&S		Yes	josh-muth-ms-44b45649
Safety Manager	Josh Muth	[Phn.] +1 304 517 1416	Aug-2023
Supervisor EH&S		Yes	josh-muth-ms-44b45649
Utilities Manager	Josh Archer	[Phn.] +1 304 843 3100	Aug-2023
	josh.archer@williams.com	No	josh-archer-51251a17
Human Resource Manager	Rachel Savage	[Phn.] +1 800 945 5426	Aug-2023
Manager of Talent Acquisition		No	

Historical Reports						
Project Name	Report Date	TIV	Phase			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	15-Nov-2017	10,000,000 USD	Permitting (P2 - 18)			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	20-Nov-2017	10,000,000 USD	Permitting (P2 - 18)			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	15-Mar-2018	10,000,000 USD	Construction - Union (C1 - 35)			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	26-Jul-2018	10,000,000 USD	Construction - Union (C1 - 35)			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	14-Sep-2018	10,000,000 USD	Construction - Union (C1 - 35)			
CAMERON #2 NATURAL GAS GATHERING COMPRESSOR STATION	27-Sep-2018	10,000,000 USD	Completion/Start-Up (C1 - 41)			

Umbrella Project Name MIDLAND TO RANCHO SEALY PROJECT

Project Name MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE

PEC Activity Diagram

Umbrella Project Count 5

Project ID: 300158230

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 575,000,000

SIC Code 4612 Crude Petroleum Pipelines

SIC Product 4612*0001 Crude Oil Pipelines

Status Complete / Done Environmental Air (A) Land (L)

Project Type Grassroot

Sector Crude Pipelines

Last Update 19-Apr-2018 Initial Release 20-Mar-2014

Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Project Capacity Planned 540.000 BBL/d of Crude Oil

Project Capa	riainled 540,000 BBL/d of Crude	Oll	
	Pipeline Installation Deta	ils	
Installation Type	Pipeline Length Unit of Measure	Pipeline Diameter Unit of Measure	
Greenfield	416 Miles (mi)	24 Inches (in)	
Plant Ov	wner Enterprise Products Partners LP	Plant Parent Enterprise Products Partners LP	
	ame Midland Crude Oil Pump Station	Unit Name	
	nt ID 3116074		
Loca	tion 4500 East Highway 80	Phone +1 432 221 7700	
City/S	State Midland, Texas 79706 U.S.A.	Zone/County TX*06, Midland	
Project Responsik	pility Project Company	Project Contact	
Project Mana	ager Enterprise Products Partners LP	Randy Wiggins	
	P O Box 4324	Project Manager	
	Houston, Texas 77210-4324	[Tel.] +1 713 381 6500	
	U.S.A.		
Project Dire	ector Enterprise Products Partners LP	John Macon	
	P O Box 4324	Project Director	
	Houston, Texas 77210-4324	[Tel.] +1 713 381 6500	
	U.S.A.	[E-Mail] jtmacon@eprod.com	
Project Execu	Itive Enterprise Products Partners LP	Leonard Mallett	
	1100 Louisiana Street, Suite 1000	Engineering VP	
	Houston, Texas 77002	[Tel.] +1 713 381 6500	
	U.S.A.	[E-Mail] Imallett@eprod.com	
	G/C Primoris Services Corporation	Roger Thurman	
	2100 McKinney Avenue Suite 1500	Regional Manager	
	Dallas, Texas 75201	[Tel.] +1 214 740 5600	
	U.S.A.	[E-Mail] rthurman@prim-es.com	
	G/C Holloman Corporation	Eddie Pernell	
	333 North Sam Houston Parkway East Suite 600	Construction Superintendent	
	Houston, Texas 77060	[Tel.] +1 281 878 2600	
	U.S.A.	[E-Mail] eddiepernell@hollomancorp.com	
	G/C Holloman Corporation	Shannon Driver	
	333 North Sam Houston Parkway East Suite 600	Project Manager	
	Houston, Texas 77060	[Tel.] +1 281 878 2600	
	U.S.A.		
	G/C Pumpco Incorporated	Shawn Pruet	
	P O Box 742	Project Manager	
	Giddings, Texas 78942	[Tel.] +1 979 542 9054	
	U.S.A.		
PEC® Tin	ning C1	PEC® Activity Completion/Start-Up	

Project Probability Completed (100%)

Scope Enterprise Products awards Primoris Energy Services, Holloman Corporation, and Pumpco (Pipeline G/C's) and continues Construction for a Grassroot Crude Oil Pipeline. DETAILS: As part of the \$760 Million Midland to Rancho Sealy Project, construct 416 miles of 24" pipe with (10) integrity meters to transport 450,000 BBL/d of Permian Basin crude oil (West Texas Sour, West Texas Intermediate, Light West Texas Intermediate) and condensate from Midland, TX to Enterprise's Sealy Station (Plant ID: 3014032). REQUIRES: Site Preparation, Trenching, 24" Transmission Pipe, Road Crossings, Automated Control System, Cathodic Protection, Receiving, Coatings, Block/Control Valves, MCC Mods, Condensers, Metering and Controls. ENVIRONMENTAL: (A) Leak Detection; (L) Containment.

Schedule Enterprise Products with Primoris, Holloman, and Pumpco continues Final Commissioning and Ramp Up through 2Q18 (Jun). Enterprise with Primoris Holloman, and Pumpco releases remaining Equipment RFQ's and Subcontractor Bid Documents through 2Q17 (May). Construction Commenced 2Q17 (Apr). Scheduled Full-Service Operation and Project Completion 2Q18 (Jun).

AFE 201704 Sub Bid Doc 201705 **Precision QUARTER** Completion 16-Apr-2018 **Project Milestones** Long-Lead 201704 Equip RFQ 201705 Kick-Off 201704 Kickoff Slippage 8 Months **Duration 13 Months**

Engineering

Contracting Electrical Environmental Instrumentation

Project Key Needs Civil/Site

Instrumentation Electrical Mechanical Piping/Fittings

Insulation/Coatings Environmental Utilities

Liquid

Valves

NDE

Transportation

Matter Phase

Energy

Buy Electricity

Communications

Sell

Plant Standard Contacts				
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager	Ralph Morris	[Phn.] +1 432 250 1173	Feb-2023	
	ramorris@eprod.com	No		
Maintenance Manager	•	[Phn.] +1 432 681 2600 x3	Feb-2023	
Pipeline Operation Supervisor	rhmorsey@eprod.com	No	rex-morsey-04566756	
Purchasing Manager	Rex Morsey	[Phn.] +1 432 681 2600 x3	Feb-2023	
Pipeline Operation Supervisor	rhmorsey@eprod.com	No	rex-morsey-04566756	
Engineering Manager	Rex Morsey	[Phn.] +1 432 681 2600 x3	Feb-2023	
Pipeline Operation Supervisor	rhmorsey@eprod.com	No	rex-morsey-04566756	
Environmental Manager	Christopher Spore	[Phn.] +1 432 221 7746	Feb-2023	
Lead Field Environmental Scientist	cspore@eprod.com	No	christopher-spore-p-g-61320b22	
Safety Manager	Christopher Spore	[Phn.] +1 432 221 7746	Feb-2023	
Lead Field Environmental Scientist	cspore@eprod.com	No	christopher-spore-p-g-61320b22	
Utilities Manager	Rex Morsey	[Phn.] +1 432 681 2600 x3	Feb-2023	
Pipeline Operation Supervisor	rhmorsey@eprod.com	No	rex-morsey-04566756	
Human Resource Manager	Marilyn Hartman	[Phn.] +1 713 381 6500	Feb-2023	
	mhartman@eprod.com	No	marilyn-hartman-349ab645	

Historical Reports					
Project Name	Report Date	TIV	Phase		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	20-Mar-2014	572,000,000 USD	Economic Evaluation (P1 - 04)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	22-Sep-2014	572,000,000 USD	Economic Evaluation (P1 - 04)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	21-Jan-2015	572,000,000 USD	Economic Evaluation (P1 - 04)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	15-May-2015	575,000,000 USD	Preliminary Design (P1 - 07)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	27-Jul-2015	575,000,000 USD	Preliminary Design (P1 - 07)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	12-Jan-2016	575,000,000 USD	Permitting (P2 - 18)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	06-Apr-2016	575,000,000 USD	Permitting (P2 - 18)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	25-May-2016	575,000,000 USD	Permitting (P2 - 18)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	13-Oct-2016	575,000,000 USD	Owner Review of Issue (P2 - 19)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	10-May-2017	575,000,000 USD	Construction - Merit Shop (C1 - 36)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	23-Jan-2018	575,000,000 USD	Final Commissioning (C1 - 40)		
MIDLAND GRASSROOT MIDLAND TO RANCHO SEALY CRUDE OIL PIPELINE	19-Apr-2018	575,000,000 USD	Completion/Start-Up (C1 - 41)		

Project Name PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION

Project ID: 30020587 **PEC Activity Diagram**

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

Umbrella Project Name AEGIS PIPELINE

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015 Initial Release 25-Feb-2015 Environmental Air (A) Land (L)

Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Plant Owner Enterprise Products Partners LP Plant Name Bayou Sorrel NGL Pump Station

Plant ID 3146219

Location 0.5 miles North of Bayou Sorrel

on Route 75

City/State Plaguemine, Louisiana 70764

Plant Parent Enterprise Products Partners LP

Unit Name Bayou Sorrel 01 EM Bayou Sorrel 02 Spare EM

Phone +1 713 381 6500

Zone/County | A*02 | Iherville

City/State Plaquemine, Louisiana 70764 U.S.A.	Zone/County LA*02, Iberville
Project Responsibility Project Company	Project Contact
Project Executive Enterprise Products Partners LP	Kevin Ramsey
1100 Louisiana Street, Suite 1000	Senior Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] keramsey@eprod.com; [LinkedIn] kevinramsey-61491013
Project Director Enterprise Products Partners LP	Alicia Copenhaver
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] acopenhaver@eprod.com
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead
1100 Louisiana Street, Suite 1000	Project Manager
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	<pre>[E-Mail] ttmoorehead@eprod.com; [LinkedIn] tafreda-moorehead-40b483116</pre>
Consultant Atkins Global	Michael Dyke
1250 Wood Branch Park Drive Suite 300	Project Manager
Houston, Texas 77079	[Tel.] +1 281 493 5100
U.S.A.	
Eng NorthStar Energy Services	Daniel Alcorn
920 Memorial City Way	Vice President Engineering
Houston, Texas 77024	[Tel.] +1 281 452 2355
U.S.A.	
G/C Holloman Corporation	Shannon Driver
333 North Sam Houston Parkway East Suite 600	Project Manager
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	
PFC® Timing C1	PFC® Activity Completion/Start-Up

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products awards Atkins Global (Environmental Consultant), Northstar Energy Services (Detailed Engineering), and Holloman Corporation (G/C) and continues Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project, construct buildings and install (1) 1,750 hp mainline and (1) 900 hp spare Westinghouse electric motor-driven horizontal multi-stage pump packages to support the planned Aegis Pipeline Phases I & II Projects (Project ID's: 300153181, 300153189). REQUIRES: Foundations, Buildings, Electric-Motor Pump Packages (PURCHASED), Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 2Q15 (May). Expected Project Completion 4Q15 (Dec).

AFE 201504 Sub Bid Doc 201504 Completion 30-Dec-2015 **Precision MONTH Project Milestones** Kick-Off 201505 Equip RFQ 201504 Kickoff Slippage 1 Months **Duration 8 Months**

Engineering

Electrical Instrumentation Contracting Environmental

Project Key Needs Civil/Site Structural Control Room

> NDE Instrumentation Electrical Mechanical Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

Matter Phase Liquid

Energy

Buy	Electricity
Sell	

Plant Standard Contacts				
Functional/Actual Title	Contact Name/E-ma	QC Date/LinkedIn ID		
Plant Manager	Scott Slack	[Phn.] +1 318 752 4362	Mar-2023	
Operations Supervisor	sdslack@eprod.com	No	scott-slack-2055ba126	
Maintenance Manager	Scott Slack	[Phn.] +1 318 752 4362	Mar-2023	
Operations Supervisor	${\sf sdslack@eprod.com}$	No	scott-slack-2055ba126	
Purchasing Manager	Scott Slack	[Phn.] +1 318 752 4362 x110	Mar-2023	
Operations Supervisor	${\sf sdslack@eprod.com}$	No	scott-slack-2055ba126	
Engineering Manager	Scott Slack	[Phn.] +1 318 752 4362 x110	Mar-2023	
Operations Supervisor	sdslack@eprod.com	No	scott-slack-2055ba126	
Environmental Manager	Rodney Sartor	[Phn.] +1 713 381 6500	Mar-2023	
Senior Director Environmental	rsartor@eprod.com	No	rodney-m-sartor-35231158	
Safety Manager	Jeff Hoffstadt	[Phn.] +1 210 528 3252 / [Alt.] +1 956 642 6025 (Mobile)	Mar-2023	
Regional Safety Manager		No	jeff-hoffstadt-27496b32	
Utilities Manager	Scott Slack	[Phn.] +1 318 752 4362 x110	Mar-2023	
Operations Manager	sdslack@eprod.com	No	scott-slack-2055ba126	
Human Resource Manager	Esmeralda Galvan	[Phn.] +1 713 381 6500	Mar-2023	
Director Human Resource	egalvan@eprod.com	No	esmeralda-galvan-a7b92a4	

Historical Reports				
Project Name	Report Date	TIV	Phase	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	25-Feb-2015	30,000,000 USD	Permitting (P2 - 18)	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Permitting (P2 - 18)	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	08-Jun-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
PLAQUEMINE GRASSROOT AEGIS BAYOU SORREL NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)	

Project Name SORRENTO GRASSROOT AEGIS NGL PUMP STATION Umbrella Project Name AEGIS PIPELINE

Project ID: 300183844

PEC Activity Diagram

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids Pipelines

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015
Environmental Air (A) Land (L) Construction L

te 31-Dec-2015 Initial Release 29-Sep-2014
Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Plant Owner Enterprise Products Partners LP
Plant Name Sorrento NGL Pump Station

Plant ID 3132800

Location 47433 Texaco Road City/State Sorrento, Louisiana 70778 Plant Parent Enterprise Products Partners LP Unit Name Sorrento 01 EM Sorrento 02 EM

Phone +1 225 675 5378 Zone/County LA*02, Ascension

U.S.A.		
Project Responsibility Project Company	Project Contact	
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead	
1100 Louisiana Street, Suite 1000	Project Manager	
Houston, Texas 77002	[Tel.] +1 713 381 6500	
U.S.A.	[E-Mail] ttmoorehead@eprod.com; [LinkedIn] tafreda-moorehead-40b483116	
Project Director Enterprise Products Partners LP	Alicia Copenhaver	
1100 Louisiana Street, Suite 1000	Project Director	
Houston, Texas 77002	[Tel.] +1 713 381 6500	
U.S.A.	[E-Mail] acopenhaver@eprod.com	
Consultant Atkins Global	Michael Dyke	
1250 Wood Branch Park Drive Suite 300	Project Manager	
Houston, Texas 77079	[Tel.] +1 281 493 5100	
U.S.A.		
G/C Holloman Corporation	Shannon Driver	
333 North Sam Houston Parkway East Suite 600	Project Manager	
Houston, Texas 77060	[Tel.] +1 281 878 2600	
U.S.A.		

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) begins Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project Spread 3, Construct buildings and install (2) 500 hp TECO-Westinghouse electric motor-driven Best Pump pump packages to support the planned 425,000 BBL/d Aegis NGL Pipeline Spread 3 (Project ID 300153189). REQUIRES: Foundations, Buildings, Electric Motor-Driven Pump Packages, Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 1Q15 (Mar). Expected Project Completion 4Q15 (Dec).

Project Milestones

AFE 201502 Sub Bid Doc 201504 Completion 30-Dec-2015 Precision MONTH

Long-Lead 201503 Equip RFQ 201504 Kick-Off 201503 Kickoff Slippage 1 Months Duration 10 Months

Engineering

Contracting Electrical Environmental Instrumentation

Project Key Needs Civil/Site Structural Control Room

 Instrumentation
 Electrical
 Mechanical
 NDE

 Piping/Fittings
 Insulation/Coatings
 Environmental Utilities
 Valves
 Pumps

 Communications
 Transportation

Matter Phase Liquid

Energy

Buy Electricity

Plant Standard Contacts			
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager Jason Dickens	[Phn.] +1 225 675 2515	Oct-2022	
j.dickens@eprod.com	No		
Maintenance Manager Jason Dickens	[Phn.] +1 225 675 2515	Oct-2022	
Plant Manager j.dickens@eprod.com	No		

Purchasing Manager	Jason Dickens	[Phn.] +1 225 675 2515	Oct-2022
Plant Manager	j.dickens@eprod.com	No	
Engineering Manager	Jason Dickens	[Phn.] +1 225 675 2515	Oct-2022
Plant Manager	j.dickens@eprod.com	No	
Environmental Manager Senior Director Environmental	Rodney Sartor rsartor@eprod.com	[Phn.] +1 713 381 6500 No	Oct-2022 rodney-m-sartor-35231158
Safety Manager	Bruce Wheatley bwheatley@eprod.com	[Phn.] +1 713 381 6500 No	Oct-2022 bruce-wheatley-300a1871
Utilities Manager	Jason Dickens	[Phn.] +1 225 675 2515	Oct-2022
Plant Manager	j.dickens@eprod.com	No	
Human Resource Manager		[Phn.] +1 713 381 6500	Oct-2022
Director Human Resource		No	esmeralda-galvan-a7b92a4

Historical Reports				
Project Name	Report Date	TIV	Phase	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	29-Sep-2014	30,000,000 USD	Permitting (P2 - 18)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	13-Jan-2015	30,000,000 USD	Permitting (P2 - 18)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	24-Feb-2015	30,000,000 USD	Permitting (P2 - 18)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
SORRENTO GRASSROOT AEGIS NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)	

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Project Name BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STA

Umbrella Project Name AEGIS PIPELINE

Project ID: 30018384 **PEC Activity Diagram**

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015 Environmental Air (A) Land (L)

Initial Release 29-Sep-2014

Construction Labor Preference Unconfirmed Operations Labor Preference Non-Union

Plant Owner Enterprise Products Partners LP Plant Name Belle Rose Grand Junction

Bayou NGL Pump Station

Plant ID 3132797

Location Off Route 70, West of Magnolia, stocks stupid

City/State Belle Rose, Louisiana 70341

Plant Parent Enterprise Products Partners LP Unit Name Grand Junction Bayou 01 & 02 EM

Phone +1 713 381 6500

Zone/County LA*02, Assumption

U.S.A.	
Project Responsibility Project Company	Project Contact
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead
1100 Louisiana Street, Suite 1000	Project Manager
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] ttmoorehead@eprod.com ; [LinkedIn] tafreda-moorehead-40b483116
Project Director Enterprise Products Partners LP	Alicia Copenhaver
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] acopenhaver@eprod.com
Consultant Atkins Global	Michael Dyke
1250 Wood Branch Park Drive Suite 300	Project Manager
Houston, Texas 77079	[Tel.] +1 281 493 5100
U.S.A.	
G/C Holloman Corporation	Shannon Driver
333 North Sam Houston Parkway East Suite 600	Project Manager
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) begins Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project Spread 3, Construct buildings and install (2) 500 hp TECO-Westinghouse electric motor-driven Best Pump pump packages to support the planned 425,000 BBL/d Aegis NGL Pipeline Spread 3 (Project ID 300153189). REQUIRES: Foundations, Buildings, Electric Motor-Driven Pump Packages, Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 1Q15 (Mar). Expected Project Completion 4Q15 (Dec).

Project Milestones Long-Lead 201503 **AFE** 201502

Environmental

Sub Bid Doc 201504

Completion 30-Dec-2015

Precision MONTH

Engineering

Equip RFQ 201504

Kick-Off 201503

Kickoff Slippage 0 Months

Duration 10 Months

Contracting

Project Key Needs Civil/Site

Electrical Structural

Control Room

Instrumentation Mechanical

Instrumentation Electrical Mechanical

Piping/Fittings Insulation/Coatings Environmental Utilities

Valves

Pumps

NDE

Communications

Transportation

Matter Phase Liquid

Energy

Buy Electricity

Plant Standard Contacts			
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager Terrell Hodges	[Phn.] +1 318 401 0093	Sep-2022	
Area Manager thodges@eprod.com	No		
Maintenance Manager Terrell Hodges	[Phn.] +1 318 401 0093	Sep-2022	

Area Manager	thodges@eprod.com	No	
Purchasing Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Sep-2022
Area Manager	thodges@eprod.com	No	
Engineering Manager	Kevin Ramsey	[Phn.] +1 713 381 4850	Sep-2022
	keramsey@eprod.com	No	kevin-ramsey-61491013
Environmental Manager	Damien Watt	[Phn.] +1 225 379 6900 / [Alt.] +1 832 776 2172	Sep-2022
	dtwatt@eprod.com	No	damienwatt
Safety Manager	Damien Watt	[Phn.] +1 225 379 6900 / [Alt.] +1 832 776 2172	Sep-2022
Environmental Manager	dtwatt@eprod.com	No	damienwatt
Utilities Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Sep-2022
Area Manager	thodges@eprod.com	No	
Human Resource Manager	Esmeralda Galvan	[Phn.] +1 713 381 6500	Sep-2022
Director of Human Resources	egalvan@eprod.com	No	esmeralda-galvan-a7b92a4

Historical Reports				
Project Name	Report Date	TIV	Phase	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	29-Sep-2014	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	13-Jan-2015	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	24-Feb-2015	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT GRAND JUNCTION BAYOU AEGIS NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)	

Umbrella Project Name AEGIS PIPELINE

Project Name GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION

Project ID: 3001838

PEC Activity Diagram

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

Plant Parent Enterprise Products Partners LP

Unit Name Tebone 01 EM Tebone 02 EM

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015 Environmental Air (A) Land (L)

Initial Release 29-Sep-2014 Construction Labor Preference Unconfirmed

Operations Labor Preference Union, Non-Unior

Plant Owner Enterprise Products Partners LP Plant Name Geismar NGL Pump Station

Plant ID 3132790

Location 10324 Highway 75

City/State Geismar, Louisiana 70734-3405

Phone +1 225 677 1100

Zone/County LA*02, Ascension

U.S.A.		
Project Responsibility Project Company	Project Contact	
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead	
1100 Louisiana Street, Suite 1000	Project Manager - Facilities	
Houston, Texas 77002	[Tel.] +1 713 381 6500	
U.S.A.	[E-Mail] ttmoorehead@eprod.com; [LinkedIn] tafreda-moorehead-40b483116	
Project Director Enterprise Products Partners LP	Alicia Copenhaver	
1100 Louisiana Street, Suite 1000	Project Director	
Houston, Texas 77002	[Tel.] +1 713 381 6500	
U.S.A.	[E-Mail] acopenhaver@eprod.com	
Consultant Atkins Global	Michael Dyke	
1250 Wood Branch Park Drive Suite 300	Project Manager	
Houston, Texas 77079	[Tel.] +1 281 493 5100	
U.S.A.		
G/C Holloman Corporation	Shannon Driver	
333 North Sam Houston Parkway East Suite 600	Project Manager	
Houston, Texas 77060	[Tel.] +1 281 878 2600	
U.S.A.		

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) begins Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project Spread 3, Construct buildings and install (2) 500 hp TECO-Westinghouse electric motor-driven Best Pump pump packages to support the planned 425,000 BBL/d Aegis NGL Pipeline Spread 3 (Project ID 300153189). REQUIRES: Foundations, Buildings, Electric Motor-Driven Pump Packages, Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 1Q15 (Mar). Expected Project Completion 4Q15 (Dec).

AFE 201502 Sub Bid Doc 201504 Completion 30-Dec-2015 **Precision MONTH Project Milestones** Long-Lead 201503 Equip RFQ 201504 Kick-Off 201503 Kickoff Slippage 0 Months **Duration 10 Months**

Engineering

Contracting Electrical Instrumentation Mechanical Environmental

Project Key Needs Civil/Site Structural Control Room

NDF Instrumentation Electrical Mechanical Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

Matter Phase Liquid

Energy

Buy Electricity

Plant Standard Contacts			
Functional/Actual Title Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager Jason Dickens	[Phn.] +1 225 675 2515	Sep-2022	
j.dickens@eprod.com	No		
Maintenance Manager Jason Dickens	[Phn.] +1 225 675 2515	Sep-2022	
j.dickens@eprod.com	No		

Purchasing Manager	Jason Dickens	[Phn.] +1 225 675 2515	Sep-2022
	j.dickens@eprod.com	No	
Engineering Manager	Kevin Ramsey	[Phn.] +1 713 381 4850	Sep-2022
	keramsey@eprod.com	No	kevin-ramsey-61491013
Environmental Manager	Rodney Sartor	[Phn.] +1 713 381 6500	Sep-2022
Senior Director Environmental	rsartor@eprod.com	No	rodney-m-sartor-35231158
Safety Manager	Bruce Wheatley	[Phn.] +1 713 381 6500	Sep-2022
	bwheatley@eprod.com	No	bruce-wheatley-300a1871
Utilities Manager	Jason Dickens	[Phn.] +1 225 675 2515	Sep-2022
	j.dickens@eprod.com	No	
Human Resource Manager	Esmeralda Galvan	[Phn.] +1 713 381 6500	Sep-2022
Director of Human Resources	egalvan@eprod.com	No	esmeralda-galvan-a7b92a4

Historical Reports			
Project Name	Report Date	TIV	Phase
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	29-Sep-2014	30,000,000 USD	Permitting (P2 - 18)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	13-Jan-2015	30,000,000 USD	Permitting (P2 - 18)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	24-Feb-2015	30,000,000 USD	Permitting (P2 - 18)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)
GEISMAR GRASSROOT AEGIS TEBONE NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)

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Project Name BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION

Umbrella Project Name AEGIS PIPELINE

Project ID: 3001531 **PEC Activity Diagram**

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015 Environmental Air (A) Land (L)

Initial Release 12-Feb-2014

Construction Labor Preference Unconfirmed Operations Labor Preference Union, Non-Unior

Plant Owner Enterprise Products Partners LP Plant Name Belle Rose NGL Pump Station

Plant Parent Enterprise Products Partners LP Unit Name Belle Rose 01 EM, 02 EM Spare

Plant ID 3114846

Location 6225 Highway 996

City/State Belle Rose, Louisiana 70341-

Phone +1 985 369 5000 Zone/County LA*02, Assumption

5338 U.S.A.	
Project Responsibility Project Company	Project Contact
Project Executive Enterprise Products Partners LP	Kevin Ramsey
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] keramsey@eprod.com; [LinkedIn] kevinramsey-61491013
Project Director Enterprise Products Partners LP	Alicia Copenhaver
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] acopenhaver@eprod.com
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead
1100 Louisiana Street, Suite 1000	Project Manager
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	<pre>[E-Mail] ttmoorehead@eprod.com; [LinkedIn] tafreda-moorehead-40b483116</pre>
Consultant Atkins Global	Michael Dyke
1250 Wood Branch Park Drive Suite 300	Project Manager
Houston, Texas 77079	[Tel.] +1 281 493 5100
U.S.A.	
Eng NorthStar Energy Services	Daniel Alcorn
920 Memorial City Way	Vice President Engineering
Houston, Texas 77024	[Tel.] +1 281 452 2355
U.S.A.	
G/C Holloman Corporation	Shannon Driver
333 North Sam Houston Parkway East Suite 600	Project Manager
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	
PEC® Timing C1	PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products awards Atkins Global (Environmental Consultant), Northstar Energy Services (Detailed Engineering), and Holloman Corporation (G/C) and continues Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project, construct buildings and install (1) 1,750 hp mainline and (1) 900 hp spare Westinghouse electric motor-driven horizontal multi-stage pump packages to support the planned Aegis Pipeline Phases I & II Projects (Project ID's: 300153181, 300153189). REQUIRES: Foundations, Buildings, Electric-Motor Pump Packages (PURCHASED), Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTÁL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant), Northstar (Detailed Engineering) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 1Q15 (Mar). Expected Project Completion 4Q15 (Dec).

AFE 201502 Sub Bid Doc 201503 Completion 30-Dec-2015 **Precision MONTH Project Milestones** Equip RFQ 201503 Kick-Off 201503 Kickoff Slippage 5 Months **Duration 10 Months**

Engineering

Flectrical Environmental Instrumentation Contracting

Project Key Needs Civil/Site Control Room

Instrumentation Electrical Mechanical NDE Piping/Fittings Insulation/Coatings Environmental Utilities Valves Pumps Communications Transportation

Matter Phase Liquid

Energy

Buy	Electricit
Sell	

Sell				
Plant Standard Contacts				
Functional/Actual Title	Contact Name/E-mail	Telephone/On-site	QC Date/LinkedIn ID	
Plant Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Oct-2022	
Area Manager	thodges@eprod.com	No		
Maintenance Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Oct-2022	
Area Manager	thodges@eprod.com	No		
Purchasing Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Oct-2022	
Area Manager	thodges@eprod.com	No		
Engineering Manager	Kevin Ramsey	[Phn.] +1 713 381 4850	Oct-2022	
Director of Project Management	keramsey@eprod.com	No	kevin-ramsey-61491013	
Environmental Manager	Rodney Sartor	[Phn.] +1 713 381 6500	Oct-2022	
Senior Director Environmental	rsartor@eprod.com	No	rodney-m-sartor-35231158	
Safety Manager	Bruce Wheatley	[Phn.] +1 713 381 6500	Oct-2022	
Senior Safety / PSM Coordinator	bwheatley@eprod.com	No	bruce-wheatley-300a1871	
Utilities Manager	Terrell Hodges	[Phn.] +1 318 401 0093	Oct-2022	
Area Manager	thodges@eprod.com	No		
Human Resource Manager		[Phn.] +1 713 381 6500	Oct-2022	
Senior Human Resources Director	jcooksey@eprod.com	No	john-p-cooksey-463192111	

Historical Reports				
Project Name	Report Date	TIV	Phase	
NAPOLEONVILLE GRASSROOT AEGIS NGL PUMP STATION	12-Feb-2014	30,000,000 USD	Permitting (P2 - 18)	
NAPOLEONVILLE GRASSROOT AEGIS NGL PUMP STATION	24-Apr-2014	30,000,000 USD	Permitting (P2 - 18)	
NAPOLEONVILLE GRASSROOT AEGIS NGL PUMP STATION	25-Jun-2014	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	14-Aug-2014	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	26-Sep-2014	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	09-Jan-2015	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	24-Feb-2015	30,000,000 USD	Permitting (P2 - 18)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)	
BELLE ROSE GRASSROOT AEGIS NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)	

Project Name BREAUX BRIDGE GRASSROOT AEGIS PROMIX NGL PUMP STATION

Umbrella Project Name AEGIS PIPELINE

Project ID: 300153188 **PEC Activity Diagram**

Umbrella Project Count 10

Umbrella Project Summary

Industry Code 03 Oil & Gas Pipelines

TIV (USD) 30,000,000

SIC Code 4922 Natural Gas Transmission

Project Type Grassroot

Sector Natural Gas Liquids **Pipelines**

SIC Product 4922*0009 Natural Gas Liquids Pump Station

Status Complete / Done Last Update 31-Dec-2015 Initial Release 12-Feb-2014 Environmental Air (A) Land (L) Construction Labor Preference Unconfirmed

Operations Labor Preference Non-Union

Plant Owner Enterprise Products Partners LP Plant Parent Enterprise Products Partners LP Plant Name Breaux Bridge NGL Pump Unit Name Breaux Bridge 01 EM, 02 EM Spare

Station Plant ID 3114829

Location Sawmill Highway

City/State Breaux Bridge, Louisiana 70582

Phone +1 713 381 6500 Zone/County LA*01, Saint Martin

U.S.A.	
Project Responsibility Project Company	Project Contact
Project Executive Enterprise Products Partners LP	Kevin Ramsey
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] keramsey@eprod.com; [LinkedIn] kevinramsey-61491013
Project Director Enterprise Products Partners LP	Alicia Copenhaver
1100 Louisiana Street, Suite 1000	Project Director
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] acopenhaver@eprod.com
Project Manager Enterprise Products Partners LP	Tafrieda Moorehead
1100 Louisiana Street, Suite 1000	Project Manager
Houston, Texas 77002	[Tel.] +1 713 381 6500
U.S.A.	[E-Mail] ttmoorehead@eprod.com; [LinkedIn] tafreda-moorehead-40b483116
Consultant Atkins Global	Michael Dyke
1250 Wood Branch Park Drive Suite 300	Project Manager
Houston, Texas 77079	[Tel.] +1 281 493 5100
U.S.A.	
Eng NorthStar Energy Services	Daniel Alcorn
920 Memorial City Way	Vice President Engineering
Houston, Texas 77024	[Tel.] +1 281 452 2355
U.S.A.	
G/C Holloman Corporation	Shannon Driver
333 North Sam Houston Parkway East Suite 600	Project Manager
Houston, Texas 77060	[Tel.] +1 281 878 2600
U.S.A.	
PEC® Timing C1	PFC® Activity Completion/Start-Lin

PEC® Timing C1

PEC® Activity Completion/Start-Up

Project Probability Completed (100%)

Scope Enterprise Products awards Atkins Global (Environmental Consultant), Northstar Energy Services (Detailed Engineering), and Holloman Corporation (G/C) and continues Construction on a Grassroot NGL Pump Station. DETAILS: As part of the Aegis Pipeline Project, construct buildings and install (1) 1,750 hp mainline and (1) 900 hp spare Westinghouse electric motor-driven pump packages to support the planned Aegis Pipeline Phases I & II Projects (Project ID's: 300153181, 300153189). REQUIRES: Foundations, Buildings, Electric-Motor Pump Packages (PURCHASED), Gear Boxes, Headers, Station Piping, Manifolds, Control Valves, Pipeyard, Pipeline Interconnections, Coatings, Switchgear, Transformers, Electrical Utilities plus Controls. ENVIRONMENTAL: (A) Flare, Leak Detection; (L) Containment, Liners.

Schedule Enterprise Products with Atkins Global (Environmental Consultant) and Holloman Corporation (G/C) continues Construction through 3Q15 (Jul). Holloman will release remaining Subcontractor Bid Documents through 2Q15 (Apr). Construction Commenced 1Q15 (Mar). Expected Project Completion 4Q15 (Dec).

AFE 201502 Sub Bid Doc 201504 Completion 30-Dec-2015 **Precision MONTH Project Milestones** Kick-Off 201503 Equip RFQ 201504 Kickoff Slippage 5 Months **Duration 10 Months**

Engineering

Electrical Environmental Instrumentation Contracting

Project Key Needs Civil/Site Structural Architectural Control Room

> NDE Instrumentation Electrical Mechanical Storage Piping/Fittings Insulation/Coatings Environmental Utilities Valves **Pumps** Communications Transportation

Matter Phase Liquid

Energy

Buy	Electricity
الم	

Plant Standard Contacts							
Functional/Actual Title	Contact Name/E-mail		QC Date/LinkedIn ID				
Plant Manager	Jonathan Bodin	[Phn.] +1 337 332 8600	Nov-2022				
	jbodin@eprod.com	No	jonathan-bodin-meng-pmp-40296043				
Maintenance Manager	Jonathan Bodin	[Phn.] +1 337 332 8600	Nov-2022				
Plant Manager	jbodin@eprod.com	No	jonathan-bodin-meng-pmp-40296043				
Purchasing Manager	Jonathan Bodin	[Phn.] +1 337 332 8600	Nov-2022				
Plant Manager	jbodin@eprod.com	No	jonathan-bodin-meng-pmp-40296043				
Engineering Manager	Jonathan Bodin	[Phn.] +1 337 332 8600	Nov-2022				
Plant Manager	jbodin@eprod.com	No	jonathan-bodin-meng-pmp-40296043				
Environmental Manager	Damien Watt	[Phn.] +1 713 381 6500 / [Alt.] +1 832 776 2172	Nov-2022				
	dtwatt@eprod.com	No	damienwatt				
Safety Manager	Damien Watt	[Phn.] +1 713 381 4747 / [Alt.] +1 832 776 2172	Nov-2022				
Environmental Manager	dtwatt@eprod.com	No	damienwatt				
Utilities Manager	Jonathan Bodin	[Phn.] +1 337 332 4123	Nov-2022				
Plant Manager	jbodin@eprod.com	No	jonathan-bodin-meng-pmp-40296043				
Human Resource Manager	Esmeralda Galvan	[Phn.] +1 713 381 6500	Nov-2022				
Director Human Resource	egalvan@eprod.com	No	esmeralda-galvan-a7b92a4				

Historical Reports						
Project Name	Report Date	TIV	Phase			
SECTION 28 GRASSROOT AEGIS NGL PUMP STATION	12-Feb-2014	30,000,000 USD	Permitting (P2 - 18)			
SECTION 28 GRASSROOT AEGIS NGL PUMP STATION	24-Apr-2014	30,000,000 USD	Permitting (P2 - 18)			
SECTION 28 GRASSROOT AEGIS NGL PUMP STATION	25-Jun-2014	30,000,000 USD	Permitting (P2 - 18)			
SECTION 28 GRASSROOT AEGIS NGL PUMP STATION	14-Aug-2014	30,000,000 USD	Permitting (P2 - 18)			
BREAUX BRIDGE GRASSROOT AEGIS NGL PUMP STATION	26-Sep-2014	30,000,000 USD	Permitting (P2 - 18)			
BREAUX BRIDGE GRASSROOT AEGIS NGL PUMP STATION	09-Jan-2015	30,000,000 USD	Permitting (P2 - 18)			
BREAUX BRIDGE GRASSROOT AEGIS NGL PUMP STATION	24-Feb-2015	30,000,000 USD	Permitting (P2 - 18)			
BREAUX BRIDGE GRASSROOT AEGIS PROMIX NGL PUMP STATION	30-Mar-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)			
BREAUX BRIDGE GRASSROOT AEGIS PROMIX NGL PUMP STATION	31-Jul-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)			
BREAUX BRIDGE GRASSROOT AEGIS PROMIX NGL PUMP STATION	13-Oct-2015	30,000,000 USD	Construction - Merit Shop (C1 - 36)			
BREAUX BRIDGE GRASSROOT AEGIS PROMIX NGL PUMP STATION	31-Dec-2015	30,000,000 USD	Completion/Start-Up (C1 - 41)			