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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF PACIFIC ENERGY &
 MINING COMPANY

Docket No. 18-999-10

PACIFIC ENERGY & MINING
 COMPANY RESPONSE TO AGENCY
 ACTION AGAINST
 PACIFIC ENERGY & MINING COMPANY

Pacific Energy and Mining Company is the operator of a 21.19 mile 16-inch steel intrastate natural gas pipeline running from the outlet of PEMC's processing plant near the intersection of Ruby Ranch Road and Power Line Road to the TD Williams' tap near the south side of the Archview Resort northwest of Moab, Utah. The following addresses the annual inspection, No. 20161101CH, which was conducted on November 1-4, 2016 for the Pacific Energy and Mining Company pipeline.

1. **192.605 Procedural manual for operations, maintenance, & emergencies (b)(8):** Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation and maintenance

and modifying the procedures when deficiencies are found. *No documentation was available to verify; needs documentation.*

The following language will be added to the PEMC Procedural Manual for Operations, Maintenance and Emergencies:

“Periodically reviewing the work done by PEMC personnel to determine the effectiveness and adequacy of the procedures and modifying the procedures when differences are found in the procedures and the manner that the work needs to be done such as when there may be a change in materials or equipment. Work performed in all areas covered by Part 192 will be reviewed through records submitted by field personnel and by on-site observation of work preparation, progress, and completion. The work reviews will be done with the applicable procedures in mind and evaluated on that basis. Any deficiencies in the manner any work is being done will be discussed and training and/or modification of the procedures will be done as appropriate.”

2. 192.605 Procedural manual for operations, maintenance, & emergencies (c)

(4): Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found. *No documentation was available to verify, needs documentation.*

The following documentation will be added to PEMC's Procedural Manual for Operations, Maintenance and Emergencies:

EVALUATIONS

“An evaluation of program effectiveness shall be performed at least once every four years by PEMC Management utilizing the following Program Performance

Measures:

1. Outreach: Percentage of each intended audience reached with desired message.
2. Understandability of the message content: Percentage of sample of the intended audience that understood and retained the key information in the message received.
3. Desired Behaviors by the Intended Audience: Evaluate actual behaviors following incidents.
4. Achieving Bottom Line Results: Maintain lower than industry average third party damage events and reduce near misses or third party damages resulting from improper application of damage prevention education or lack of public awareness outreach.

Evaluation methods may include: self-assessments, focus groups, surveys, samplings, independent analysis, or other appropriate means. Individual groups may be evaluated separately at different times during the four year period. Evaluation results and recommendations for improving the plan shall be documented in the records of annual plan activities.

DOCUMENTATION AND RECORDS

Program activities shall be documented and shall include:

- A copy of the current Policies and Procedures,
- A detailed description of the program activities by audience,
- Samples of the materials used to communicate messages,

- Copies of survey results or interviews conducted that year,
- Assessments of program implementation,
- Copies of evaluations of effectiveness performed,
- Copies of any independent or outside evaluations made,
- Determinations made concerning supplemental enhancements,
- Recommendations for improvements to the plan,
- A listing of specific activities to be performed in the coming year.

PEMC may apply various techniques to determine the effectiveness of its abnormal O&M procedures, some as:

- Root cause analysis
- Post event reports
- Tailgate meeting agenda item
- Near-miss and accident investigation analysis
- Simulation or event re-construction reviews
- Abnormal operations drills and mock exercises

Recommendations for program improvements and specific activities to be performed in the coming year shall become part of the future year's plans. Records of program activities may be hard copy records or electronic records. Electronic records may be kept in a central location. All records shall be retained for a minimum of five years."

3. **192.615 Emergency plans (b) (2):** Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the

training is effective. No documentation was available to verify training and/or training effectiveness.

PEMC manager is currently taking an online training course. Once completed, PEMC will need to engage a Certified Pipeline Operator to train PEMC. This will be completed within 60 days.

4. 192.615 Emergency plans (b) (3): Review employee activities to determine whether the procedures were effectively followed in each emergency. No documentation was available to verify whether procedures were effectively followed.

A copy of the latest edition of the emergency plan (See Exhibit "A") will be provided to supervisors responsible for emergency action. Training will be provided to operating personnel on the requirements of the emergency plan and the effectiveness of the training will be documented. After each emergency, employees' activities will be reviewed to determine if the procedures were effectively followed. There have been no emergencies, therefore PEMC has not conducted any Post-Emergency discussions.

In the event an Emergency incident occurred, the following will be incorporated into the Procedural Manual for Operations, Maintenance and Emergencies:

1. PEMC will identify the emergency procedures or the applicable portion for the alleged violation will be identified.
2. PEMC will document any statements made by operator representative about the topic of the alleged violation in the violation report.

3. PEMC will obtain written statements from police, fire, or other public officials related to the pipeline operator's emergency response. If they will not provide written statements, document any statements made by police, fire, or other public officials in the violation report.
4. PEMC will obtain copies of reports prepared by police, fire, and public officials pertaining to the emergency.
5. PEMC will create accident investigation documents and accident reports that provide information on the operator's response or failure to respond appropriately.
6. PEMC will obtain photographs of the accident site, including the pipeline facilities and property damage.
7. PEMC will document types of meetings, materials covered, invitation lists, and list of those that attended the meeting.
8. PEMC will document the assessment review of the effectiveness of the procedures and any revisions that were made from the review.
9. PEMC will document the lack of a plan or documentation.

5. 192.615 Emergency plans (c): Each operator shall establish and maintain liaison with appropriate fire, police, and other public officials. *No documentation was available to verify liaison.*

Within the next 30 days, PEMC will contact the following offices to discuss the pipeline Public Awareness program, identify the individual as a point of contact and follow up with a personal visit to the office.

	Telephone	Address
Green River Fire Department	435-564-3229	130 Green River Ave, Green River, UT 84525
Emery County Sheriff, Green River	435-381-2404	80 Farrer St, Green River, UT 84525
Green River Mayor's office	435-564-3448	460 E Main St, Green River, UT 84525
Moab Fire Department	435-259-5557	25 S 100 E, Moab, UT 84532
Moab Police Department	435-259-8938	217 E Center St, Moab, UT 84532
Moab Mayor's office	435-259-5121	217 E Center St, Moab, UT 84532
Grand County Sheriff	435-259-8115	25 S 100 E, Moab, UT 84532
Highway Patrol, Moab	435-259-5441	125 E Center St, Moab, UT 84532
Highway Patrol, Green River	435-564-3474	420 Main St, Green River, UT 84525

6. 192.616 Public awareness (e) & (f): The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations. The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports gas. *No documentation was available to verify public awareness activities.*

Within the next 30 days, PEMC will mail the Appendix I Public Awareness Safety Information for the public document in Exhibit "B" to the following addresses of businesses in the area of the PEMC pipeline.

Blue Hills Gas Plant c/o Wesco Operating	120 S Durbin, PO Box 1650, Casper, WY 82602	(307) 472-4618
Archview Resort RV	13701 N Highway 191, Moab, UT 84532	(435) 259-7854
Moab Under Canvas	13784 US-191, Moab, UT 84532	(801) 895-3213
Moab Airport	110 W Aviation Way, Moab, UT 84532	(435) 259-4849

Within the next 30 days, PEMC will mail the Appendix K Public Awareness Safety Information Public Officials document in Exhibit "B" to the following addresses of community officials in the area of the PEMC pipeline.

	Telephone	Address
Green River Mayor's office	435-564-3448	460 E Main St, Green River, UT 84525
Moab Mayor's office	435-259-5121	217 E Center St, Moab, UT 84532

Additionally PEMC will join Utah Pipeline Association

<https://upa.pipelineawareness.org/> which provides the following:

The Utah Pipeline Association (UPA) is sponsoring pipeline emergency response meetings at various locations throughout the state to educate attendees about pipelines in their communities and how to respond to a pipeline emergency.

The UPA and the Utah State Fire Marshal's Office – Hazmat Section will provide instruction for your agency about the coordination necessary for local emergency responders and pipeline operators. A meal will be provided along with the opportunity to meet pipeline operators in your area. The Utah State Fire Marshal's Office – Hazmat Section will be providing 1.5 continuing education units for your attendance.

7. 192.616 Public awareness (g): The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population in the operator's area. *This item was not addressed by the PEMC Procedural Manual for Operations, Maintenance and Emergencies (PMOME).*

- a. Based on the following website: <https://datausa.io/profile/geo/moab-ut/>
- b. The population of Moab, UT is 88.1% White, 8.47% Hispanic, and 2.12% Native. 8.18% of the people in Moab, UT speak a non-English language, and 96.9% are U.S. citizens.
- c. The pipeline is not located in a populated area, therefore all programs are in English.

- d. Copy of PEMC's map identifying pipeline facility locations is attached in Exhibit "C".
- e. Copy of PEMC's written Public Awareness Program is attached in Exhibit "C".

8. 192.616 Public awareness (h): Operators in existence on June 20, 2005, must have completed their written programs no later than June 20, 2006. The operator of a master meter or petroleum gas system covered under paragraph (j) of this section must complete development of its written procedure by June 13, 2008. Upon request, operators must submit their completed programs to PHMSA or, in the case of an intrastate pipeline facility operator, the appropriate State agency. *An effectiveness review was not addressed by the PEMC PMOME.*

PEMC's Pubic Awareness Plan will be incorporated into PEMC's PMOME which is attached in Exhibit "C".

9. 192.706 Transmission lines: Leakage surveys: Leakage surveys of a transmission line must be conducted at intervals not exceeding 15 months, but at least once each calendar year. However, in the case of a transmission line which transports gas in conformity with § 192.625 without an odor or odorant, leakage surveys using leak detector equipment must be conducted. *No documentation of leak surveys available.*

PEMC personnel conducted a survey by walking the pipeline during the week of October 16, 2017. PEMC used a methane sensor for the survey. There were no signs of leakage or loss of gas. Methane sensor did not indicate any free gas. However, Jimmy Betham of Utah DOT explained the methane sensor was not

approved for the survey. PEMC will purchase an IF sensor and conduct a new survey within the next 60 day. See Exhibit "D."

10. 192.745 Valve maintenance: Transmission lines: Each transmission line valve that might be required during any emergency must be inspected and partially operated at intervals not exceeding 15 months, but at least once each calendar year. *No documentation of valve maintenance/testing available.*

On May 4th, 2018 personnel of PEMC operated and inspected for leaks and damage on each valve along the pipeline as shown in the attached log. Locks were added where necessary. Scheduled Cameron see quote. Cameron has been scheduled to conduct maintenance on June 2018. Once completed, the results will be forwarded to Utah DOT. Exhibit "E."

11. 192.751 Prevention of accidental ignition: Each operator shall take steps to minimize the danger of accidental ignition of gas in any structure or area where the presence of gas constitutes a hazard of fire or explosion. *Not addressed by the PEMC PMOME, no documentation available.*

The attached will be added to the PEMC PMOME manual (See Exhibit "F.):

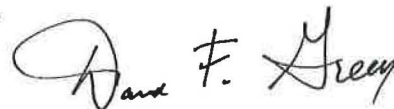
12. 192.227/229 Qualification of welders and welding operators / Limitations on welders and welding operators: Welder qualification documentation not available at the time of audit because records are stored in Reno, NV. *PEMC will check and follow-up with additional information.*

PEMC possesses inspection reports and X-ray film on every weld on the pipeline. The welders were provided by W.C. Striegel, Inc. pipeline contractors. On August 30, 2017 PEMC sent a letter to Striegel requesting documentation of the welding (See attached.) The welding had been completed in 2008. Striegel was unable to secure any records of the qualification of welders. Striegel has been in the pipeline construction business since 1935 and constructs DOT regulated pipelines. See Exhibit "G".

- 13. 192.243 Nondestructive testing:** NDT qualification documentation not available at the time of audit because records are stored in Reno, NV. *PEMC will check and follow-up with additional information.*

PEMC possesses inspection reports on every weld on the pipeline. The inspection was conducted by H & M Inspectors of Houston Texas. At some point H & M was acquired by Mistras. PEMC contacted Mistras on September 5, 2017 to obtain records of the NDT qualification documentation of the inspectors. Mistras reviewed its records and could not find any documentation since the construction had taken place in 2008. At the time of the construction, Delta Petroleum, it is believed, did not intend for the pipeline to be regulated by DOT. See attached. Exhibit "H."

Dated: May 15, 2018



Dan Green
Engineer

CERTIFICATE OF SERVICE

I certify that I caused a true and correct copy of the foregoing Utah Division of Public Utilities Request for Agency Action to be served this 15 day of May 2018 by email and/or USPS mail, postage prepaid, to the following:

Tariq Ahmad
President
Pacific Energy & Mining Company
3550 Barron Way, Suite 13A Reno, NV 89511
Taroil@yahoo.com

Rodney Nugent
Registered Agent - PEMC
17 West Main Street
P.O. Box 149
Green River, UT 84525
rnuge1@yahoo.com

Chris Parker, Director, Division of Public Utilities
Chrisparker@utah.gov

Al Zadeh, Pipeline Safety Lead
azadeh@utah.gov

DPU Data Request
DPUdatarequest@utah.gov

Dated: May 15, 2018

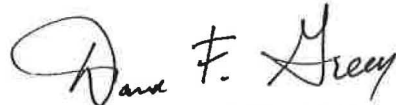

Dan Green

EXHIBIT “A”

Pacific Energy and Mining Company (PEMC)

EMERGENCY CONTACTS:

DAN GREEN-COMPLIANCE OFFICER PEMC-775-336-3132 OR

RODNEY NUGENT-FIELD SUPERVISOR PEMC-775-842-9934.

EMERGENCY PLAN STARTS ON PAGE XXX?

Procedural Manual for Operations, Maintenance and Emergencies

Paradox Natural Gas Pipeline

Operator: Pacific Energy and Mining Company

PHMSA (OPID): 39049

1/20/2014

NOTICE TO READER:

THIS MANUAL MUST BE REVIEWED AND UPDATED BY PEMC AT INTERVALS NOT EXCEEDING 15 MONTHS, BUT AT LEAST ONCE EACH CALENDAR YEAR, IF THIS REQUIREMENT IS NOT MET THEN

PLEASE GET IN TOUCH WITH THE COMPLIANCE OFFICER IMMEDIATELY

1. DATE OF REVIEW: _____ BY(PRINT & SIGN NAME): _____
2. DATE OF REVIEW: _____ BY(PRINT & SIGN NAME): _____
3. DATE OF REVIEW: _____ BY(PRINT & SIGN NAME): _____
4. DATE OF REVIEW: _____ BY(PRINT & SIGN NAME): _____
5. DATE OF REVIEW: _____ BY(PRINT & SIGN NAME): _____

This manual has been prepared in accordance with 49 CFR 192.605 and is made specifically for the Paradox Natural Gas Pipeline, PHMSA (OPID): 39049

**Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT**

SYNOPSIS OF THIS MANUAL

**THIS MANUAL MUST BE LOCATED IN THE FIELD OFFICE
OF PEMC AND BE READ AND UNDERSTOOD BY PEMC'S
PERSONNEL AND SUBCONTRACTORS WHO WORK ON THE
SUBJECT PIPELINE**

This manual's purpose is to set forth a summary of this Paradox Natural Gas (Type A, Class 1) transmission line. Please see Figure 1 for the subject pipeline, regulated under 49CFR PART192SUBPART A, 192.1, from the outlet of the gas processing plant, labeled on Figure 1 as OUTLET OF COMPRESSOR, NORTH END OF 16" LINE to the point labelled as TIE-IN TO NORTHWEST PIPELINE. This pipeline is approximately 21.2 miles and made from carbon steel.

This manual details written procedures for conducting operations and maintenance activities and for emergency response for the subject pipeline. This manual includes emergency procedures, notification and reports; normally required reports of this pipeline, detailed layout and geographic location (includes map and right-of-ways); the design process of the pipeline (includes materials and devices used in the construction of the pipeline and the Maximum Allowable Operating Pressure(MAOP)); Corrosion protection (includes all corrosion tests conducted to date and supplemental information); Monitoring of pipeline (includes normal operating condition and that of abnormal operating condition); and Safety and notification (includes emergency shut-down; on and off and purging procedures; procedures and safety for work on the transmission line; employee training and safety ; public safety and notification).

**Designated Compliance Officer -775-636-3132 (dfgreen1@dslextreme.com)
Field Supervisor-Rodney Nugent-775-842-9934**

Prepared by: Mobashir Ahmad	Approved by: Tariq Ahmad	Date: 3/52014
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1. EMERGENCY PLAN:

THIS EMERGENCY PLAN IS FOR PEMC EMPLOYEES AND SUBCONTRACTORS, HOWEVER, IT IS ALSO IMPLEMENTABLE BY ANYONE WITH ACCESS TO THE SAID PLAN:

(1) INITIATION OF AN EMERGENCY:

AN EMERGENCY CAN BE INITIATED BY ANY PERSON OR AGENCY, GO TO (2).

(2) DEFINITION OF AN EMERGENCY-IS THIS AN EMERGENCY? IS THERE:

(i) EVIDENCE OF GAS LEAKING FROM THE SUBJECT PIPELINE THAT IS ENDANGERING LIFE OR PROPERTY.

(ii) FIRE INVOLVING THE SUBJECT PIPELINE OR ENDANGERING SAID PIPELINE.

(iii) A NATURAL DISASTER THAT RESULTS IN EITHER (i) or (ii).

(iv) AN EVENT THAT RESULTS IN A DEATH, OR PERSONAL INJURY THAT RESULTS IN HOSPITALIZATION.

(v) AN EVENT THAT IS SIGNIFICANT IN THE JUDGMENT OF THE PERSON DECLARING THE EMERGENCY.

IF YES, THEN GO TO (3) ON NEXT PAGE

(IF NO, THEN INFORM COMPLIANCE OFFICER OF SPECIFIC INCIDENT DETAILS AND OBTAIN SPECIFIC INSTRUCTIONS, 775-336-3132)

1. EMERGENCY PLAN (CONTINUED):

(3) EMERGENCY INFORMATION RELAYED TO EMERGENCY
CONTACT TELEPHONE NUMBERS:

RELAY THE FOLLOWING INFORMATION
TO THE NUMBERS GIVEN BELOW (AS WRITTEN):

YOUR NAME AND TELEPHONE NUMBER: _____

BRIEF DESCRIPTION OF EMERGENCY: _____

APPROXIMATE LOCATION: _____

TIME OF INCIDENT, IF KNOWN: _____

(i) FOR IMMEDIATE DANGER TO LIFE AND PROPERTY
CALL 911, AND GO TO (ii)
OTHERWISE GO TO (ii)

(ii) CALL COMPLIANCE OFFICER PEMC-
DAN GREEN: 775-636-3132
INFORM, GET ADDITIONAL DIRECTIONS AND

(iii) CALL FIELD SUPERVISOR PEMC-
RODNEY NUGENT: 775-842-9934
INFORM, GET ADDITIONAL DIRECTIONS AND

GO TO (4) ON NEXT PAGE

1. EMERGENCY PLAN (CONTINUED):

(4) EMERGENCY CHAIN OF COMMAND:

ONCE THE FIELD SUPERVISOR PEMC (FS-PEMC) IS NOTIFIED OF THE INCIDENT THEN FS-PEMC WILL ASSUME COMMAND OF THE EMERGENCY SCENE ONCE THE FS-PEMC ARRIVES AT THE SCENE, UNTIL THAT TIME THE PEMC EMPLOYEE OR SUBCONTRACTOR AT THE SCENE FIRST REPORTING THE INCIDENT WILL BE THE PRIMARY CONTACT FOR THE EMERGENCY UNTIL THE SCENE IS TAKEN OVER BY AN OUTSIDE REGULATORY AGENCY THAT ASSUMES COMMAND OF THE SCENE.

GO TO (5) ON NEXT PAGE

1. EMERGENCY PLAN (CONTINUED):

(5) COMMUNICATION MAINTENANCE:

- (i) ONCE AN EMERGENCY HAS BEEN DECLARED THEN THE PERSON DECLARING THE EMERGENCY IN (3) ABOVE WILL BE THE PRIMARY CONTACT FOR OUTSIDE AGENCIES UNTIL THE FIELD SUPERVISOR OF PEMC (FS-PEMC) TAKES OVER PERSONALLY (BEING PHYSICALLY PRESENT WITH THE PERSON IN (3)).**

- (ii) THE PERSON IN (i) ABOVE, WILL MAINTAIN COMMUNICATION WITH 911, OR OTHER APPROPRIATE EMERGENCY RESPONDING AUTHORITY VIA CELLULAR TELEPHONE.**

- (iii) ONCE AN OUTSIDE AGENCY EMERGENCY COMMANDER HAS TAKEN OVER CONTROL FROM THE PERSON IN (i) ABOVE, IF AN EMPLOYEE OR SUBCONTRACTOR OF PEMC, WILL REMAIN PHYSICALLY PRESENT AT THE SITE OF THE OUTSIDE AGENCY EMERGENCY COMMANDER AND WILL ASSIST THE SAID COMMANDER WITH ANY INFORMATION NEEDED.**

GO TO (6) ON NEXT PAGE

1. EMERGENCY PLAN (CONTINUED):

(6) STEPS TO TAKE IN AN EMERGENCY:

THE EMPLOYEE OR SUBCONTRACTOR FIRST REPORTING THE EMERGENCY OR THE FIELD SUPERVISOR OF PEMC, FS-PEMC, ONCE HAS TAKEN OVER COMMAND, KNOWN AS RESPONSIBLE WORKER, WILL TAKE IMMEDIATE STEPS TO PROTECT LIFE AND PROPERTY IN THE VICINITY OF THE SUBJECT PIPELINE BY:

(i) DETERMINING THE LOCATION, FROM A SAFE LOCATION OR FROM SCADA, WHEN INSTALLED, OF THE INCIDENT AND BY

(ii) CALLING THE COMPLIANCE OFFICER AND STATING:

THAT THE RESPONSIBLE WORKER, HAS DETERMINED THAT IT IS SAFE TO ACCESS THE VALVES TO SHUTOFF OR ISOLATE THE SUBJECT PIPELINE, THEN WILL GO TO STEP (iii) ON THE NEXT PAGE.

OR

THAT THE RESPONSIBLE WORKER HAS DETERMINED THAT IT IS NOT SAFE TO, DOES NOT KNOW HOW TO, OR CAN'T ACCESS THE VALVES TO SHUTOFF OR ISOLATE THE SUBJECT PIPELINE, THEN WILL GO TO STEP (iv) ON THE NEXT PAGE.

1. EMERGENCY PLAN (CONTINUED):

(6) STEPS TO TAKE IN CASE OF AN EMERGENCY(CONTINUED):

- (iii) GO TO EMERGENCY PROCEDURE TO SHUTOFF OR ISOLATE PIPELINE, (8) BELOW, PAGE ____.**

- (iv) CALL 911, & GO TO EMERGENCY INCIDENT NOTIFICATION TO NATIONAL RESPONSE CENTER; UTAH DIVISION OF PUBLIC UTILITIES, LEAD PIPELINE SAFETY ENGINEER; & COMPLIANCE OFFICER, (10) BELOW, PAGE ____.**

1. EMERGENCY PLAN (CONTINUED):

(7) EMERGENCY TOOLS, EQUIPMENT & PROFICIENCY:

The Field Supervisor for PEMC will have the following safety equipment in working condition in his vehicle at all times, will be proficient in its usage and will ensure that all other pipeline employees of PEMC are trained and proficient in its usage:

- (i) A tested and functional Gas Monitoring instrument that can detect LEL/Carbon Dioxide/Oxygen/Methane.**
- (ii) An extra charged battery for the cell phone.**
- (iii) A fully functional and fully charged, Self Contained Breathing Apparatus (SCBA)**
- (iv) A complete First Aid Kit.**
- (v) Fully charged and functional 10-lb Fire Extinguisher of the ABC type.**
- (vi) At least two portable 2-way radios fully charged with charger.**

1. EMERGENCY PLAN (CONTINUED):

(8) EMERGENCY PROCEDURE TO SHUTOFF OR ISOLATE PIPELINE:

(REFER TO MAP ON PAGE _____)

- (i) POWER OFF COMPRESSOR AT GAS PLANT AND RECORD OUTLET PRESSURE AND TIME:
DATE/TIME: _____, PSIG: _____.
- (ii) IDENTIFY LOCATION ON MAP OF EMERGENCY INCIDENT, IF NOT ALREADY KNOWN, THEN
- (iii) IF THE LOCATION IS BETWEEN THE OUTLET OF COMPRESSOR AT THE GAS PLANT AND THE NORTH SIDE OF THE BLOCK VALVE,
GO TO (v) BELOW
- (iv) IF THE LOCATION IS BETWEEN THE BLOCK VALVE AND THE OUTLET OF THE 16" LINE AT THE TIE-IN TO NORTHWEST PIPELINE, THEN GO TO (ix) BELOW
- (v) CLOSE VALVE BETWEEN THE OUTLET OF THE COMPRESSOR AND THE INLET OF THE 16" GAS LINE AND RECORD PRESSURE READING (AND TIME TAKEN), DOWNSTREAM OF CLOSED VALVE (TOWARDS BLOCK VALVE).
DATE/TIME: _____, PSIG _____.

GO TO (vi) ON NEXT PAGE

Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT

1. EMERGENCY PLAN (CONTINUED):

(8) EMERGENCY PROCEDURE TO SHUTOFF OR ISOLATE PIPELINE (CONTINUED):

(vi) CLOSE BLOCK VALVE AND RECORD PRESSURE GAUGE READING (AND TIME TAKEN), ON THE UPSTREAM SIDE OF THE CLOSED BLOCK VALVE (TOWARDS GAS PLANT)

DATE/TIME: _____, PSIG _____.

AND RECORD PRESSURE GAUGE READING (AND TIME TAKEN), ON THE DOWNSTREAM SIDE OF THE CLOSED BLOCK VALVE

(TOWARDS TIE-IN TO NORTHWEST PIPELINE)

DATE/TIME: _____, PSIG _____.

(vii) CLOSE VALVE BETWEEN THE OUTLET OF THE 16" LINE AND THE METER LOCATED AT THE TIE-IN TO NORTHWEST PIPELINE AND RECORD PRESSURE GAUGE READING (AND TIME TAKEN) ON UPSTREAM SIDE OF CLOSED VALVE (TOWARDS BLOCK VALVE).

DATE/TIME: _____, PSIG _____.

AND RECORD PRESSURE GAUGE READING (AND TIME TAKEN), ON THE DOWNSTREAM SIDE OF THE CLOSED VALVE

(TOWARDS METER)

DATE/TIME: _____, PSIG _____.

GO TO (viii) ON PAGE AFTER THE NEXT PAGE

Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
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Paradox Natural Gas Pipeline, Grand County, UT

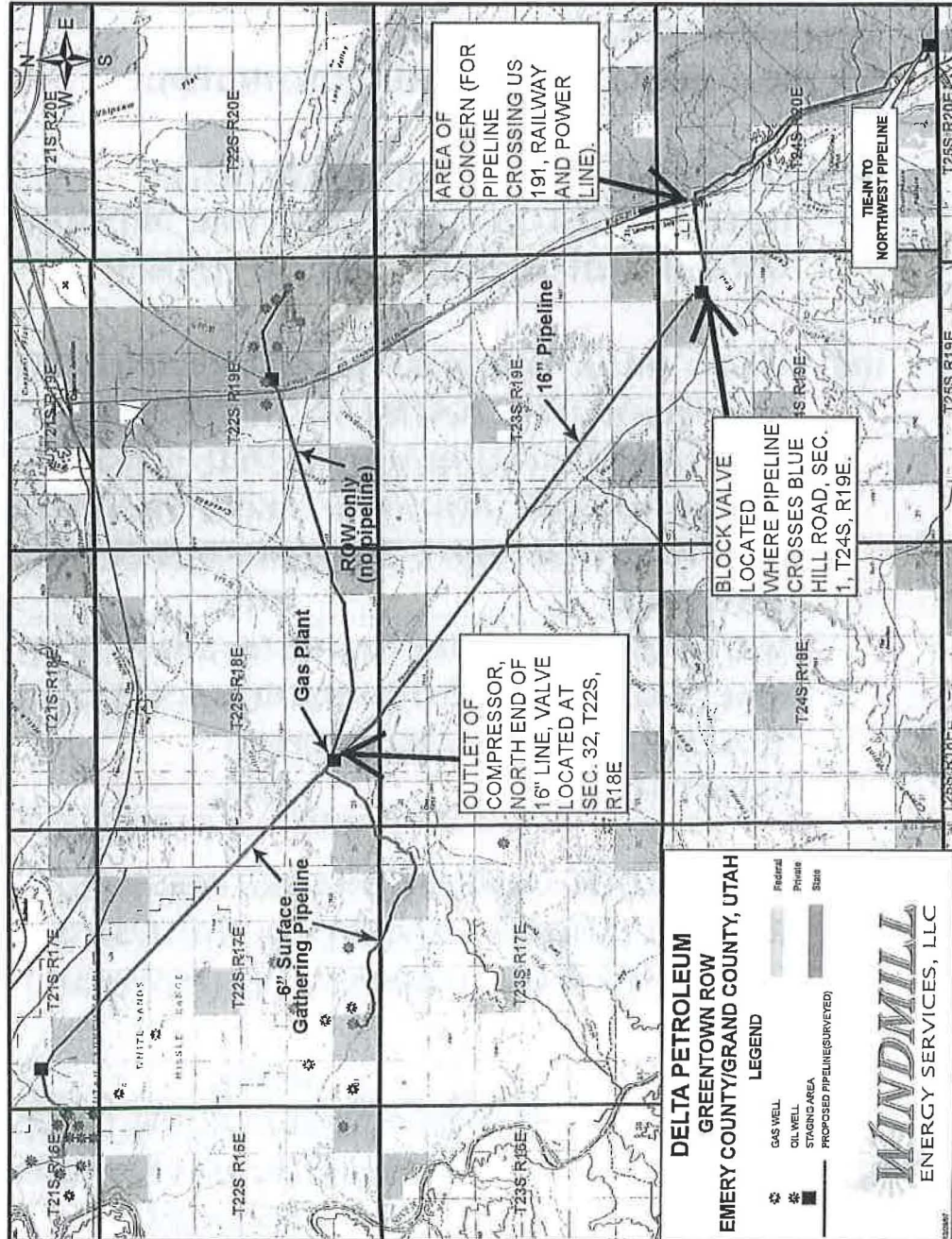


FIGURE 1-MAP OF PARADOX PIPELINE-OPID 39049

1. EMERGENCY PLAN (CONTINUED):

**(8) EMERGENCY PROCEDURE TO
SHUTOFF OR ISOLATE PIPELINE (CONTINUED):**

**(viii) CALL COMPLIANCE OFFICER AND RELAY
INFORMATION ON LOCATIONS, TIME, PRESSURES.
GET FURTHER INSTRUCTIONS, GO TO (xiii)**

**(ix) CLOSE VALVE BETWEEN THE OUTLET OF THE 16" LINE
AND THE METER LOCATED AT THE TIE-IN TO
NORTHWEST PIPELINE AND RECORD PRESSURE
GAUGE READING (AND TIME TAKEN) ON UPSTREAM
SIDE OF CLOSED VALVE (TOWARDS BLOCK VALVE).
DATE/TIME: _____, PSIG _____.
AND RECORD PRESSURE GAUGE READING (AND
TIME TAKEN), ON THE DOWNSTREAM SIDE OF THE
CLOSED VALVE (TOWARDS METER)
DATE/TIME: _____, PSIG _____.**

**(x) CLOSE BLOCK VALVE AND RECORD PRESSURE GAUGE
READING (AND TIME TAKEN), ON THE UPSTREAM
SIDE OF THE CLOSED BLOCK VALVE (TOWARDS GAS
PLANT)
DATE/TIME: _____, PSIG _____.
AND RECORD PRESSURE GAUGE READING (AND
TIME TAKEN), ON THE DOWNSTREAM SIDE OF THE
CLOSED BLOCK VALVE (TOWARDS TIE-IN TO
NORTHWEST PIPELINE)
DATE/TIME: _____, PSIG _____.
GO TO (xi) ON NEXT PAGE**

1. EMERGENCY PLAN (CONTINUED):

**(8) EMERGENCY PROCEDURE TO
SHUTOFF OR ISOLATE PIPELINE (CONTINUED):**

(xi) CLOSE VALVE BETWEEN THE OUTLET OF THE COMPRESSOR AND THE INLET OF THE 16" GAS LINE AND RECORD PRESSURE READING (AND TIME TAKEN), DOWNSTREAM OF CLOSED VALVE (TOWARDS BLOCK VALVE).

DATE/TIME: _____, PSIG _____.

(xii) CALL COMPLIANCE OFFICER AND RELAY INFORMATION ON LOCATIONS, TIME, PRESSURES. GET FURTHER INSTRUCTIONS

(xiii) COMPLIANCE OFFICER WILL ASK OF ANY ADDITIONAL INFORMATION NEEDED FROM THE PERSON CALLING, IF A PEMC EMPLOYEE OR SUBCONTRACTOR, AND WILL THEN GIVE ADDITIONAL INSTRUCTIONS IF NECESSARY SUCH AS TO COORDINATE WITH LOCAL 911 EMERGENCY COMMAND. THE PERSON CALLING, THE RESPONSIBLE WORKER, BE THEY A PEMC EMPLOYEE, SUBCONTRACTOR OR THE FS-PEMC, WILL REMAIN AT THEIR PRESENT COMMUNICATION LOCATION, IF IT IS SAFE TO DO SO, OR WILL INFORM COMPLIANCE OFFICER OF HIS/HER NEW LOCATION.

(GO TO (xiv) ON NEXT PAGE)

**Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT**

1. EMERGENCY PLAN (CONTINUED):

**(8) EMERGENCY PROCEDURE TO
SHUTOFF OR ISOLATE PIPELINE (CONTINUED):**

**(xiv) THE RESPONSIBLE WORKER WILL THEN GO TO
EMERGENCY INCIDENT NOTIFICATION TO NATIONAL
RESPONSE CENTER; UTAH DIVISION OF PUBLIC
UTILITIES, LEAD PIPELINE SAFETY ENGINEER; &
COMPLIANCE OFFICER, (10) BELOW, PAGE_____.**

1. EMERGENCY PLAN (CONTINUED):

(9) DEFINITION OF AN EMERGENCY INCIDENT:

An event that involves a release of gas from a pipeline, and that results in one or more of the following consequences:

- (i) A death, or personal injury necessitating in-patient hospitalization; or
- (ii) Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost; or
- (iii) Unintentional estimated gas loss of three million cubic feet (3000 mcf) or more; or
- (iv) An event that is significant in the judgment of the operator (Pacific Energy & Mining Company), even though it did not meet the criteria of the above (i), (ii) or (iii).

1. EMERGENCY PLAN (CONTINUED):

(10) EMERGENCY INCIDENT NOTIFICATION TO NATIONAL
RESPONSE CENTER; UTAH DIVISION OF PUBLIC
UTILITIES, LEAD PIPELINE SAFETY ENGINEER; &
COMPLIANCE OFFICER (CONTINUED):

(I) The National Response Center 800-424-8802 AND
PROVIDE INFORMATION ON PREVIOUS PAGE, (if busy
or no answer then <http://www.nrc.uscg.mil> and fill in
online report) There should be return communication
from NRC within 30 minutes.

AND

(II) Utah Division of Public Utilities, Lead Pipeline Safety
Engineer 24-Hr emergency number: 801-530-6787 &
pager 801-241-1163.

If unavailable then try 801-530-6673 or 801-530-6652
or 800-874-0904, PROVIDE INFORMATION ON
PREVIOUS PAGE,

AND

(III) Call Pacific Energy & Mining Company's Compliance
Officer at 775-336-3132, AND PROVIDE
INFORMATION, ON PREVIOUS PAGE

2

Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT

1. EMERGENCY PLAN (CONTINUED):

(11) EMERGENCY PLAN COORDINATION WITH LOCAL AGENCIES & UTILITIES:

The "911" system is designed to coordinate local agency response, thus the local agencies will be notified once 911 is notified and the National Response Center is notified, in addition, PEMC will inform the following local agencies in Green River, UT and the other gas pipeline operators of the location of the pipeline and will provide the same with a copy of the Emergency Plan (this is in case there is a problem with the 911 or with the National Response Center response in a timely manner):

- (i) Green River Fire Department, Tel:435-564-8111
- (ii) Green River Police Department, Tel: 435-564-3431
- (iii) Green River Mayor's office, Tel: 435-564-3448
- (iv) Northwest Pipeline, Tel: (801) 584-6615
- (v) Mid-America Pipeline, Tel: (713) 381-2802
- (vi) Rocky Mountain Power, Tel: 1-866-870-3419

The above will be invited to coordinate in planned responses to a gas pipeline emergency.

1. EMERGENCY PLAN (CONTINUED):

(12) INVESTIGATION OF AN EMERGENCY:

After an emergency situation has been declared and appropriate actions have been taken by PEMC and/or third parties including local emergency authorities, the ~~National Response Center~~, etcetera, to neutralize the emergency, then an investigation of the emergency shall be initiated by the Compliance officer and the recommendations implemented before the restart of this pipeline, and:

- (i) Appropriate samples of the failed material, if any, such as a section of pipe, relief valve, weld, shall be sent to a third party approved metallurgical laboratory for a cause of failure, and
- (ii) All actions taken by PEMC personnel or subcontractors which led to the emergency, will be recorded, reviewed and
- (iii) If a material defect or corrosion caused the emergency then a proper material and/or corrosion control method will be chosen and
- (iv) If improper or delayed actions were taken by PEMC personnel or subcontractors, then suitable changes will be made in this manual for these specific tasks and there will be remedial training conducted for the personnel concerned and

(GO TO NEXT (v) ON NEXT PAGE)

1. EMERGENCY PLAN (CONTINUED):

(12) INVESTIGATION OF AN EMERGENCY (CONTINUED):

(v) A formal report will be written by the Compliance Officer which will be reviewed by the management of PEMC and which will be filed in APPENDIX E's Summary section. This report will include the following in the conclusion section:

**(I) DATE OF EMERGENCY: _____.
CAUSE & DETAIL OF EMERGENCY (WHETHER HUMAN, DEVICE FAILURE, CORROSION AND/OR OTHER), AND**

(II) DETAIL OF CHANGES MADE: (INCLUDING PROCEDURE, DESIGN, MATERIAL, UPGRADING OF CORROSION COATING/PROTECTION, DOWNGRADING OF FUTURE NORMAL OPERATING PRESSURE, ETCETERA), AND

(III) ALL LOSSES: (FIRSTLY ANY INJURIES OR DEATHS, THEN MATERIAL REPLACEMENT & LOSS OF GAS COST AND OTHER MISCELLANEOUS COSTS), AND

(IV) DATE OF STARTUP OF PIPELINE, AND

(V) DATE, NAME AND AUTHOR OF REPORT:

(GO TO (VI) ON NEXT PAGE)

Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT

1. EMERGENCY PLAN (CONTINUED):

(12) INVESTIGATION OF AN EMERGENCY (CONTINUED):

**(VI) A CERTIFICATION BY THE COMPLIANCE OFFICER,
STATING: "I, THE COMPLIANCE OFFICER, OF
PEMC DO STATE, THAT I'VE REVIEWED THE ABOVE
EMERGENCY AND HAVE DETERMINED THE CAUSES OF
THE SAME AND HAVE MADE APPROPRIATE CHANGES
BASED ON THE RECOMMENDATIONS OF THIS
REPORT."**

1. EMERGENCY PLAN (CONTINUED):

(13) DISTRIBUTION OF EMERGENCY MANUAL & TRAINING OF PERSONNEL:

- (i) The Compliance Officer will ensure that a copy of this Emergency Plan is distributed to and is readily accessible to all Operator Personnel & subcontractors working on the subject pipeline and**
- (ii) Will ensure that all such personnel are proficient in the procedures contained in the said manual and**
- (iii) Are qualified to conduct the Emergency tasks contained in the subject manual and**
- (iv) At least annually, in any given twelve month period, have gone through an emergency drill that is supervised by the Compliance Officer and or an authorized person designated by the Compliance Officer, wherein, the relevant personnel have visually inspected the physical locations of the relevant valves and switches of the subject pipeline to be closed or turned off and**
- (v) A record of such annual Emergency Drill shall be kept in APPENDIX A-Operations and Maintenance Procedures Task Manual, which will contain the following information:**

(GO TO NEXT PAGE)

Procedural Manual for Operations, Maintenance and Emergencies
Operator: Pacific Energy & Mining Company
PHMSA-issued Operator Identification Number (OPID): 39049
Paradox Natural Gas Pipeline, Grand County, UT

- 1. EMERGENCY PLAN (CONTINUED):**
(13) DISTRIBUTION OF EMERGENCY MANUAL & TRAINING OF PERSONNEL:

EMERGENCY DRILL RECORD

(SUPERVISED BY THE COMPLIANCE OFFICER OR SUPRVISED BY A DESIGNATE OF THE COMPLIANCE OFFICER)

- i) Date of Emergency Drill:** _____

- ii) Names of persons, companies & agencies participating:** _____

- iii) DESCRIPTION OF SCENARIO:** _____

- iv) START TIME:** _____ **END TIME:** _____

- v) WAS EMERGENCY DRILL CONDUCTED TO SATISFACTION:**
(CIRCLE ONE) YES OR NO.

- vi) IF NO, THEN THIS EMERGENCY DRILL MUST BE REDONE,**
AFTER NOTED DEFICIENCIES ARE CORRECTED.
DEFICIENCIES NOTED: _____

(FILL OUT ANOTHER FIRM UNTIL THE ANSWER TO (v) ABOVE IS YES.

- vii) PRINTED NAME & SIGNATURE OF SUPERVISOR FOR DRILL:**

EXHIBIT “B”

PACIFIC ENERGY AND MINING COMPANY



APPENDIX I-Public Awareness Program- Important Safety Information for the Community

Paradox Natural Gas Pipeline
Operator: Pacific Energy & Mining Company
PHMSA (OPID): 39049

3/25/2014

Call before you dig. IT'S FREE, AND IT'S THE LAW!

One easy phone call to 811 starts the process to get your underground pipelines and utility lines marked for FREE. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com & at www.bluestakes.org

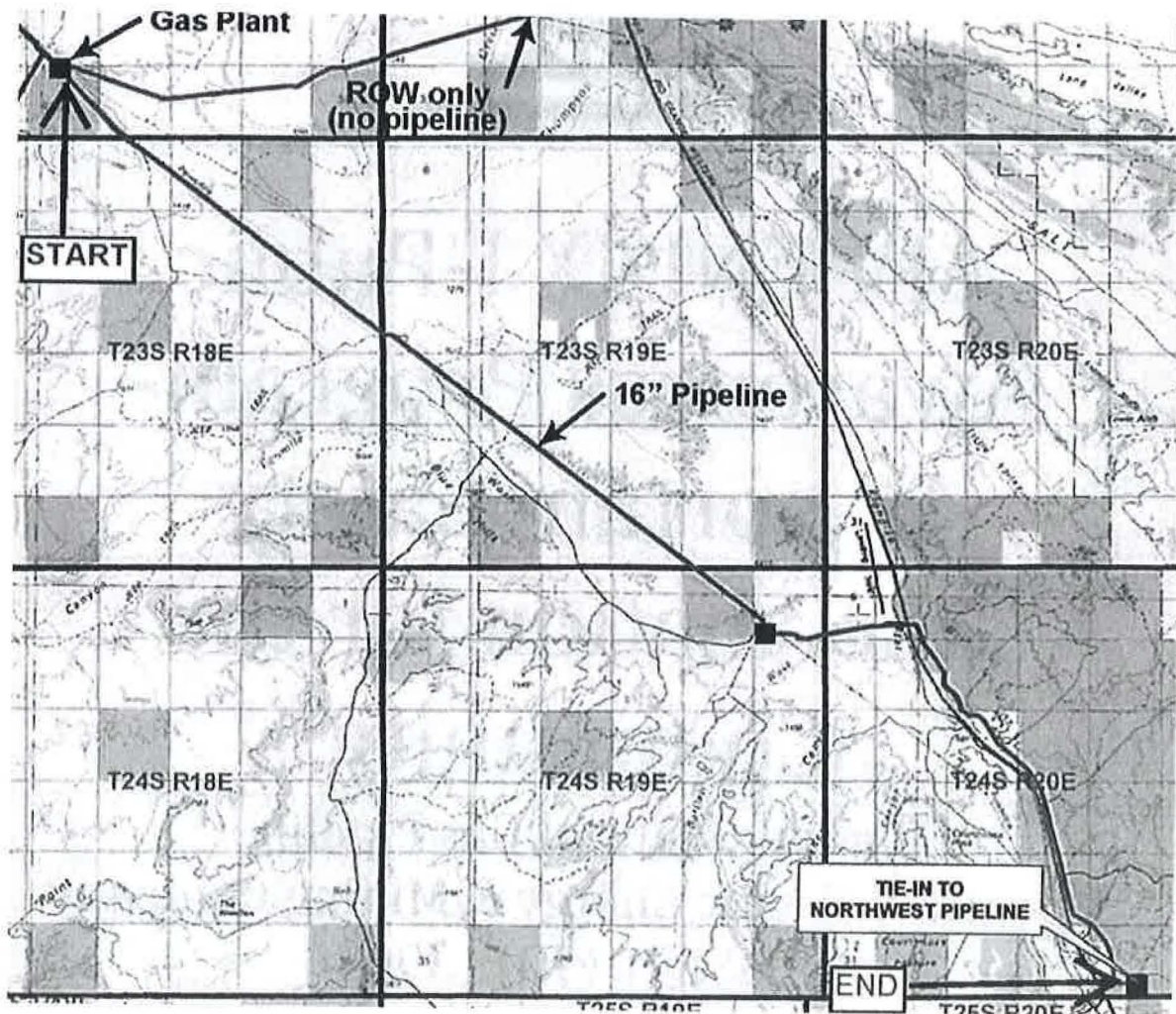
PUBLIC AWARENESS PROGRAM-COMMUNITY SAFETY INFORMATION

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IMPORTANT SAFETY INFORMATION FOR THE COMMUNITY

PEMC-NATURAL GAS PIPELINE



**START AT GAS PLANT
END AT TIE-IN TO NORTHWEST PIPELINE
STEEL WITH 16 INCH DIAMETER
GRAND COUNTY, UT**

How would you know where a pipeline is?

Most pipelines are underground, where they are more protected from the elements and minimize interference with surface uses. Even so, pipeline rights-of-way are clearly identified by pipeline markers along pipeline routes that identify the approximate—NOT EXACT—location of the pipeline. Every pipeline marker contains information identifying the company that the pipeline, the Pipeline Markers product transported, and a phone number that should be called in the event of an emergency. Markers do not indicate pipeline burial depth, which will vary. Markers are typically seen where a pipeline intersects a street, highway or railway. For any person to willfully deface, damage, remove, or destroy any pipeline marker is a federal crime.



Pipeline Marker-This marker is the most common. It contains operator information, type of product, and an emergency contact number. Size, shape and color may vary.

Aerial Marker-These skyward facing markers are used by patrol planes that monitor pipeline routes.

Casing Vent Marker-This marker indicates that a pipeline (protected by a steel outer casing) passes beneath a nearby roadway, rail line or other crossing.

What does the pipeline company do if a leak occurs?

To prepare for the event of a leak, pipeline companies regularly communicate, plan and train with local emergency responders. Upon the notification of an incident or leak the pipeline company will immediately dispatch trained personnel to assist emergency responders. Pipeline operators and emergency responders are trained to protect life, property and facilities in the case of an emergency. Pipeline operators will also take steps to minimize the amount of product that leaks out and to isolate the pipeline emergency.

How would you recognize a pipeline leak?

Sight-Liquid pools, discolored or abnormally dry soil/vegetation, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, and vaporous fogs or blowing dirt around a pipeline area can all be indicative of a pipeline leak. Dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are other possible signs.

Sound-Volume can range from a quiet hissing to a loud roar depending on the size of the leak and pipeline system.

Smell-An unusual smell, petroleum odor, or gaseous odor will sometimes accompany pipeline leaks. Natural Gas and Highly Volatile Liquids are colorless, tasteless and odorless unless commercial odorants or Mercaptan is added. Gas transmission/gas gathering pipelines are odorless, but may contain a hydrocarbon smell.

What to do in the event a leak were to occur:

Turn off any equipment and eliminate any ignition sources without risking injury.

Leave the area by foot immediately. Try to direct any other bystanders to leave the area. Attempt to stay upwind.

If known, from a safe location, notify the pipeline operator immediately and call 911 or your local emergency response number. The operator will need your name, your phone number, a brief description of the incident, and the location so the proper response can be initiated.

What not to do in the event a leak were to occur:

DO NOT cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. Do not start motor vehicles or electrical equipment. Do not ring doorbells to notify others of the leak. Knock with your hand to avoid potential sparks from knockers.

DO NOT come into direct contact with any escaping liquids or gas.

DO NOT drive into a leak or vapor cloud while leaving the area.

DO NOT attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.

DO NOT attempt to extinguish a petroleum product or natural gas fire. Wait for local firemen and other professionals trained to deal with such emergencies.

Maintaining safety and integrity of pipelines

Pipeline operators invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most, not all, active pipelines are monitored 24 hours a day via manned control centers. Pipeline companies also utilize aerial surveillance and/or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow. They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized to isolate a leak.

Gas transmission and hazardous liquid pipeline operators have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). IMPs have been implemented for areas designated as "high consequence areas" in accordance with federal regulations. Specific information about an operators' program may be found on their company Web site, or by contacting them directly.

What to do in case of damaging/disturbing a pipeline

If you cause or witness even minor damage to a pipeline or its protective coating, please immediately notify the pipeline company. Even a small disturbance to a pipeline may cause a future leak. A gouge, scrape, dent or crease is cause enough for the company to inspect the damage and make repairs.

Excavators must notify the pipeline company through the One-Call Center immediately but not later than two hours following the damage incident.

PIPELINE OPERATORS IN AREA

Pacific Energy & Mining Company

Compliance Officer-Dan Green: 775-336-3132, dfgreen1@dslextreme.com

or Field Supervisor-Rodney Nugent: 775-842-9934

OTHER OPERATORS IN AREA

Pipeline Operator Name	Person To Contact	Contact Address	Phone / Fax / Email
ENTERPRISE PRODUCTS OPERATING LLC	Michael McLaughlin (Manager, Public Awareness & Damage Prevention)	PO Box 4735, Houston, TX 77210	Phone: (713) 381-2802 Fax: Email: MMclaughlin@eprod.com
MOAB PIPELINE, LLC	Don Hamilton (Authorized Agent)	2580 Creekview Road, Moab, UT 84532	Phone: (435) 719-2018 Fax: (435) 719-2019 Email: starpoint@etv.net
NORTHWEST PIPELINE CORP (WGP)	George Angerbauer (Local Outreach Business Partner)	295 Chipeta Way, Salt Lake City, UT 84108	Phone: (801) 584-6615 Fax: Email: george.angerbauer@williams.com

PIPELINE PRODUCT TRANSPORTED IN AREA*

PRODUCT: NATURAL GAS.

LEAK TYPE: GAS.

VAPORS: LIGHTER THAN AIR AND WILL GENERALLY RISE AND DISSIPATE. MAY GATHER IN A CONFINED SPACE AND TRAVEL TO A SOURCE OF IGNITION.

HEALTH HAZARDS: WILL BE EASILY IGNITED BY HEAT, SPARK, OR FLAME AND WILL FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY CAUSE DIZZINESS OR ASPHYXIATION WITHOUT WARNING AND MAY BE TOXIC IF INHALED AT HIGH CONCENTRATIONS. CONTACT WITH WITH GAS OR LIQUEFIED GAS MAY CAUSE BURNS, SEVERE INJURY AND/OR FROSTBITE.

*Operators and products represented may not be all inclusive. Please visit www.nps.phmsa.dot.gov/ for more information. Information obtained from U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration's 2008 Emergency Response Guidebook.

REGULATORY AGENCIES

1. Utah Division of Public Utilities, PIPELINE SAFETY
Al Zadeh , Senior Pipeline Safety Engineer , 801-530-6673, azadeh@utah.gov
Jimmy Betham, Pipeline Safety Engineer, 801-580-7515, jbetham@utah.gov
Website: <http://publicutilities.utah.gov/pipeline.html>
State Law Link: (PSC Rules R746-409 Pipeline Safety)
<http://www.rules.utah.gov/publicat/code/r746/r746-409.htm>
2. U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration,
Community Assistance and Technical Services (CATS)
OPS (Office of Pipeline Safety) Western Region
Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington;
Wyoming.
Tom Finch, 720-963-3175, thomas.finch@dot.gov
Dave Mulligan, 720-963-3193, david.mulligan@dot.gov
Website: <http://primis.phmsa.dot.gov/comm/CATS.htm?nocache=4045>
Federal Law Link: <http://phmsa.dot.gov/regulations>

UTAH ONE-CALL CENTER

BLUE STAKES OF UTAH, call 811 or 1-800-662-4111, www.bluestakes.org

Hours: 7a.m. to 5 p.m. M-F

Marks Valid: 14 Calendar days, Advance Notice: 2 business days, 48 hours notice.

TICKETS

Fax Tickets Available: No.

Online Tickets: Yes.

STATE LAWS & PROVISIONS

Coverage Statewide: Y

Civil Penalties: Y

Emergency Clause: N

Mandatory Membership: Y

Excavator Permits Issued: N

Mandatory Premarks: N

Positive Response: Y

Hand Dig Clause: Y

Damage Reporting: N

EXEMPTIONS

DOT: N

Homeowner: N

Railroad: N

Agriculture: N

Depth: N

NOTIFICATIONS ACCEPTED

Damage, Design & Overhead: N

Emergency: Y

Tolerance Zone: 24 inches.

Pipeline purpose and reliability

Pipelines are the safest and most efficient means of transporting natural gas and petroleum products, according to National Transportation Safety Board statistics. In the United States alone, there are over 200,000 miles of petroleum pipelines and 300,000 miles of natural gas transmission pipelines in use every day. These pipelines transport the natural gas, which provides about 24 percent of all the energy used in the United States, and over 700 million gallons of petroleum products per day.

Local Distribution Companies (LDCs) deliver natural gas to most homes and businesses through underground main and utility service lines. These lines cover over 800,000 miles of underground pipeline in the United States.

How can you help?

While accidents pertaining to pipeline facilities are rare, awareness of the location of the pipeline, the potential hazards, and what to do if a leak occurs can help minimize the number of accidents. A leading cause of pipeline incidents is third-party excavation damage. Pipeline operators are responsible for the safety and security of their respective pipelines. To help maintain the integrity of pipelines and their rights-of-way, it is essential that pipeline and facility neighbors protect against unauthorized excavations or other destructive activities. Here's what you can do to help:

- *Become familiar with the pipelines and pipeline facilities in the area (marker signs, fence signs at gated entrances, etc).*
- *Record the operator name, contact information and any pipeline information from nearby marker/facility signs and keep in a permanent location near the telephone.*
- *Be aware of any unusual or suspicious activities or unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility; report any such activities to the pipeline operator and the local law enforcement.*

For more information regarding pipeline safety and an overview of the pipeline industry please visit the following Web sites:

Pipeline Resources and Information

- Pipeline 101 - www.pipeline101.com
- Association of Oil Pipe Lines (AOPL) - www.aopl.org
- American Petroleum Institute (API) - www.api.org
- In the Pipe - Newsletter from the Oil Pipeline Industry - www.enebuilder.net/aopl/
- Interstate Natural Gas Association of America (INGAA) - www.ingaa.org
- American Gas Association (AGA) - www.aga.org
- Dig Safely - www.digsafely.com
- Common Ground Alliance (CGA) - www.commongroundalliance.com









Regulatory Agencies

- Department of Transportation (DOT) - www.dot.gov
- Office of Pipeline Safety (OPS) - www.phmsa.dot.gov
- National Transportation and Safety Board (NTSB) - www.nts.gov
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
- Federal Energy Regulatory Commission (FERC - Oil Pipelines) - www.ferc.gov/industries/oil.asp
- Occupational Safety & Health Administration (OSHA) - www.osha.gov
- National Fire Protection Association (NFPA) - www.nfpa.org

Transmission Pipeline Mapping

The U.S. Department of Transportation's Office of Pipeline Safety has developed the National Pipeline Mapping System (NPMS) to provide information about gas transmission and liquid transmission operators and their pipelines. The NPMS Web site is searchable by zip code or by county and state, and can display a county map that is printable. For a list of pipeline operators with pipelines in your area and their contact information, go to www.npms.phmsa.dot.gov/ Operators of production facilities, gas/liquid gathering piping and distribution piping, are not represented by NPMS nor are they required to be.

This color code chart will help determine which utilities have marked their underground utility lines.

-  WHITE-Proposed excavation
-  PINK-Temporary survey markings
-  RED-Electric power lines, cables, conduit and lighting cables
-  YELLOW-Gas, oil, steam, petroleum or gaseous materials.
-  ORANGE-Communications, alarm or signal lines, cables or conduit
-  BLUE-Potable water lines
-  PURPLE-Reclaimed water, irrigation and slurry lines
-  GREEN-Sewer lines

NOTICE-The information provided in this brochure, including but not limited to, One-Call center information, Web sites, state laws, regulatory agencies, has been gathered using the most up to date information available, and provided for informational purposes only. All matter is subject to change without notice. Pacific Energy and Mining Company made an attempt to verify all information contained herein as to its accuracy, and is not liable for any missing or incorrect information.

PACIFIC ENERGY AND MINING COMPANY



APPENDIX J-Public Awareness Program- Important Safety Information for Emergency Responders

Paradox Natural Gas Pipeline
Operator: Pacific Energy & Mining Company
PHMSA (OPID): 39049

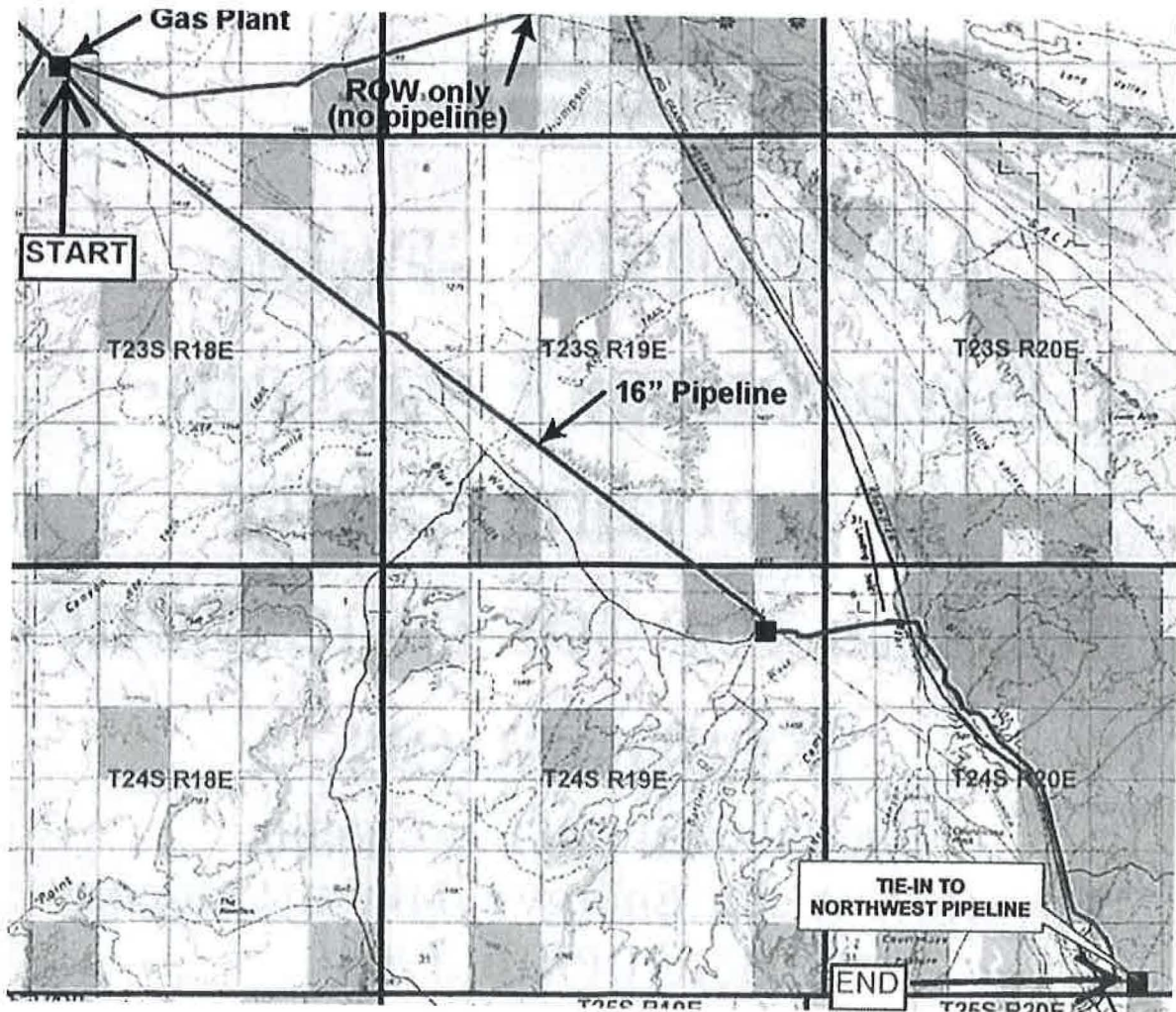
3/25/2014

Call before you dig. IT'S FREE, AND IT'S THE LAW!

One easy phone call to 811 starts the process to get your underground pipelines and utility lines marked for FREE. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com & at www.bluestakes.org

IMPORTANT SAFETY INFORMATION FOR EMERGENCY RESPONDERS

PEMC-NATURAL GAS PIPELINE



**START AT GAS PLANT
END AT TIE-IN TO NORTHWEST PIPELINE
STEEL WITH 16 INCH DIAMETER
GRAND COUNTY, UT**

Responding to a Pipeline Emergency

The following guidelines are designed to ensure the safety of those in the area if a petroleum product or natural gas pipeline leak is suspected or detected:

***Secure the area around the leak to a safe distance.** Because vapors from the products carried in pipelines can migrate great distances, it is important to remove all ignition sources from the area. Keep in mind, Highly Volatile Liquid (HVL) vapors are heavier than air and can collect in low areas such as ditches, sewers, etc. If safe, evacuating people from homes, businesses, schools and other places of congregation, as well as controlling access to the site may be required in some incident scenarios. Sheltering in place may be the safest action if the circumstances make going outdoors dangerous.

***If the pipeline leak is not burning DO NOT** cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. **DO NOT** start motor vehicles or electrical equipment. **DO NOT** ring doorbells. Knock with your hand to avoid potential sparks from knockers. **DO NOT** drive into a leak or vapor cloud at any time.

***If the pipeline leak is burning attempt to control the spread of the fire, but DO NOT attempt to extinguish a petroleum product or natural gas fire.** When extinguished, petroleum products, gas and vapor could collect and explode if reignited by secondary fire.

***DO NOT attempt to operate any pipeline valves yourself.** You may inadvertently route more product to the leak or cause a secondary incident.

***Establish a command center.** Work with pipeline representatives as you develop a plan to address the emergency. The pipeline operator will need to know:

***Your contact information and the location of the emergency**

***Size, characteristics and behavior of the incident, and if there are any primary or secondary fires**

***Any injuries or deaths**

***The proximity of the incident to any structures, buildings, etc.**

***Any environmental concerns such as bodies of water, grasslands, endangered wildlife and fish, etc.**

***Evacuate or shelter in place.** Depending on the level of chemical, natural gas, or product, and whether or not the product was released, or other variables, it may be necessary to evacuate the public or have the public shelter in place. Evacuation route and the location of the incident will determine which procedure is required, but both may be necessary. Evacuate people upwind of the incident if necessary. Involving the pipeline company may be important in making this decision.

PIPELINE OPERATORS IN AREA

Pacific Energy & Mining Company

Compliance Officer-Dan Green: 775-336-3132, dfgreen1@dslextreme.com

or Field Supervisor-Rodney Nugent: 775-842-9934

OTHER OPERATORS IN AREA

Pipeline Operator Name	Person To Contact	Contact Address	Phone / Fax / Email
ENTERPRISE PRODUCTS OPERATING LLC	Michael McLaughlin (Manager, Public Awareness & Damage Prevention)	PO Box 4735, Houston, TX 77210	Phone: (713) 381-2802 Fax: Email: MMclaughlin@eprod.com
MOAB PIPELINE, LLC	Don Hamilton (Authorized Agent)	2580 Creekview Road, Moab, UT 84532	Phone: (435) 719-2018 Fax: (435) 719-2019 Email: starpoint@etv.net
NORTHWEST PIPELINE CORP (WGP)	George Angerbauer (Local Outreach Business Partner)	295 Chipeta Way, Salt Lake City, UT 84108	Phone: (801) 584-6615 Fax: Email: george.angerbauer@williams.com

PIPELINE PRODUCT TRANSPORTED IN AREA*

PRODUCT: NATURAL GAS.

LEAK TYPE: GAS.

VAPORS: LIGHTER THAN AIR AND WILL GENERALLY RISE AND DISSIPATE. MAY GATHER IN A CONFINED SPACE AND TRAVEL TO A SOURCE OF IGNITION.

HEALTH HAZARDS: WILL BE EASILY IGNITED BY HEAT, SPARK, OR FLAME AND WILL FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY CAUSE DIZZINESS OR ASPHYXIATION WITHOUT WARNING AND MAY BE TOXIC IF INHALED AT HIGH CONCENTRATIONS. CONTACT WITH WITH GAS OR LIQUEFIED GAS MAY CAUSE BURNS, SEVERE INJURY AND/OR FROSTBITE.

*Operators and products represented may not be all inclusive. Please visit www.nps.phmsa.dot.gov/ for more information. Information obtained from U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration's 2008 Emergency Response Guidebook.

PUBLIC AWARENESS PROGRAM-FOR EMERGENCY RESPONDERS

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REGULATORY AGENCIES

1. Utah Division of Public Utilities, PIPELINE SAFETY
Al Zadeh , Senior Pipeline Safety Engineer , 801-530-6673, azadeh@utah.gov
Jimmy Betham, Pipeline Safety Engineer, 801-580-7515, jbetham@utah.gov
Website: <http://publicutilities.utah.gov/pipeline.html>
State Law Link: (PSC Rules R746-409 Pipeline Safety)
<http://www.rules.utah.gov/publicat/code/r746/r746-409.htm>
2. U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration,
Community Assistance and Technical Services (CATS)
OPS (Office of Pipeline Safety) Western Region
Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington;
Wyoming.
Tom Finch, 720-963-3175, thomas.finch@dot.gov
Dave Mulligan, 720-963-3193, david.mulligan@dot.gov
Website: <http://primis.phmsa.dot.gov/comm/CATS.htm?nocache=4045>
Federal Law Link: <http://phmsa.dot.gov/regulations>

UTAH ONE-CALL CENTER

BLUE STAKES OF UTAH, call 811 or 1-800-662-4111, www.bluestakes.org

Hours: 7a.m. to 5 p.m. M-F

Marks Valid: 14 Calendar days, Advance Notice: 2 business days, 48 hours notice.

TICKETS

Fax Tickets Available: No.

Online Tickets: Yes.

STATE LAWS & PROVISIONS

Coverage Statewide: Y

Civil Penalties: Y

Emergency Clause: N

Mandatory Membership: Y

Excavator Permits Issued: N

Mandatory Premarks: N

Positive Response: Y

Hand Dig Clause: Y

Damage Reporting: N

EXEMPTIONS

DOT: N

Homeowner: N

Railroad: N

Agriculture: N

Depth: N

NOTIFICATIONS ACCEPTED

Damage, Design & Overhead: N

Emergency: Y

Tolerance Zone: 24 inches.

911 Dispatch

911 Dispatch personnel play a critical role in effective response to pipeline incidents. Knowing the companies, their contact information, and the products transported in your respective jurisdiction is important for prompt and correct responses in the case of a pipeline incident. Dispatchers actions can save lives, direct the appropriate emergency responders to the scene, and protect our nations' infrastructure from additional issues that can be caused by improper response. Follow these simple guidelines in the case of a pipeline incident:

- *Gather the proper information (*if possible*): company, product, and release characteristics
- *Know the appropriate response to each product
- *Know the wind direction at the time
- *Warn of ignition sources if possible
- * Dispatch appropriate emergency responders
- *Contact the pipeline company

How would you know where a pipeline is?

Most pipelines are underground, where they are more protected from the elements and minimize interference with surface uses. Even so, pipeline rights-of-way are clearly identified by pipeline markers along pipeline routes that identify the approximate—NOT EXACT—location of the pipeline. Every pipeline marker contains information identifying the company that the pipeline, the Pipeline Markers product transported, and a phone number that should be called in the event of an emergency. Markers do not indicate pipeline burial depth, which will vary.

Markers are typically seen where a pipeline intersects a street, highway or railway. For any person to willfully deface, damage, remove, or destroy any pipeline marker is a federal crime.



Pipeline Marker-This marker is the most common. It contains operator information, type of product, and an emergency contact number. Size, shape and color may vary.

Aerial Marker-These skyward facing markers are used by patrol planes that monitor pipeline routes.

Casing Vent Marker-This marker indicates that a pipeline (protected by a steel outer casing) passes beneath a nearby roadway, rail line or other crossing.



What does the pipeline company do if a leak occurs?

To prepare for the event of a leak, pipeline companies regularly communicate, plan and train with local emergency personnel such as fire and police departments. Upon the notification of an incident or leak, either by the pipeline company's personnel, internal control center or by phone, the pipeline operator will immediately dispatch trained personnel to assist public safety officials, in their response to the emergency. Pipeline operators will also take steps to minimize the amount of product that leaks out and to isolate the pipeline.

The pipeline company's personnel or control center may:

- *Stop or reduce the flow of product.*
- *Dispatch pipeline emergency response personnel and equipment to the emergency site.*
- *Inform you of any special precautionary recommendations.*
- *Act as a liaison between emergency response agencies and pipeline company personnel.*
- *Help bring the emergency to conclusion as quickly and safely as possible.*

How would you recognize a pipeline leak?

Sight-Liquid pools, discolored or abnormally dry soil/vegetation, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, and vaporous fogs or blowing dirt around a pipeline area can all be indicative of a pipeline leak. Dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are other possible signs.

Sound-Volume can range from a quiet hissing to a loud roar depending on the size of the leak and pipeline system.

Smell-An unusual smell, petroleum odor, or gaseous odor will sometimes accompany pipeline leaks. Natural Gas and Highly Volatile Liquids are colorless, tasteless and odorless unless commercial odorants or Mercaptan is added. Gas transmission/gas gathering pipelines are odorless, but may contain a hydrocarbon smell.

What do pipelines transport, and what are the potential hazards?

Many pipelines transport petroleum products and natural gas. Some pipelines transport other hazardous products such as chemicals, highly volatile liquids, anhydrous ammonia, or carbon dioxide. Exposure to these products can be harmful if inhaled, and can cause eye and skin irritation, and difficulty in breathing.

Fortunately, pipeline accidents are extremely rare, but they can occur. Natural gas and petroleum products are flammable and potentially hazardous and explosive under certain conditions. Pipeline companies undertake many prevention and safety measures to ensure the integrity of their pipeline systems.

You can obtain more specific information regarding pipelines and the products they carry by contacting the pipeline company directly.

Pipeline purpose and reliability

Pipelines are the safest and most efficient means of transporting natural gas and petroleum products, according to National Transportation Safety Board statistics. In the United States alone, there are over 200,000 miles of petroleum pipelines and 300,000 miles of natural gas transmission pipelines in use every day. These pipelines transport the natural gas, which provides about 24 percent of all the energy used in the United States, and over 700 million gallons of petroleum products per day. Local Distribution Companies (LDCs) deliver natural gas to most homes and businesses through underground main and utility service lines. These lines cover over 800,000 miles of underground pipeline in the United States.

Maintaining safety and integrity of pipelines

Pipeline operators invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most, not all, active pipelines are monitored 24 hours a day via manned control centers. Pipeline companies also utilize aerial surveillance and/ or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow. They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized to isolate a leak.

Gas transmission and hazardous liquid pipeline operators have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). IMPs have been implemented for areas designated as "high consequence areas" in accordance with federal regulations. Specific information about an operators' program may be found on their company Web site, or by contacting them directly.

How can you help?

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- *Become familiar with the pipelines and pipeline facilities in the area (marker signs, fence signs at gated entrances, etc).*
- *Record the operator name, contact information and any pipeline information from nearby marker/facility signs and keep in a permanent location near the telephone.*
- *Be aware of any unusual or suspicious activities or unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility; report any such activities to the pipeline operator and the local law enforcement.*

What to do in case of damaging/disturbing a pipeline

If you cause or witness even minor damage to a pipeline or its protective coating, please immediately notify the pipeline company. Even a small disturbance to a pipeline may cause a future leak. A gouge, scrape, dent or crease is cause enough for the company to inspect the damage and make repairs.

Excavators must notify the pipeline company through the One-Call Center immediately but not later than two hours following the damage incident.

Emergency Response Plans for Gas and Hazardous Liquid Pipeline Operators

(Reference 49 CFR 192.605, 192.615 and 195.402)

Federal regulations for both gas and hazardous liquid pipelines require operators to have written procedures for responding to emergencies involving their pipeline facility. Because pipelines are often located in public space, the regulations further require that operators include procedures for planning with emergency and other public officials to ensure a coordinated response. Please contact your local pipeline operators for information regarding their company specific emergency response plan.

Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide for the following:

- *Receiving, identifying, and classifying notices of events which require immediate response by the operator.
- *Establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials.
- *Prompt and effective response to a notice of each type of emergency, including the following:
 - Gas detected inside or near a building.
 - Fire located near or directly involving a pipeline facility.
 - Explosion occurring near or directly involving a pipeline facility.
 - Natural Disaster.
- *The Availability of personnel, equipment, tools and materials, as needed at the scene of an emergency.
- *Actions directed toward protecting people first and then property.
- *Emergency shutdown and pressure reduction in any section of the operator's pipeline system necessary to minimize hazards to life or property.
- *Making safe any actual or potential hazard to life or property.
- *Notifying appropriate fire, police and other public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency.
- *Safely restoring any service outage.
- *Determining which facilities are located in high consequence areas.
- *Each operator shall establish and maintain liaison with appropriate fire, police and other public officials to:
 - Learn the responsibility and resources of each government organization that may respond to gas pipeline emergency;
 - Acquaint the officials with the operator's ability in responding to a gas pipeline emergency;
 - Identify the types of gas pipeline emergencies for which the operator notifies the officials; and
 - Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

Transmission Pipeline Mapping

The National Pipeline Mapping System (NPMS) is a geographic information system (GIS) created by the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS) in cooperation with other federal and state governmental agencies and the pipeline industry to provide information about pipeline operators and their pipelines. The NPMS Web site is searchable by ZIP code or by county and state, and can display a county map that is printable.

Within the NPMS, PHMSA has developed the Pipeline Integrity Management Mapping Application (PIMMA) for use by pipeline operators and Federal, state, and local government officials only. The application contains sensitive pipeline infrastructure information that can be viewed via internet browser. Access to PIMMA is limited to Federal, State, and Local Government officials as well as pipeline operators. PIMMA access cannot be given to any person who is not a direct employee of a government agency.

For a list of pipeline operators with pipelines in your area and their contact information or to apply for PIMMA access, go to www.npms.phmsa.dot.gov/. Operators of production facilities, gas/liquid gathering piping and distribution piping, are not represented by NPMS nor are they required to be.

For more information regarding pipeline safety and an overview of the pipeline industry please visit the following Web sites:

Pipeline Resources and Information









- Pipeline 101 - www.pipeline101.com
- Association of Oil Pipe Lines (AOPL) - www.aopl.org
- American Petroleum Institute (API) - www.api.org
- In the Pipe - Newsletter from the Oil Pipeline Industry - www.enebuilder.net/aopl/
- Interstate Natural Gas Association of America (INGAA) - www.ingaa.org
- American Gas Association (AGA) - www.aga.org
- Dig Safely - www.digsafely.com
- Common Ground Alliance (CGA) - www.commongroundalliance.com

Regulatory Agencies

- Department of Transportation (DOT) - www.dot.gov
- Office of Pipeline Safety (OPS) - www.phmsa.dot.gov
- National Transportation and Safety Board (NTSB) - www.nts.gov
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
- Federal Energy Regulatory Commission (FERC - Oil Pipelines) - www.ferc.gov/industries/oil.asp
- Occupational Safety & Health Administration (OSHA) - www.osha.gov
- National Fire Protection Association (NFPA) - www.nfpa.org

to be.

This color code chart will help determine which utilities have marked their underground utility lines.

	WHITE-Proposed excavation
	PINK-Temporary survey markings
	RED-Electric power lines, cables, conduit and lighting cables
	YELLOW-Gas, oil, steam, petroleum or gaseous materials.
	ORANGE-Communications, alarm or signal lines, cables or conduit
	BLUE-Potable water lines
	PURPLE-Reclaimed water, irrigation and slurry lines
	GREEN-Sewer lines

NOTICE-The information provided in this brochure, including but not limited to, One-Call center information, Web sites, state laws, regulatory agencies, has been gathered using the most up to date information available, and provided for informational purposes only. All matter is subject to change without notice. Pacific Energy and Mining Company made an attempt to verify all information contained herein as to its accuracy, and is not liable for any missing or incorrect information.

PACIFIC ENERGY AND MINING COMPANY



APPENDIX K-Public Awareness Program- Important Safety Information for Public Officials & Planning & Zoning Personnel

Paradox Natural Gas Pipeline
Operator: Pacific Energy & Mining Company
PHMSA (OPID): 39049

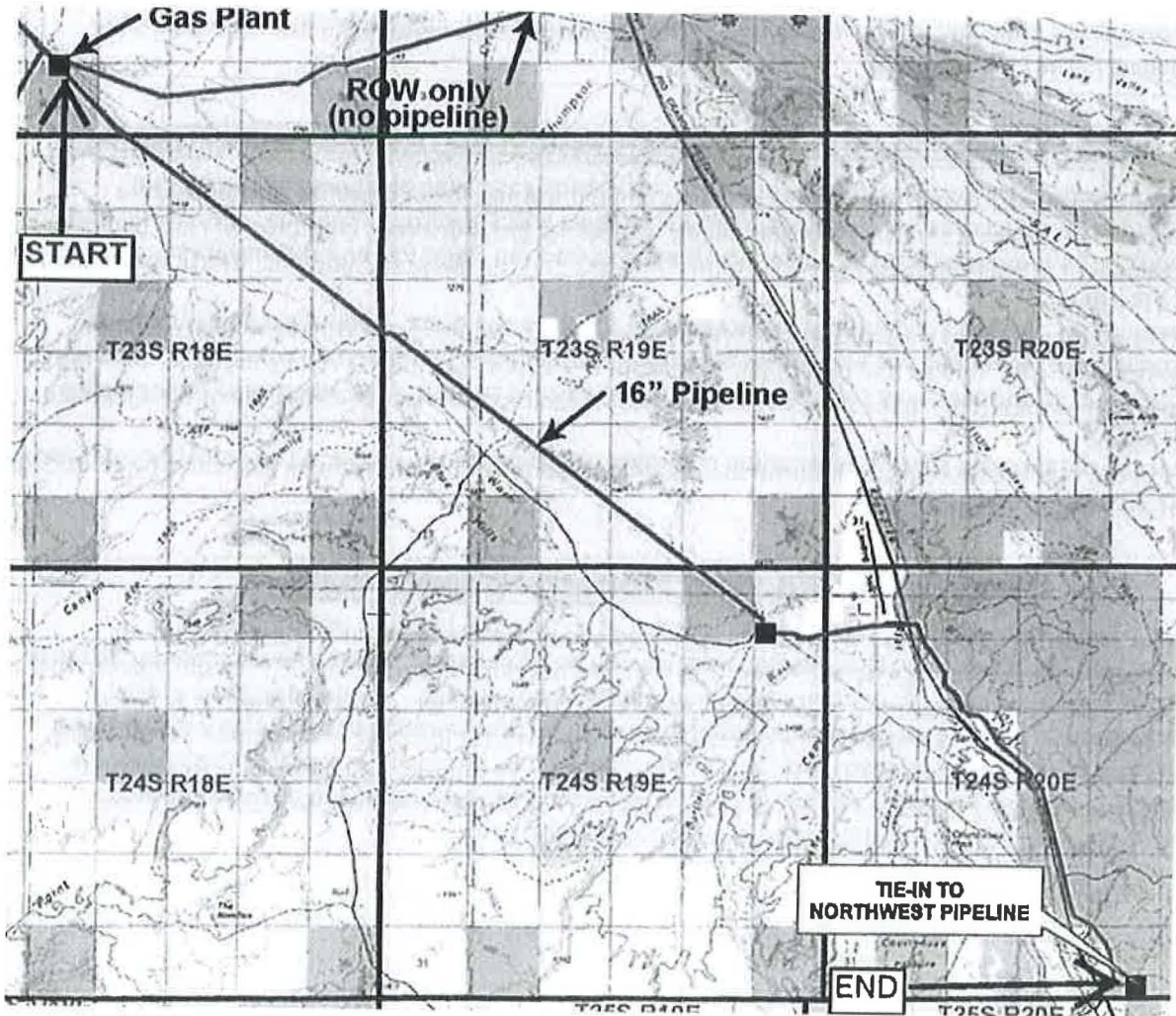
3/25/2014

Call before you dig. IT'S FREE, AND IT'S THE LAW!

One easy phone call to **811** starts the process to get your underground pipelines and utility lines marked for FREE. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com & at www.bluestakes.org

**IMPORTANT SAFETY INFORMATION
FOR PUBLIC OFFICIALS & PLANNING & ZONING
PERSONNEL**

PEMC-NATURAL GAS PIPELINE



**START AT GAS PLANT
END AT TIE-IN TO NORTHWEST PIPELINE
STEEL WITH 16 INCH DIAMETER
GRAND COUNTY, UT**

Pipeline purpose and reliability

Pipelines are the safest and most efficient means of transporting natural gas and petroleum products, according to National Transportation Safety Board statistics. In the United States alone, there are over 200,000 miles of petroleum pipelines and 300,000 miles of natural gas transmission pipelines in use every day. These pipelines transport the natural gas, which provides about 24 percent of all the energy used in the United States, and over 700 million gallons of petroleum products per day. Local Distribution Companies (LDCs) deliver natural gas to most homes and businesses through underground main and utility service lines. These lines cover over 800,000 miles of underground pipeline in the United States.

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Fortunately, pipeline accidents are extremely rare, but they can occur. Natural gas and petroleum products are flammable and potentially hazardous and explosive under certain conditions. Pipeline companies undertake many prevention and safety measures to ensure the integrity of their pipeline systems.

You can obtain more specific information regarding pipelines and the products they carry by contacting the pipeline company directly.

Planning, Zoning and Property Development

It is crucial to coordinate with pipeline operators to take the location of pipelines into consideration in land use plans, zoning, and property development activities. Developments can make use of pipeline easements as open spaces and greenway connectors. Pipeline depth is a crucial consideration during development planning to ensure costs for lowering or relocation are identified. Changes to the topography on either side of the pipeline may impose unacceptable stresses on the pipeline. Pipeline operators would like to coordinate the development of site plans where large numbers of people congregate, including schools, churches, etc.

PIPELINE OPERATORS IN AREA

Pacific Energy & Mining Company

Compliance Officer-Dan Green: 775-336-3132, dfgreen1@dslextreme.com

or Field Supervisor-Rodney Nugent: 775-842-9934

OTHER OPERATORS IN AREA

Pipeline Operator Name	Person To Contact	Contact Address	Phone / Fax / Email
ENTERPRISE PRODUCTS OPERATING LLC	Michael McLaughlin (Manager, Public Awareness & Damage Prevention)	PO Box 4735, Houston, TX 77210	Phone: (713) 381-2802 Fax: Email: MMclaughlin@eprod.com
MOAB PIPELINE, LLC	Don Hamilton (Authorized Agent)	2580 Creekview Road, Moab, UT 84532	Phone: (435) 719-2018 Fax: (435) 719-2019 Email: starpoint@etv.net
NORTHWEST PIPELINE CORP (WGP)	George Angerbauer (Local Outreach Business Partner)	295 Chipeta Way, Salt Lake City, UT 84108	Phone: (801) 584-6615 Fax: Email: george.angerbauer@williams.com

PIPELINE PRODUCT TRANSPORTED IN AREA*

PRODUCT: NATURAL GAS.

LEAK TYPE: GAS.

VAPORS: LIGHTER THAN AIR AND WILL GENERALLY RISE AND DISSIPATE. MAY GATHER IN A CONFINED SPACE AND TRAVEL TO A SOURCE OF IGNITION.

HEALTH HAZARDS: WILL BE EASILY IGNITED BY HEAT, SPARK, OR FLAME AND WILL FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY CAUSE DIZZINESS OR ASPHYXIATION WITHOUT WARNING AND MAY BE TOXIC IF INHALED AT HIGH CONCENTRATIONS. CONTACT WITH WITH GAS OR LIQUEFIED GAS MAY CAUSE BURNS, SEVERE INJURY AND/OR FROSTBITE.

*Operators and products represented may not be all inclusive. Please visit www.nps.phmsa.dot.gov/ for more information. Information obtained from U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration's 2008 Emergency Response Guidebook.

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Civil Penalties: Y

Emergency Clause: N

Mandatory Membership: Y

Excavator Permits Issued: N

Mandatory Premarks: N

Positive Response: Y

Hand Dig Clause: Y

Damage Reporting: N

EXEMPTIONS

DOT: N

Homeowner: N

Railroad: N

Agriculture: N

Depth: N

NOTIFICATIONS ACCEPTED

Damage, Design & Overhead: N

Emergency: Y

Tolerance Zone: 24 inches.

REGULATORY AGENCIES

1. Utah Division of Public Utilities, PIPELINE SAFETY

Al Zadeh , Senior Pipeline Safety Engineer , 801-530-6673, azadeh@utah.gov

Jimmy Betham, Pipeline Safety Engineer, 801-580-7515, jbetham@utah.gov

Website: <http://publicutilities.utah.gov/pipeline.html>

State Law Link: (PSC Rules R746-409 Pipeline Safety)

<http://www.rules.utah.gov/publicat/code/r746/r746-409.htm>

2. U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration, Community Assistance and Technical Services (CATS)

OPS (Office of Pipeline Safety) Western Region

Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington; Wyoming.

Tom Finch, 720-963-3175, thomas.finch@dot.gov

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How emergency responders are trained in case of a pipeline incident

***Secure the area around the leak to a safe distance.** Because vapors from the products carried in pipelines can migrate great distances, it is important to remove all ignition sources from the area. Keep in mind, Highly Volatile Liquid (HVL) vapors are heavier than air and can collect in low areas such as ditches, sewers, etc. If safe, evacuating people from homes, businesses, schools and other places of congregation, as well as controlling access to the site may be required in some incident scenarios. Sheltering in place may be the safest action if the circumstances make going outdoors dangerous.

***If the pipeline leak is not burning DO NOT** cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. **DO NOT** start motor vehicles or electrical equipment. **DO NOT** ring doorbells. Knock with your hand to avoid potential sparks from knockers. **DO NOT** drive into a leak or vapor cloud at any time.

***If the pipeline leak is burning attempt to control the spread of the fire, but DO NOT** attempt to extinguish a petroleum product or natural gas fire. When extinguished, petroleum products, gas and vapor could collect and explode if reignited by secondary fire.

***DO NOT** attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.

***Establish a command center.** Work with pipeline representatives as you develop a plan to address the emergency. The pipeline operator will need to know:

- Your contact information and the location of the emergency
- Size, characteristics and behavior of the incident, and if there are any primary or secondary fires
- Any injuries or deaths
- The proximity of the incident to any structures, buildings, etc.

-Any environmental concerns such as bodies of water, grasslands, endangered wildlife and fish, etc.

***Evacuate or shelter in place.** Depending on the level of chemical, natural gas, or product and whether or not the product was released, or other variables, it may be necessary to evacuate the public or have the public shelter in place. Evacuation route and the location of the incident will determine which procedure is required, but both may be necessary. Evacuate people upwind of the incident if necessary. Involving the pipeline company may be important in making this decision.

How can you help?

While accidents pertaining to pipeline facilities are rare, awareness of the location of the pipeline, the potential hazards, and what to do if a leak occurs can help minimize the number of accidents. A leading cause of pipeline incidents is third-party excavation damage. Pipeline operators are responsible for the safety and security of their respective pipelines. To help maintain the integrity of pipelines and their rights-of-way, it is essential that pipeline and facility neighbors protect against unauthorized excavations or other destructive activities. Here's what you can do to help:

- *Become familiar with the pipelines and pipeline facilities in the area (marker signs, fence signs at gated entrances, etc).*
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**Determining which facilities are located in high consequence areas.*

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- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
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-  RED-Electric power lines, cables, conduit and lighting cables
-  YELLOW-Gas, oil, steam, petroleum or gaseous materials.
-  ORANGE-Communications, alarm or signal lines, cables or conduit
-  BLUE-Potable water lines
-  PURPLE-Reclaimed water, irrigation and slurry lines
-  GREEN-Sewer lines

NOTICE-The information provided in this brochure, including but not limited to, One-Call center information, Web sites, state laws, regulatory agencies, has been gathered using the most up to date information available, and provided for informational purposes only. All matter is subject to change without notice. Pacific Energy and Mining Company made an attempt to verify all information contained herein as to its accuracy, and is not liable for any missing or incorrect information.

PACIFIC ENERGY AND MINING COMPANY



APPENDIX L-Public Awareness Program- Important Safety Information for Excavators & Contractors

Paradox Natural Gas Pipeline
Operator: Pacific Energy & Mining Company
PHMSA (OPID): 39049

3/25/2014

Call before you dig. IT'S FREE, AND IT'S THE LAW!

One easy phone call to **811** starts the process to get your underground pipelines and utility lines marked for FREE. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com & at www.bluestakes.org

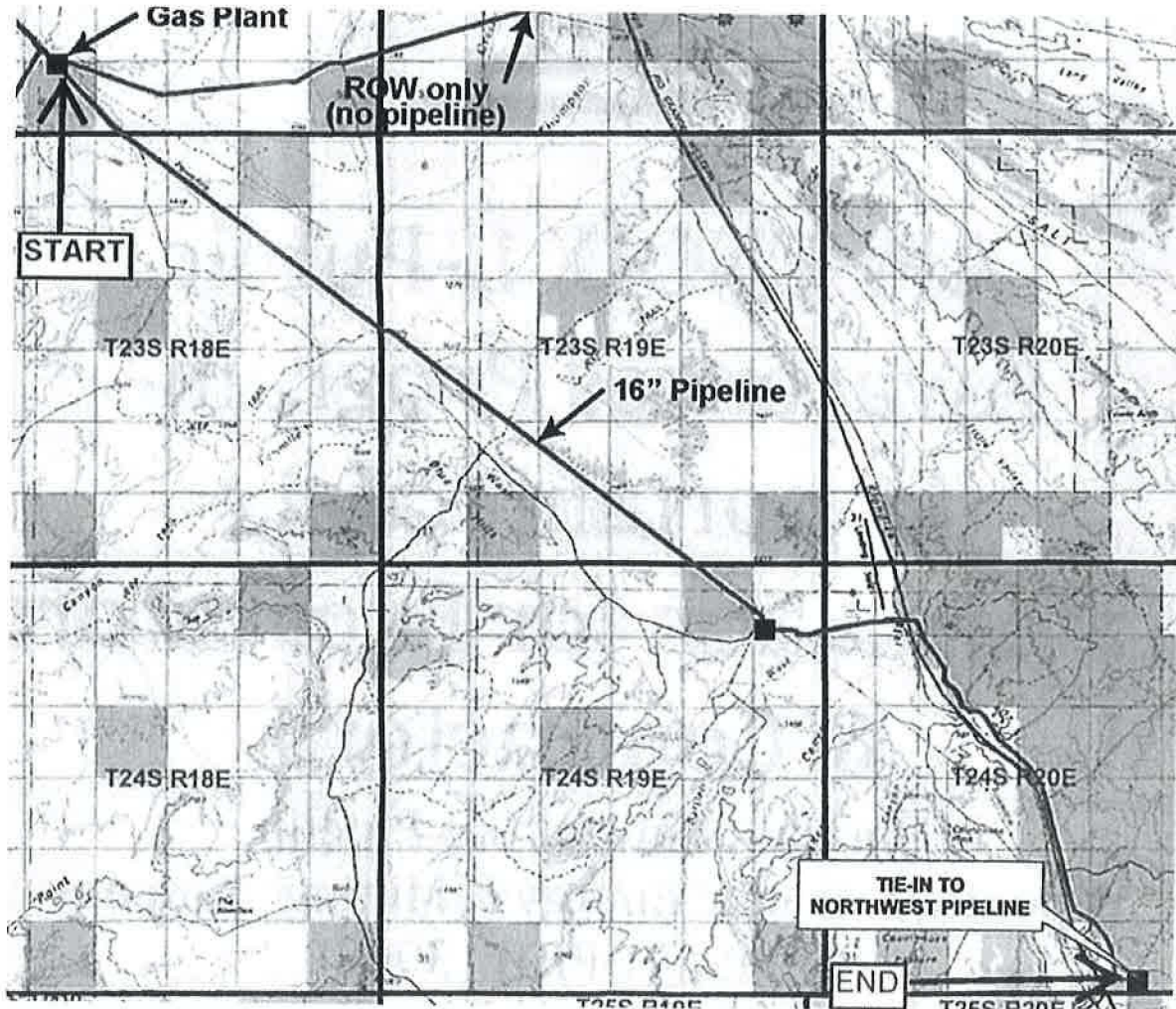
PUBLIC AWARENESS PROGRAM-EXCAVATORS & CONTRACTORS

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IMPORTANT SAFETY INFORMATION FOR EXCAVATORS & CONTRACTORS

PEMC-NATURAL GAS PIPELINE



**START AT GAS PLANT
END AT TIE-IN TO NORTHWEST PIPELINE
STEEL WITH 16 INCH DIAMETER
GRAND COUNTY, UT**



IT'S FREE, AND IT'S THE LAW!

Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, its protective casing and/or buried utility lines, always contact your state One-Call Center before engaging in any excavation, construction, farming or digging. State of Utah requires 2 business days, 48 hours notice, to the One-Call Center to allow the utility operators to mark their pipelines and utilities at your proposed digging site. In fact, most serious damage done to pipelines is done when a third party inadvertently excavates, blasts or drills within a pipeline right-of-way. By contacting the One-Call Center first, this type of damage can be prevented. Sometimes pipeline companies will require a representative present to monitor the safe excavation.

One easy phone call to 811 starts the process to get your underground pipelines and utility lines marked for FREE. When you call 811 from anywhere in the country, your call will be routed to your state One-Call Center. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com or www.bluestakes.org.

How would you know where a pipeline is?

Most pipelines are underground, where they are more protected from the elements and minimize interference with surface uses. Even so, pipeline rights-of-way are clearly identified by pipeline markers along pipeline routes that identify the approximate—NOT EXACT—location of the pipeline. Every pipeline marker contains information identifying the company that the pipeline, the Pipeline Markers product transported, and a phone number that should be called in the event of an emergency. Markers do not indicate pipeline burial depth, which will vary. Markers are typically seen where a pipeline intersects a street, highway or railway. For any person to willfully deface, damage, remove, or destroy any pipeline marker is a federal crime.



Pipeline Marker-This marker is the most common. It contains operator information, type of product, and an emergency contact number. Size, shape and color may vary.

Aerial Marker-These skyward facing markers are used by patrol planes that monitor pipeline routes.

Casing Vent Marker-This marker indicates that a pipeline (protected by a steel outer casing) passes beneath a nearby roadway, rail line or other crossing.

What does the pipeline company do if a leak occurs?

To prepare for the event of a leak, pipeline companies regularly communicate, plan and train with local emergency responders. Upon the notification of an incident or leak the pipeline company will immediately dispatch trained personnel to assist emergency responders. Pipeline operators and emergency responders are trained to protect life, property and facilities in the case of an emergency. pipeline operators will also take steps to minimize the amount of product that leaks out and to isolate the pipeline emergency.

How would you recognize a pipeline leak?

Sight-Liquid pools, discolored or abnormally dry soil/vegetation, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, and vaporous fogs or blowing dirt around a pipeline area can all be indicative of a pipeline leak. Dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are other possible signs.

Sound-Volume can range from a quiet hissing to a loud roar depending on the size of the leak and pipeline system.

Smell-An unusual smell, petroleum odor, or gaseous odor will sometimes accompany pipeline leaks.

Natural Gas and Highly Volatile Liquids are colorless, tasteless and odorless unless commercial odorants or Mercaptan is added. Gas transmission/gas gathering pipelines are odorless, but may contain a hydrocarbon smell.

What to do in the event a leak were to occur:

Turn off any equipment and eliminate any ignition sources without risking injury.

Leave the area by foot immediately. Try to direct any other bystanders to leave the area. Attempt to stay upwind.

If known, from a safe location, notify the pipeline operator immediately and call 911 or your local emergency response number. The operator will need your name, your phone number, a brief description of the incident, and the location so the proper response can be initiated.

What not to do in the event a leak were to occur:

DO NOT cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. Do not start motor vehicles or electrical equipment. Do not ring doorbells to notify others of the leak. Knock with your hand to avoid potential sparks from knockers.

DO NOT come into direct contact with any escaping liquids or gas.

DO NOT drive into a leak or vapor cloud while leaving the area.

DO NOT attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.

DO NOT attempt to extinguish a petroleum product or natural gas fire. Wait for local firemen and other professionals trained to deal with such emergencies.

What to do in case of damaging/disturbing a pipeline

If you cause or witness even minor damage to a pipeline or its protective coating during the course of an excavation or digging project, please immediately notify the pipeline company. The PIPES Act requires excavators to call 911 if excavation damage causes a pipeline leak. Even a small disturbance to a pipeline's integrity may cause a future leak. A gouge, scrape, dent or crease is cause enough for the company to inspect the damage and make any repairs necessary to the pipeline or any other related facility. Some states have laws that require any damage to pipelines be reported to the pipeline company and in case of an Emergency the One-Call Center (**BLUE STAKES OF UTAH**, call 811 or 1-800-662-4111, www.bluestakes.org).

PIPELINE OPERATORS IN AREA

Pacific Energy & Mining Company

Compliance Officer-Dan Green: 775-336-3132, dfgreen1@dslextreme.com

or Field Supervisor-Rodney Nugent: 775-842-9934

OTHER OPERATORS IN AREA

Pipeline Operator Name	Person To Contact	Contact Address	Phone / Fax / Email
ENTERPRISE PRODUCTS OPERATING LLC	Michael McLaughlin (Manager, Public Awareness & Damage Prevention)	PO Box 4735, Houston, TX 77210	Phone: (713) 381-2802 Fax: Email: MMclaughlin@eprod.com
MOAB PIPELINE, LLC	Don Hamilton (Authorized Agent)	2580 Creekview Road, Moab, UT 84532	Phone: (435) 719-2018 Fax: (435) 719-2019 Email: starpoint@etv.net
NORTHWEST PIPELINE CORP (WGP)	George Angerbauer (Local Outreach Business Partner)	295 Chipeta Way, Salt Lake City, UT 84108	Phone: (801) 584-6615 Fax: Email: george.angerbauer@williams.com

PIPELINE PRODUCT TRANSPORTED IN AREA*

PRODUCT: NATURAL GAS.

LEAK TYPE: GAS.

VAPORS: LIGHTER THAN AIR AND WILL GENERALLY RISE AND DISSIPATE. MAY GATHER IN A CONFINED SPACE AND TRAVEL TO A SOURCE OF IGNITION.

HEALTH HAZARDS: WILL BE EASILY IGNITED BY HEAT, SPARK, OR FLAME AND WILL FORM EXPLOSIVE MIXTURES WITH AIR. VAPORS MAY CAUSE DIZZINESS OR ASPHYXIATION WITHOUT WARNING AND MAY BE TOXIC IF INHALED AT HIGH CONCENTRATIONS. CONTACT WITH WITH GAS OR LIQUEFIED GAS MAY CAUSE BURNS, SEVERE INJURY AND/OR FROSTBITE.

*Operators and products represented may not be all inclusive. Please visit www.nps.phmsa.dot.gov/ for more information. Information obtained from U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration's 2008 Emergency Response Guidebook.

REGULATORY AGENCIES

1. Utah Division of Public Utilities, PIPELINE SAFETY
Al Zadeh , Senior Pipeline Safety Engineer , 801-530-6673, azadeh@utah.gov
Jimmy Betham, Pipeline Safety Engineer, 801-580-7515, jbetham@utah.gov
Website: <http://publicutilities.utah.gov/pipeline.html>
State Law Link: (PSC Rules R746-409 Pipeline Safety)
<http://www.rules.utah.gov/publicat/code/r746/r746-409.htm>
2. U.S. Department of Transportation, Pipeline & Hazardous Materials Safety Administration,
Community Assistance and Technical Services (CATS)
OPS (Office of Pipeline Safety) Western Region
Alaska; Arizona; California; Colorado; Hawaii; Idaho; Montana; Nevada; Oregon; Utah; Washington;
Wyoming.
Tom Finch, 720-963-3175, thomas.finch@dot.gov
Dave Mulligan, 720-963-3193, david.mulligan@dot.gov
Website: <http://primis.phmsa.dot.gov/comm/CATS.htm?nocache=4045>
Federal Law Link: <http://phmsa.dot.gov/regulations>

UTAH ONE-CALL CENTER

BLUE STAKES OF UTAH, call 811 or 1-800-662-4111, www.bluestakes.org

Hours: 7a.m. to 5 p.m. M-F

Marks Valid: 14 Calendar days, Advance Notice: 2 business days, 48 hours notice.

TICKETS

Fax Tickets Available: No.

Online Tickets: Yes.

STATE LAWS & PROVISIONS

Coverage Statewide: Y

Civil Penalties: Y

Emergency Clause: N

Mandatory Membership: Y

Excavator Permits Issued: N

Mandatory Premarks: N

Positive Response: Y

Hand Dig Clause: Y

Damage Reporting: N

EXEMPTIONS

DOT: N

Homeowner: N

Railroad: N

Agriculture: N

Depth: N

NOTIFICATIONS ACCEPTED

Damage, Design & Overhead: N

Emergency: Y

Tolerance Zone: 24 inches.

Pipeline purpose and reliability

Pipelines are the safest and most efficient means of transporting natural gas and petroleum products, according to National Transportation Safety Board statistics. In the United States alone, there are over 200,000 miles of petroleum pipelines and 300,000 miles of natural gas transmission pipelines in use every day. These pipelines transport the natural gas, which provides about 24 percent of all the energy used in the United States, and over 700 million gallons of petroleum products per day.

Local Distribution Companies (LDCs) deliver natural gas to most homes and businesses through underground main and utility service lines. These lines cover over 800,000 miles of underground pipeline in the United States.

Maintaining safety and integrity of pipelines

Pipeline operators invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most, not all, active pipelines are monitored 24 hours a day via manned control centers. Pipeline companies also utilize aerial surveillance and/ or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow. They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized to isolate a leak.

Gas transmission and hazardous liquid pipeline operators have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). IMPs have been implemented for areas designated as "high consequence areas" in accordance with federal regulations. Specific information about an operators' program may be found on their company Web site, or by contacting them directly.

How can you help?

While accidents pertaining to pipeline facilities are rare, awareness of the location of the pipeline, the potential hazards, and what to do if a leak occurs can help minimize the number of accidents. A leading cause of pipeline incidents is third-party excavation damage. Pipeline operators are responsible for the safety and security of their respective pipelines. To help maintain the integrity of pipelines and their rights-of-way, it is essential that pipeline and facility neighbors protect against unauthorized excavations or other destructive activities. Here's what you can do to help:

- *Become familiar with the pipelines and pipeline facilities in the area (marker signs, fence signs at gated entrances, etc).*
- *Record the operator name, contact information and any pipeline information from nearby marker/facility signs and keep in a permanent location near the telephone.*
- *Be aware of any unusual or suspicious activities or unauthorized excavations taking place within or near the pipeline right-of-way or pipeline facility; report any such activities to the pipeline operator and the local law enforcement.*

For more information regarding pipeline safety and an overview of the pipeline industry please visit the following Web sites:

Pipeline Resources and Information

- Pipeline 101 - www.pipeline101.com
- Association of Oil Pipe Lines (AOPL) - www.aopl.org
- American Petroleum Institute (API) - www.api.org
- In the Pipe - Newsletter from the Oil Pipeline Industry - www.enebuilder.net/aopl/
- Interstate Natural Gas Association of America (INGAA) - www.ingaa.org
- American Gas Association (AGA) - www.aga.org
- Dig Safely - www.digsafely.com
- Common Ground Alliance (CGA) - www.commongroundalliance.com

Regulatory Agencies

- Department of Transportation (DOT) - www.dot.gov
- Office of Pipeline Safety (OPS) - www.phmsa.dot.gov
- National Transportation and Safety Board (NTSB) - www.nts.gov
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
- Federal Energy Regulatory Commission (FERC - Oil Pipelines) - www.ferc.gov/industries/oil.asp
- Occupational Safety & Health Administration (OSHA) - www.osha.gov
- National Fire Protection Association (NFPA) - www.nfpa.org









Transmission Pipeline Mapping

The U.S. Department of Transportation's Office of Pipeline Safety has developed the National Pipeline Mapping System (NPMS) to provide information about gas transmission and liquid transmission operators and their pipelines. The NPMS Web site is searchable by zip code or by county and state, and can display a county map that is printable. For a list of pipeline operators with pipelines in your area and their contact information, go to www.npms.phmsa.dot.gov/. Operators of production facilities, gas/liquid gathering piping and distribution piping, are not represented by NPMS nor are they required to be.

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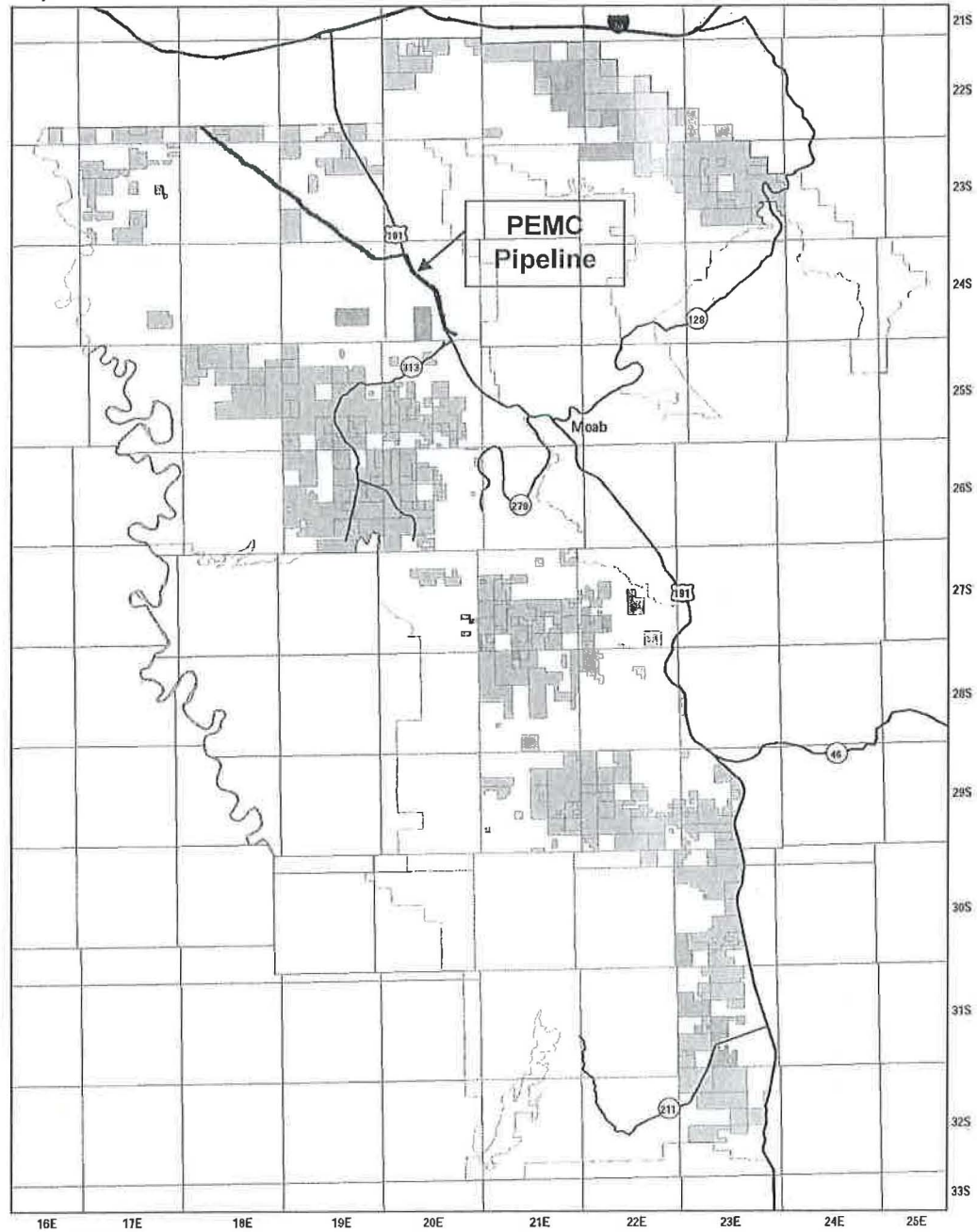
This color code chart will help determine which utilities have marked their underground utility lines.

-  WHITE-Proposed excavation
-  PINK-Temporary survey markings
-  RED-Electric power lines, cables, conduit and lighting cables
-  YELLOW-Gas, oil, steam, petroleum or gaseous materials.
-  ORANGE-Communications, alarm or signal lines, cables or conduit
-  BLUE-Potable water lines
-  PURPLE-Reclaimed water, irrigation and slurry lines
-  GREEN-Sewer lines

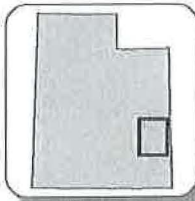
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EXHIBIT “C”

Map 4 - Federal Oil and Gas Leases



Location Map
Utah BLM Field Office Boundaries



Date: 7/31/2012

- State and Federal Highways
- Master Leasing Plan Area
- Township Lines
- Pending Leases
- Authorized Leases



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers. No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

Pacific Energy & Mining
Company

Public Awareness Plan

Pacific Energy & Mining Company	PUBLIC AWARENESS PLAN	Document No: DOT-020
		Revised By/Date: DOT Comm./05-01-2018
		Reviewed By/Date: See DOT Mtg. <u>Minutes</u> Approved By/Date: DOT Comm./05-11- 2018

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1.0 INTRODUCTION

This Public Awareness Plan (Plan) outlines the efforts of Pacific Energy & Mining Company to improve public safety and minimize environmental impact by increasing public awareness and enhancing communication with:

- The affected public (including residents and places of congregation, such as businesses, schools, hospitals and other places where people gather) in the vicinity of pipelines and associated right of ways and facilities;
- State and local emergency response and planning officials (e.g, State and county emergency management agency's (EMA's) and local emergency planning committees (LEPC's)) and first responder organizations;
- Local public officials and governing councils of affected municipalities and school districts; and
- Excavators

The identified areas include DOT jurisdictional pipeline assets within the States of Colorado and Utah.

2.0 CONTACT INFORMATION

Pacific Energy & Mining Company
 Attn: Dan Green
 3550 Barron Way Suite 13a
 Reno, NV 89511

OPS System ID #: 39049

PEMC Field Office Personnel contact information and job titles are available on each respective Emergency Notification Chart.

3.0 SCOPE

The pipeline assets covered under these procedures include all DOT jurisdictional facilities operated by Pacific Energy & Mining Company

4.0 Objective

The objective of PEMC's Public Awareness Plan is to enhance public safety and reduce the environmental impact on associated public and private property through improved communication and education of stakeholders including:

- The affected public
- State and local emergency response and planning officials
- Local public officials and governing councils of affected municipalities and school districts
- Excavators

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These efforts are supported by PEMC's Management Team through the allocation of resources sufficient for satisfactory education of targeted audiences associated with and impacted by jurisdictional pipeline facilities.

5.0 ROLES AND RESPONSIBILITIES

Administration of PEMC's Public Awareness Plan shall be jointly managed and carried out by each Field Management Team, PEMC's EH&S Administration and PEMC's DOT Committee Members.

- Management (Dan Green, Vice President) will demonstrate its commitment to PEMC's Public Awareness Plan through the allocation of resources and funds to carry out the activities identified in the Plan, such that the goals and objectives stated in the Plan are met.
- PEMC's Public Awareness Plan Administrator (Dan Green) shall administer the overall program and chair the DOT Committee. The Administrator shall also assist in the preparation of materials, evaluations, documentation, and web based tools as appropriate.
- The DOT Committee shall review the PEMC's Public Awareness Plan, provide input into the development of materials, evaluate the performance of baseline activities, and execute other specific actions identified in these plans.
- The DOT Committee Representatives shall chair their respective Field Office locations, coordinate supplemental activities in their respective locations, and maintain the documentation of the respective activities.
- Each Field Management Team shall establish and ensure membership in appropriate one-call systems.
- Each Field Management Team shall determine the need for supplemental activities in the respective areas, prepare any required Supplemental

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Public Awareness Plan actions, perform the annual assessment of local activities, and execute other specific actions identified in this plan.

6.0 BASELINE MESSAGE OBJECTIVES

Stakeholder	Message Objectives
Affected Public	<ul style="list-style-type: none"> • Awareness that they live or work near a pipeline • Pipeline purpose and reliability • Purpose of line markers and explanation of the information on them • Leak recognition and response • Hazards associated with unintended releases • An overview of pipeline operators actions to prevent accidents and mitigate consequences of accidents if they occur • One-call requirements • Damage prevention awareness • How to obtain additional information by contacting local operators
Emergency Response Officials	<ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Purpose of line markers and explanation of the information on them • Emergency Preparedness Communications • Potential hazards • Pipeline location information and accessing NPMS • How to obtain additional information
Public Officials	<ul style="list-style-type: none"> • Pipeline purpose and reliability • Awareness of hazards and prevention measures undertaken • Purpose of line markers and explanation of the information on them • One-call requirements • Emergency Preparedness Communications • Potential hazards • Pipeline location information and accessing NPMS • How to obtain additional information
Excavators	<ul style="list-style-type: none"> • Pipeline purpose and reliability • Purpose of line markers and explanation of the information on them • Awareness of hazards and prevention measures undertaken • Damage prevention awareness

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	<ul style="list-style-type: none"> • One-call requirements • Leak recognition and response • How to obtain additional information
--	--

7.0 BASELINE COMMUNICATION METHODS AND FREQUENCY

Stakeholder	Method	Min. Frequency
Affected Public	Personal contact, printed materials, pipeline markers, consortium activities &/or direct mailing	2 years
Emergency Response Officials	Personal contact, printed materials, pipeline markers & consortium activities	Annual
Public Officials	Personal contact, printed materials, pipeline markers & consortium activities	3 year
Excavators	Consortium activities, consortium participation, group meetings, printed materials & pipeline markers	Annual

8.0 ENHANCEMENTS AND SUPPLEMENTAL ACTIVITIES

Annually, each Field Management Team shall evaluate the relevant factors influencing the public awareness activities along the pipeline routes to decide if supplemental efforts or activities are warranted beyond the baseline program requirements. The following relevant factors shall be considered and the decisions documented in the annual records of the plan activities:

- Potential hazards
- High Consequence Areas (HCA's)
- Population density
- Land development activity
- Land farming activities
- Third party damage incidents
- Environmental considerations
- Pipeline history in the area
- Specific local situations
- Regulatory requirements

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- Results from previous public awareness program evaluations
- Other relevant needs

The following forms of enhancement should be considered if supplemental program enhancement is warranted:

- Increased frequency or shorter interval than baseline requirement
- Additional message content or delivery/media efforts beyond those identified in the baseline program
- Broadening or widening the coverage area beyond the baseline program.

9.0 EVALUATIONS

An evaluation of program effectiveness shall be performed at least once every four years by the DOT Committee, utilizing program performance measures. Those measures may include;

- *Outreach* - Percentage of each intended audience reached with desired message.
- *Understandability of the message content*: Percentage of sample of the intended stakeholder audience that understood and retained the key information in the message received.
- *Desired Behaviors by the Intended Stakeholder Audience*: Evaluate actual behaviors following incidents.
- *Achieving Bottom Line Results*: Maintain lower than industry average third party damage events and reduce near misses or third party damages resulting from improper application of damage prevention education or lack of public awareness outreach

Evaluation methods may include: self assessments, focus groups, surveys, samplings, independent analysis, or other appropriate means. Individual stakeholder groups may be evaluated separately at different times during the four year period. Evaluation results and recommendations for improving the plan shall be documented in the records of annual plan activities.

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10.0 PLAN DOCUMENTATION

Plan Documentation shall include:

- A copy of the current Policies and Procedures
- A detailed description of the program activities by audience
- Samples of the materials used to communicate messages
- Copies of survey results or interviews conducted that year
- Annual assessments of program implementation
- Copies of evaluations of effectiveness performed
- Copies of any independent or outside evaluations made
- Determinations made concerning supplemental enhancements
- Recommendations for improvements to the plan
- A listing of specific activities to be performed in the coming year

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11.0 PLAN EFFECTIVENESS EVALUATIONS

An evaluation of the Plan effectiveness shall be performed at least once every four years by each Field Management Team and PEMC's Midstream Services EH&S Administration utilizing any or all of the following Program Performance Measures:

- *Outreach* - Percentage of each intended audience reached with desired message
- *Understandability of the message content* - Percentage of sample of the intended stakeholder audience that understood the key information in the message received
- *Desired Behaviors by the Intended Stakeholder Audience* - Evaluate actual behaviors following incidents
- *Achieving Bottom Line Results* – Target achievement of lower than industry average third party damage events and reduce near misses or third party damages resulting from improper application of damage prevention education

Evaluation methods may include: self assessments, surveys, samplings, independent analysis, or other appropriate means. Individual stakeholder groups may be evaluated separately at different times during the four year period. Evaluation results and recommendations for improving the plan shall be documented in the records of annual plan activities.

12.0 PLAN ASSESSMENT

A plan assessment of implementation shall be performed annually by each Field Management Team. Those assessments shall include;

- Evaluation of all facilities for inclusion into the Plan?
- Are all the elements of the Plan implemented and completed?
- Are all responsible PEMC Field Personnel informed of their roles and responsibilities?
- Is all Plan documentation complete?
- Are Plan effectiveness evaluations being utilized?

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13.0 APPENDIX A-GUIDELINES FOR DETERMING BUFFER DISTANCES

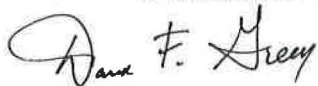
Square Root of MAOP x Nominal Outside Diameter = Distance in Feet

MAOP	Nominal Outside Diameter										
	6	8	10	12	16	20	22	24	30	36	42
100	60	80	100	120	160	200	220	240	300	360	420
200	85	113	141	170	226	283	311	339	424	509	594
300	104	139	173	208	277	346	381	416	520	624	727
400	120	160	200	240	320	400	440	480	600	720	840
500	134	179	224	268	358	447	492	537	671	805	939
600	147	196	245	294	392	490	539	588	735	882	1029
700	159	212	265	317	423	529	582	635	794	952	1111
800	170	226	283	339	453	566	622	679	849	1018	1188
900	180	240	300	360	480	600	660	720	900	1080	1260
1000	190	253	316	379	506	632	696	759	949	1138	1328
1100	199	265	332	398	531	663	730	796	995	1194	1393
1200	208	277	346	416	554	693	762	831	1039	1247	1455
1300	216	288	361	433	577	721	793	865	1082	1298	1514
1400	224	299	374	449	599	748	823	898	1122	1347	1571
1440	228	304	379	455	607	759	835	911	1138	1366	1594
1500	232	310	387	465	620	775	852	930	1162	1394	1627
1600	240	320	400	480	640	800	880	960	1200	1440	1680
1700	247	330	412	495	660	825	907	990	1237	1484	1732
1800	255	339	424	509	679	849	933	1018	1273	1527	1782
1900	262	349	436	523	697	872	959	1046	1308	1569	1831
2000	268	358	447	537	716	894	984	1073	1342	1610	1878
2100	275	367	458	550	733	917	1008	1100	1375	1650	1925
2200	281	375	469	563	750	938	1032	1126	1407	1689	1970

Pacific Energy & Mining Company	PUBLIC AWARENESS PLAN	Document No: DOT-020
		Revised By/Date: DOT Comm./05-01-2018
		Reviewed By/Date: See DOT Mtg. <u>Minutes</u> Approved By/Date: DOT Comm./05-11- 2018

14.0 APPENDIX B-STATEMENT OF MANAGEMENT COMMITMENT

This Public Awareness Plan is agreed to by Pacific Energy & Mining Company



Signature of PEMC Management Representative

Dan Green — Vice President

Printed Name of PEMC Management Representative

EXHIBIT “D”

DP[®] 4 FLAME IONIZATION GAS LEAK DETECTOR



THE LEADING GAS DETECTOR IN SEARCHING FOR UNDERGROUND LEAKS

Heath introduces the DP 4, a portable flame ionization gas leak detector for walking and mobile leak surveys. It reads from 0-10, 0-50, 0-100, 0-1,000, and 0-10,000 parts per million (PPM) and has a fast response time due to its strong internal sample pump system. The DP 4 is the most cost effective instrument on the market.

FLAME IONIZATION TECHNOLOGY

The DP 4 utilizes this well known and field proven principle to measure very small concentrations of hydrocarbons. A controlled amount of fuel is mixed with a sample and burned. When hydrocarbons are present in the sample, ionization occurs. The amount of ionization is electrically measured and converted to a visual indication of hydrocarbon level in PPM via the instrument's meter.

Heath designed the DP 4 to maximize its operational life. The all new ignition system utilizes a low voltage hot wire ignition. The fuel flow system incorporates advanced design elements. Fewer mechanical components requiring fewer adjustments have made the DP 4 more stable, resulting in more reliable fuel flow rates and calibration settings. The DP 4 has a new modular design that is rugged and weather resistant. Mechanical controls have been replaced by membrane switches that last longer and are more reliable.

Many of the design features are based on "intelligent" electronics that save time and money. The DP 4 monitors the cell base temperature, automatically stopping the fuel flow if the temperature is too high, as when using 100% H₂, thus preventing damage to the instrument. The DP 4 automatically stops the fuel flow when it is turned "Off", extending the operating supply in the fuel cylinder and eliminating the need for the operator to remove the cylinder after each use.

The DP 4 automatically monitors the input sample flow rate and alerts the operator when the sample rate is not within an allowed range using audio and light emitting diode (LED) alarms. Zero adjust and instrument PPM range selection is accomplished in a simple push button operation.



EASY OPERATION

The DP 4 uses conventional 40% hydrogen and 60% nitrogen fuel, making it compatible with existing systems. Calibration in the field continues to be simple. The DP 4 can be carried with a shoulder strap or built-in handle that is ergonomically designed for comfort. Also, it can be easily used in a mobile leak unit equipped with an auxiliary sample system.



Operating the DP 4 is easy with the new design features. The battery pack uses Nickel-Metal-Hydrate (NiMH) technology for longer operating life, lighter weight and reduced maintenance.

Features:

- Compact & user-friendly
- Intelligent electronics
- Large backlit display
- Range scales from 10 to 10,000 PPM (Optional 100,000 PPM)
- Automatic fuel shut-off
- Long life membrane switches
- Audible and visual alarms
- Hot wire ignition

See back for specifications and ordering instructions

DP[®]4

Specifications

Instrument Weight: 7 lbs. (3.2 kg)

Telescopic Probe: Extends from 25 to 41 inches
(63 cm to 104 cm); 1 lb. (.45 kg)

Sensitivity: 5-scale operation: 0-10, 50,100, 1000, and
10,000 PPM gas in air. (Optional 100,000 PPM)

Sampling Rate: 2.0 liters per minute, nominal

Fuel Consumption: 30 cc per minute
(40% hydrogen and 60% nitrogen)
(High altitude above 3,000 ft - 42% hydrogen and 58%
nitrogen)

Meter Readout: Analog meter with backlight

Alarms: Pulsating audible and visual alarm for leak
indications: continuous audible for flame-out
indication. Low sample audible alarm and light
emitting diode (LED) indicator

Ignition: Low voltage hot wire

Batteries: Nickel-Metal-Hydride (NiMH) rechargeable
battery pack. 1.5 AHr capacity at 12 VDC

Battery Charger: Available in 110 VAC or 220 VAC,
50-60 HZ (must specify) 14 oz., (0.4 kg.)

Fuel Bottle Capacity: Approximately 7 cubic inches each
(water capacity)

Daily Operating Life: Approximately 10 hours with full
battery charge and two fuel bottles

Total Shipping Weight: 29 lbs. (13.2 kg)

Carrying Case Dimensions:
28"L x 19 1/2"W x 9"H
(71 cm x 49 cm x 23 cm)

Warranty: One year parts and labor, excluding abuse and
unauthorized modification



Descriptions

DP 4 Complete:

P/N 100659-0

P/N 100659-1 for High Altitude

Includes telescopic probe assembly, 2 fuel cylinders,
transfiller, 110 VAC battery charger, extra filters,
shoulder carrying strap, fuel bottle o-rings, low
pressure gauge, o-ring lubricant, instruction manual
and carrying case.

DP 4 Complete with 220 VAC Battery Charger:

P/N 100659-2

P/N 100659-3 High Altitude

ACCESSORIES

DP 4 Calibration Kit:

P/N 0123309-0 - field kit with 100 PPM methane bottle

Calibration Gas:

P/N 0123071 - 100 PPM methane/balance air.
Refillable bottle.

Mobile Kit:

P/N 102316-0 - mobile kit 4 cones

P/N 102331-0 - mobile kit 6 cones includes sample
assembly, tubing, pump with fittings, inverter,
mounting bracket and necessary hardware.

Heath Consultants Incorporated operates under a continual product improvement program and reserves the right to make improvements and/or changes without prior notification.



Heath Consultants Incorporated
713-844-1300 • Fax 713-844-1309
1-800-HEATH-US
www.heathus.com

EXHIBIT "E"



QUOTATION

Surface System
 Cameron Intl Corp
 CAMERON
 2326 I-70 FRONTAGE ROAD
 GRAND JUNCTION CO 81505
 USA

Document number : US10/JC01/1602080
 Page 1 of 3
 Date Issued : APR 23 2018
 Payment Terms : Net 30 Days
 Terms and conditions : As Attached/Included
 Freight Terms : FOB Ship Pt-PPD/Add-Pro Fr
 EXW - GRAND JUNCTION

Sold to : 22040269
 PACIFIC ENERGY AND MINING CO
 P.O. Box 18148
 RENO NV 89511
 USA

Ship To : 43000997
 PACIFIC ENERGY AND MINING CO
 GREEN RIVER UT 84540
 USA

Inside Sales Contact: BRITTAN CAMPBELL/970-241-5711 Email: BRITTAN.CAMPBELL@C-A-M.COM

Customer Reference : QUOTATION
Placed By : DAN GREEN
Valid From : APR 23 2018
Valid To : JUL 30 2018
Project Reference : PIPELINE GREASING PROGRAM

CAMERON IS PLEASED TO OFFER THIS QUOTATION FOR PACIFIC ENERGY'S 2018 PIPELINE VALVE GREASING PROGRAM.

VALVES TO BE INCLUDED IN PROJECT

- 2 Outside Plant 6" 12 Blue Hills 6"
- 3 Outside Plant 12" 13 Blue Hills 6"
- 4 Outside Plant 6" 14 Airport Block 16"
- 5 Pig Launcher 16" 15 Airport Block 6"
- 6 Pig Launcher 6" 16 Airport Block 6"
- 7 Pig Launcher 16" 17 Airport Block 16"
- 8 Pig Launcher 4" 18 Pig Receiver NWP 16"
- Pig Launcher 2" 19 Pig Receiver NWP 6"
- 9 Blue Hills 16" 20 Pig Receiver NWP 16"
- 10 Blue Hills 6" 21 Pig Receiver NWP 4"
- 11 Blue Hills 6" - Pig Receiver NWP 2"

Item	Material Number Description	Extended Weight	Qty	UM	Unit Net Price USD	Extended Price USD
GREASING PROGRAM						
20	LABOR-IT 2 SERVICE TECHNICIANS, 10 HRS/DAY EACH *HOURS ARE BASED ON COMPLETION OF PROJECT WITHIN 2 DAYS. ANY ADDITIONAL HOURS WILL BE CHARGED AT THE RATE OF \$90.00 PER HOUR, PER TECHNICIAN, THEREAFTER. *MILEAGE INCLUDED IS LIMITED TO THE TWO DAY PROJECT. ANY ADDITIONAL MILES INCURRED OUTSIDE OF THE PROJECTED TWO DAYS WILL BE CHARGED OUT AT THE RATE OF \$4.00 PER MILE THEREAFTER.	0 kg	40	HR	90.00	3,600.00
50	GREASE84 Val-Tex Sealant, 972, -20 Degrees F - 600 Degrees F	0 kg	196	LB	14.50	2,842.00
Total GREASING PROGRAM						6,442.00

Item	Material Number Description	Extended Weight	Qty	UM	Unit Net Price USD	Extended Price USD
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Section Summary:

Total	GREASING PROGRAM					6,442.00
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Price Summary :

Total Price :	6,442.00 USD
Total Quotation Price :	6,442.00 USD

TERMS AND CONDITIONS

1. **CONTRACT ACCEPTANCE:** Any written or oral purchase order received from Buyer by Seller shall be construed as a written acceptance of Seller's offer to sell and shall be filled in accordance with the terms and conditions of sale set forth herein. SELLER'S ACCEPTANCE OF THIS ORDER IS EXPRESSLY CONDITIONED ON BUYER'S ASSENT TO THE TERMS CONTAINED HEREIN. The terms and conditions of Seller's proposal (if any) and acknowledgment shall prevail over any conflicting or different terms in Buyer's order unless Buyer notifies Seller in writing of its objections thereto within fifteen (15) days from receipt of Seller's acknowledgment. Buyer's standard terms of purchase will not be considered a counteroffer to Seller's terms and conditions of sale. The failure of Seller to object to any provision in conflict herewith whether contained on Buyer's purchase order or otherwise shall not be construed as a waiver of the provisions hereof nor as an acceptance thereof.

2. **QUOTATIONS AND PRICES:** Any product, service capability or manufacturing capability which may be available at the time a quotation is made is subject to prior sale. Prices quoted are subject to change without notice. The price in effect at the time of shipment including any escalation formula will apply, unless a valid quotation or written agreement to the contrary exists between Buyer and Seller. All prices shown are in U.S. dollars and are F.O.B. Seller's shipping point. Seller reserves the right to place a service charge on past due accounts at the highest rate permitted by law. Any documentation pertaining to traceability requirements for raw materials or products or documentation required for any routine or special processes must be identified by the Buyer at the time of quotation (if any) or at the time of order placement.

3. **TAXES:** Any tax or other charge imposed by law on the sale or production of goods or the performance of services shall be paid by the Buyer, unless the law specifically provides that such payment must be made by Seller, in which case Buyer shall reimburse Seller for such payment as part of the purchase price. Custom duties, consular fees, insurance charges and other comparable charges will be borne by Buyer.

4. **SHIPPING SCHEDULE AND DELIVERY:** Shipment schedules are given as accurately as conditions permit and every effort will be made to make shipments as scheduled. Seller will not be responsible for deviations in meeting shipping schedules nor for any losses or damages to Buyer (or any third party) occasioned by deviations in the shipping schedule, whether due to Acts of God, orders bearing priority ratings established pursuant to law, differences with workmen, local labor shortages, fire, flood, shortages or failure of raw materials, supplies, fuel, power or transportation, breakdown of equipment or any other causes beyond Seller's reasonable control, whether of similar or dissimilar nature than those enumerated. Seller shall have additional time within which to perform as may be reasonably necessary under the circumstances and shall have the right to apportion its production among its customers in such a manner as it may consider to be equitable. Seller reserves the right to furnish commercially equivalent or better substitutes for materials or to subcontract the Buyer's order or portions thereof as Seller deems necessary. In no event shall Seller be liable for any consequential damages resulting from failure or delay in shipment. If Buyer requires drawings, procedures, standards or similar material for approval, shipping schedules will be calculated from the time such approvals are received by Seller, since shipping schedules are based on Seller having all required information and a firm order from Buyer which is enterable into production. Any hold points, witness points or the need for inspection by Buyer's representatives must be identified by Buyer at the time of quotation (if any) and/or order placement in order that the effect on the prices or shipping schedules (if any) can be taken into account. Additional inspection or testing required by Buyer which affects normal production sequence will be considered as extending the shipping dates accordingly.

5. **TERMS OF PAYMENT:** Terms of payment are 30 days from date of invoice unless otherwise stated in the quotation or Seller's order acknowledgment.

6. **CANCELLATIONS AND RETURNS:** Purchase orders once placed by Buyer and accepted by Seller can be canceled only with Seller's written consent and upon terms which will save Seller from loss. No products may be returned for credit or adjustment without written permission from Seller's office authorized to issue such permission.

7. **WARRANTIES:** Contractor warrants that goods of its manufacture shall be free from defects in materials and workmanship for a period of one (1) year after being placed in service or eighteen (18) months from delivery, whichever is earlier, when all such goods are used in the service and within the pressure range for which the goods were manufactured. In the case of products or parts not wholly of Contractor's manufacture, Contractor's liability shall be limited to the extent of its recovery from the manufacturer of such products or parts under its liability to Contractor. Parts subject to regular replacement due to operational wear are not covered by this warranty. In the event that Company discovers a defect in the manufactured goods within the warranty period specified above, Company shall notify Contractor of such defect and if in Contractor's sole judgment the product or repair does not conform or is found to be defective in material or workmanship, then, Company shall, at Contractor's request, return the part or product F.O.B. to Contractor's designated plant or service location. Contractor, at its option and expense, shall repair or replace the defective part or product, or repay to Company the full price paid by Company for such defective part, repair or product. Any repayment of purchase price shall be without interest. Company shall be responsible for any costs related to removal, transportation and re-installation of the defective part or goods. Contractor shall not be liable for any damages, claims, losses or expenses of Company resulting from such defects, recovery under general tort law or strict liability or for damages resulting from delays, loss of use, or other direct, indirect, incidental or consequential damages of any kind. Contractor will not be responsible for (i) failures of products which have been in any way tampered with or altered by anyone other than an authorized representative of Contractor, (ii) failures due to lack of compliance with recommended maintenance procedures, (iii) products which have been repaired or altered in such a way (in Contractor's judgment) as to affect the products adversely, or (iv) products requiring replacement due to normal wear and tear. EXCEPT FOR THE WARRANTIES EXPRESSLY STATED ABOVE, THERE ARE NO OTHER WARRANTIES AND NONE SHALL BE IMPLIED BY LAW INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

8. **ENGINEERING AND SERVICE:** Upon request, Seller will provide engineering and/or technical information regarding its products and their uses and, if feasible, will provide personnel to assist Buyer in effecting field installations and/or field service. Any such information, service or assistance so provided, whether with or without charge, shall be advisory only.

9. **LABOR STANDARDS:** Seller hereby certifies that these products were produced in accordance with all applicable requirements of Section 6, 7 and 12 of the Fair Labor Standards Act as amended and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

10. **INSPECTION:** Unless otherwise agreed in writing, final inspection and acceptance of products must be made at Seller's plant or other shipping or receiving point designated by Seller and shall be conclusive except as regards latent defects. Buyer's representatives may inspect at the Seller's plant or shipping point during working hours prior to shipment in such manner as will not interfere with operations.

11. **DELIVERY AND ACCEPTANCE:** Delivery shall be in accordance with the requirements in the Purchase Contract, provided, in the event Buyer is unable to accept delivery upon completion of the manufacture of the Goods in accordance with such requirements, Buyer agrees that (i) title and risk of ownership shall pass to Buyer on date of Seller's invoice, and (ii) Buyer will make payments within thirty days after date of such invoice. Seller shall retain custodial risk of loss until delivery is made in accordance with such requirements.

12. **EXPORT COMPLIANCE:** The Buyer shall provide the Seller with relevant end-use, end-user and country of end-use information with respect to the goods, services, software or technology to be supplied hereunder (collectively, "Items"). Based on and in reliance on such information, the Seller will supply such Items in compliance with applicable trade and customs laws including that of the United States of America. The Seller cautions and the Buyer acknowledges that any change in end-use, end-user or country of end-use (including a shipment between countries other than the U.S.) may be restricted or prohibited by applicable trade and customs law, whether it be of the U.S. or other country. The Parties shall comply with all trade and customs laws (including U.S. Export Controls) except for any such laws which conflict with or are otherwise penalized under the laws of the U.S., which in the event of such conflict, Seller shall notify Buyer. The Buyer agrees in particular that it shall not use and shall not permit any third party to use such Items in connection with the design, production, use, or storage of chemical, biological or nuclear weapons or missiles of any kind.

13. **TRANSPORTATION CHARGES, ALLOWANCES, CLAIMS.** All prices are F.O.B. Seller's plant or other designated shipping point. No freight is allowed unless stated in Seller's quotation (if any) or in a written contract which may exist between Seller and Buyer at the time of shipment. If Seller's quotation or a written contract states that all or a portion of freight is allowed, all prices are F.O.B. Seller's plant or other designated shipping point, with most economical surface transportation allowed. If the quoted or contractual price includes transportation, Seller reserves the right to designate the common carrier and to ship in the manner it deems most economical. Added costs due to special routing requested by the Buyer are chargeable to the Buyer. Under no circumstances is any freight allowance which is absorbed by Seller to be deducted from the selling price. If the quoted price or contract includes transportation, no deduction will be made in lieu thereof whether Buyer accepts shipment at plant, warehouse, freight station, or otherwise supplies its own transportation. When sales are made from the Seller's warehouse, Seller reserves the right to charge either actual or pro-rated freight from Seller's principle point of manufacture to Seller's warehouse. Buyer assumes risk of loss upon delivery to the carrier,

regardless of who pays shipping costs. Seller endeavors to pack or prepare all shipments so that they will not break, rust or deteriorate in transit, but does not guarantee against such damage. Unless requested in writing by the Buyer, no shipments are insured by Seller against damage or loss in transit. Seller will place insurance as nearly as possible in accordance with Buyer's written instructions but in such case Seller acts only as agent between the insurance company and the Buyer and assumes no liability whatsoever. Any claims for shipping loss, breakage or damage (obvious or concealed) are Buyer's responsibility and should be made to the carrier. All claims regarding shortages must be made within thirty (30) days from receipt of shipment and must be accompanied by the packing list(s) covering the shipment. 14. **INDEMNIFICATION AND LIMITATION OF LIABILITY:**

A. **INDEMNIFICATION:** Buyer Group means: Buyer, its parent (if any), subsidiaries, affiliates, co-owners, co-venturers, partners and any entity with whom Buyer has an economic interest with respect to the Work including Buyer's customer and its and their respective employees, personnel, directors, officers, borrowed servants, representatives, agents, contractors and subcontractors (respectively and of any tier or level and who are not included within the Seller Group). Seller Group means: Seller, its parent (if any), subsidiaries, affiliates, co-owners and its and their respective employees, personnel, directors, officers, borrowed servants, representatives, agents, contractors and subcontractors (respectively and of any tier or level and who are not included within the Buyer Group). Negligence means: sole, joint or concurrent, active, passive, gross or willful misconduct.

(1) Seller shall release, defend, save, indemnify (collectively "Indemnify") and hold Buyer Group harmless from and against all claims, demands, losses, damages and causes of action of whatever kind or nature (collectively "Claims"), for loss of or damage to the property of the members of the Seller Group even if such Claims arise from or attributable to the Negligence of the members of Buyer Group.

(2) Seller shall Indemnify and hold Buyer Group harmless from and against all Claims for the death(s) of or personal injury (ies) to members of the Seller Group even if such Claims arise from or attributable to the Negligence of the members of Buyer Group.

(3) Buyer shall Indemnify and hold Seller Group harmless from and against all Claims for loss of or damage to the property (including the Work) of the members of the Buyer Group even if such Claims arise from or attributable to the Negligence of the members of Seller Group.

(4) Buyer shall Indemnify and hold Seller Group harmless from and against all Claims for the death(s) of or personal injury (ies) to members of the Buyer Group even if such Claims arise from or attributable to the Negligence of the members of Seller Group.

(5) Buyer (on its own behalf and on behalf of Buyer Group) and Seller (on its own behalf and on behalf of Seller Group) shall Indemnify and hold each other harmless from and against any and all Claims asserted against them by or on behalf of any third party for the death(s) of or personal injury (ies) to such a third party, as well as loss (es) of or damage(s) to the property of such a third party. A third party is a person or entity not included in Buyer Group or Seller Group. It is agreed by Buyer and Seller that their respective duty of indemnity to each other with respect to Claims asserted against them by a third party pursuant to this Article 14 (A) (5) shall be limited to their respective degree of Negligence.

(6) Notwithstanding any other provision contained in this Agreement, Buyer shall Indemnify and hold the members of Seller Group harmless from and against all Claims (including clean-up costs and loss (es) of oil, gas or hydrocarbons) arising from pollution, contamination, dumping or spilling of any substance and even if arising out of or attributable to the Negligence of the members of the Seller Group.

B. **INDEMNITY FOR CONSEQUENTIAL DAMAGES:** UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR PUNITIVE DAMAGES (collectively "CONSEQUENTIAL"), AS DEFINED BY THE LAWS GOVERNING THIS PURCHASE ORDER, NOR FOR ANY LOSS OF ANTICIPATED PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF USE OF EQUIPMENT OR OF ANY INSTALLATION, SYSTEM OR FACILITY INTO WHICH SELLER'S EQUIPMENT MAY BE LOCATED OR AT WHICH MEMBERS OF THE SELLER GROUP MAY BE PERFORMING WORK AND BUYER AGREES TO INDEMNIFY AND HOLD SELLER GROUP HARMLESS FROM AND AGAINST ANY CLAIMS FOR SUCH CONSEQUENTIAL DAMAGES EVEN IF ARISING OUT OF OR ATTRIBUTABLE TO THE NEGLIGENCE OF THE MEMBERS OF THE SELLER GROUP.

C. **LIMITATION OF LIABILITY:** EXCEPT AS OTHERWISE EXPRESSLY LIMITED IN THIS AGREEMENT IT IS THE EXPRESS INTENTION OF THE PARTIES HERETO THAT ALL INDEMNITY OBLIGATIONS AND/OR LIABILITIES HEREBY ASSUMED BY THE PARTIES SHALL BE: (i) SUPPORTED BY INSURANCE; (ii) WITHOUT LIMIT; (iii) AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF, INCLUDING, BUT NOT LIMITED TO, PREEXISTING CONDITIONS (WHETHER SUCH CONDITIONS BE PATENT OR LATENT); THE UNSEAWORTHINESS OF ANY VESSEL OR VESSELS (WHETHER OR NOT PREEXISTING); THE UNAIRWORTHINESS OF ANY AIRCRAFT; BREACH OF REPRESENTATION OR WARRANTY (EXPRESS OR IMPLIED); BREACH OF CONTRACT; BREACH OF DUTY (STATUTORY, CONTRACTUAL, COMMON LAW OR OTHERWISE); STRICT LIABILITY; CONDITION OF RUIN OR DEFECTIVE PREMISES, EQUIPMENT, FACILITIES, OR APPURTENANCES OF ANY PARTY UNDER ANY CODE, LAW OR (WHETHER OR NOT SAID CONDITION IS PREEXISTING AND/OR LATENT, PATENT OR OTHERWISE), THE LOADING OR UNLOADING OF PERSONS OR CARGO, TORT; OR THE NEGLIGENCE OR FAULT OF ANY PARTY (AS DEFINED AT THE BEGINNING OF THIS ARTICLE 14; OR ANY OTHER THEORY OF LEGAL LIABILITY. Seller's total responsibility for any claims, damages, losses or liability arising out of or related to its performance of this contract or the products or services covered hereunder shall not exceed the purchase price.

15. **MODIFICATION, RESCISSION & WAIVER:** The terms herein may not be modified or rescinded nor any of its provisions waived unless such modification, rescission or waiver is in writing and signed by an authorized employee of Seller at its office in Houston, Texas. Failure of Seller to insist in any one or more instances upon the performance of any of the terms and conditions of the contract or the failure of Seller to exercise any of its rights hereunder shall not be construed as a waiver or relinquishment of any such term, condition, or right hereunder and shall not affect Seller's right to insist upon strict performance and compliance with regard to any unexecuted portions of this contract or future performance of these terms and conditions. All orders must be accepted by an authorized employee of Seller. The rights and duties of the parties and construction and effect of all provisions hereof shall be governed by and construed according to the internal laws of the State of Texas. Any disputes which arise under this agreement shall be venued in the District Court of Harris County, Texas or in the Southern District of Texas.

REV08/06

5/13/2018

Pacific Energy and Mining Co.
Pipeline Valves

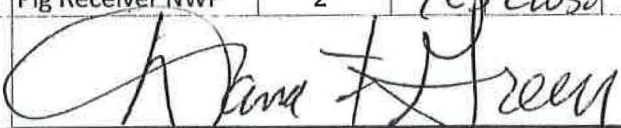
Valve Number	Location	Size	Insp	Open / Closed	Partially Opened	Date	Comment
2	Outside Plant	6"	YES	OPEN	YES	5/5/18	
3	Outside Plant	12"	YES	CLOSE	YES		
4	Outside Plant	6"	YES	OPEN	YES		
5	Pig Launcher	16"	YES	CLOSE	YES		PIGGING IN PROGRESS
6	Pig Launcher	6"	YES	OPEN	YES		
7	Pig Launcher	16"	YES	OPEN	YES		
8	Pig Launcher	4"	YES	CLOSE	YES		NEED LOCK CAN
No #	Pig Launcher	2"	YES	CLOSE	YES		NEED LOCK CAN
9	Blue Hills	16"	YES	OPEN	YES		
10	Blue Hills	6"	YES	CLOSE	YES		
11	Blue Hills	6"	YES	OPEN	YES		
12	Blue Hills	6"	YES	CLOSE	YES		
13	Blue Hills	6"	YES	CLOSE	YES		
14	Airport Block	16"	YES	OPEN	YES		
15	Airport Block	6"	YES	CLOSE	YES		
16	Airport Block	6"	YES	CLOSE	YES		
17	Airport Block	16"	YES	CLOSE	YES		NEED LOCK
18	Pig Receiver NWP	16"	YES	CLOSE	YES		PIGGING IN PROGRESS
19	Pig Receiver NWP	6"	YES	OPEN	YES		
20	Pig Receiver NWP	16"	YES	OPEN	YES		
21	Pig Receiver NWP	4"	YES	CLOSE	YES		NEED LOCK CAN
No #	Pig Receiver NWP	2"	YES	CLOSE	YES		NEED LOCK CAN
Signed						Date	5/13/18

EXHIBIT “F”

PACIFIC ENERGY AND MINING COMPANY
Prevention of Accidental Ignition Plan
May 15, 2018

1 GENERAL

1.1 Smoking and open flames.

Smoking and open flames are prohibited in the following PEMC locations.

- (a) In structures or areas containing gas facilities where possible leakage or presence of gas constitutes a hazard of fire or explosion.
- (b) In the open when accidental ignition of gas-air mixture might cause personal injury or property damage.

1.2 Accidental electric arcing.

To prevent accidental ignition by electric arcing, the following will be reviewed.

- (a) Flashlights, portable floodlights, extension cords, and any other electrically powered tool or equipment should be of a type approved for use in hazardous atmospheres. Care will be taken to ensure that electrical connections and disconnections are not made, and are prevented from occurring, in hazardous atmospheres.
- (b) Internal combustion engines that power trucks, cars, compressors, pumps, generators, and other equipment will not be operated in suspected or known hazardous atmospheres.
- (c) Bonding to provide electrical continuity will be considered around all cuts separating metallic pipes that may have natural gas present. This bond will be installed prior to cutting and maintained until all reconnections are completed or a gas free environment exists. Bond cables will be installed in a manner to ensure that

they do not become detached during construction and that they provide minimal electrical resistance between pipe sections.

1.3 Static electricity on plastic pipe.

A static electric charge can build up on both the inside and outside of plastic pipe due to the dielectric properties of plastic. Discharging of the static electricity going to ground can cause an arc that will cause ignition if a flammable gas-air mixture is present. In plastic pipe operations, it is essential to avoid the accumulation of a flammable gas-air mixture and the arcing of a static electrical discharge. When conditions exist such that a flammable gas-air mixture may be encountered and static charges may be present, such as when repairing a leak, squeezing-off an open pipe, purging, making a connection, etc., arc preventing safety precautions are necessary. The following should be considered.

(a) Leaking or escaping gas should be eliminated by closing valves or excavating and squeezing-off in a separate excavation at a safe distance from the escaping gas.

(b) If escaping gas cannot be effectively controlled or eliminated and it is necessary to work in an area of escaping gas, safety provisions should be considered such as dissipating or preventing the accumulation of a static electrical charge, venting the gas from the trench, and grounding those tools used in the area. Additionally, flame-resistant clothing treated to prevent static buildup and respiratory equipment should be used. Acceptable methods of dissipating or preventing the accumulation of static electricity include wetting the exposed area with an electrically conductive liquid (e.g., soapy water with glycol added when ambient temperatures are below freezing)

and using an anti-static polyethylene (PE) film or wet non-synthetic cloth wound around or laid in contact with the entire section of exposed pipe and grounded with a brass pin driven into the ground. Commercially available electrostatic discharge systems may be considered as a means of eliminating static electricity from both the inside and outside of PE pipe.

(c) A plastic pipe vent or blowdown stack should not be used due to the possibility that venting gas with a high scale or dust content could generate an internal static electrical charge that could ignite the escaping gas. Metal vent stacks will be grounded before placement in the escaping gas stream. Venting should be done downwind at a safe distance from personnel and flammable material.

(d) To reduce potential sources of ignition, all tools, including squeeze-off tools, used in gaseous atmospheres should be grounded or the non-sparking type.

1.4 Other sources of ignition.

Care will be taken in selecting the proper hand tools for use in hazardous atmospheres and in handling tools to reduce the potential for a spark.

1.5 Fire extinguishers.

If escaping gas in the area of the work is possible, a fire extinguisher will be available upwind and adjacent to the area. All vehicles carry a fully inspected fire extinguisher.

1.6 Verification of the presence of gas.

Prior to welding, cutting, or performing other work on isolated sections of gas piping, a check will be made with a gas detector for the presence of a combustible gas

mixture inside the pipe. Work will begin only when safe conditions are indicated. If the work takes place over an extended period of time, the line will be periodically monitored to ensure that a combustible gas mixture does not accumulate.

1.7 Accidental ignition of discharged gas.

Operators will consider using the following measures to help avoid accidental ignition when gas is discharged in areas subject to public motor vehicle or pedestrian traffic.

(a) Posting warning signs.

(b) Directing motor vehicles and pedestrians away from the area by the following.

(1) Law enforcement.

(2) Traffic flaggers.

(3) Signs (e.g., detour, road closed).

(4) Barricades.

2 WELDING, CUTTING, AND OTHER HOT WORK

2.1 General.

Prior to welding, cutting, or other hot work in or around a structure or area containing gas facilities, a thorough check will be made with a gas detector for the presence of a combustible gas mixture. Prior to entering pipe, tanks, or similar confined spaces, appropriate instruments will be used to ensure a safe, breathable atmosphere. Work will begin only when safe conditions are indicated. The atmosphere will be tested periodically for oxygen deficiency and combustible gas mixtures.

2.2 Pipelines filled with gas.

When a pipeline or main is to be kept full of gas during welding or cutting operations, the following are recommended.

- (a) A slight flow of gas will be kept moving toward the cutting or welding operation.
- (b) The gas pressure at the site of the work will be controlled by suitable means.
- (c) All slots or open ends should be closed with tape, tightly fitted canvas, or other suitable material immediately after a cut is made.
- (d) Two openings will not be uncovered at the same time.

2.3 Pipelines containing air.

- (a) Before the work is started, and at intervals as the work progresses, the atmosphere in the vicinity of the zone to be heated will be tested with a combustible gas indicator or by other suitable means.
- (b) Unless a suitable means (e.g., an air blower) is used to prevent a combustible mixture in the work area, welding, cutting or other operations that could be a source of ignition will not be performed on a pipeline, main, or auxiliary apparatus that contains air and is connected to a source of gas.
- (c) When the means noted in 2.3(b) above are not used, one or more of the following precautions are suggested, depending upon the job site circumstances.
 - (1) The pipe or other equipment upon which the welding or cutting is to be done will be purged with an inert gas.
 - (2) The pipe or other equipment upon which the welding or cutting is to be done will be continuously purged with air in such a manner that a combustible mixture does not form in the vicinity at the work area.

3 ISOLATING PIPELINE SEGMENTS ON PLANNED WORK TO MINIMIZE THE POTENTIAL OF IGNITION

3.1 General.

Planned work on gas facilities will incorporate procedures to shut off or minimize the escape of gas. No portion of a pipeline, large-diameter service line, or main will be cut out under pressure, unless the flow of gas is shut off or minimized by the use of line valves, line plugging equipment, bags, stoppers, or pipe squeezers. Where 100% shutoff is not feasible, the following precautions are recommended.

- (a) Plan the job to minimize the escape of gas and sequence steps to limit the time and amount of gas to which personnel are exposed.
- (b) Ensure that the size and position of the cut allows the gas to vent properly even with an employee in the excavation.
- (c) Protect personnel working in a gaseous atmosphere under an overhang, in a tunnel, or in a manhole.

3.2 Isolating pipeline segments.

(a) Preliminary action. The operator will conduct a pre-work meeting(s) to review the following with the personnel involved.

- (1) The method of isolation.
- (2) The purpose of each activity.
- (3) Drawings, procedures, and schematics, as applicable.
- (4) Responsibilities of each individual, including the designation of an individual to be in charge of the operation.

(b) Isolation precautions.

- (1) The operator will ensure that the isolation equipment is appropriate and sized correctly for the job.

(2) Isolation equipment left unattended will have a positive means of preventing unauthorized operation.

(3) Positive means will be provided at the work site to alert and protect personnel from unintentional pressuring. Consideration will be given to the use or installation of items such as:

(i) Relief valves.

(ii) Rupture discs.

(iii) Pressure gauges.

(iv) Pressure recorders.

(v) Vents.

(vi) Pressure alerting devices.

(vii) Other pressure detecting devices.

(4) Isolation equipment will be inspected and maintained prior to use.

(5) Temporary closures capable of withstanding full line pressure should have a means to determine pressure buildup, such as gauges and vents.

(6) Consideration should be given to the following to prevent the uncontrolled release of liquid hydrocarbons when cutting into offshore pipelines or other pipelines that might contain significant quantities of these liquids.

(i) The elevation difference between the blowdown valve and cut location.

(ii) The impact of water displacement on liquid hydrocarbons in those instances where water may enter into the pipeline segment.

(c) Monitoring isolated segments.

(1) Monitoring procedures should be established based on the pressure, volumes, closures, and other pertinent factors.

(2) Personnel assigned to operate isolation equipment will have a means to determine pressure buildups, such as gauges and vents.

(3) Personnel monitoring at remote locations will have communication with the work site and the individual in charge of the operation.

4 NOTIFICATIONS PRIOR TO PURGE OR BLOWDOWN

4.1 Public officials.

Local public officials will be notified prior to a purge or blowdown in those situations where the normal traffic flow through the area might be disturbed, or where it is anticipated that there will be calls from the public regarding the purge or blowdown.

4.2 Public in vicinity of gas discharge.

The public in the vicinity of the gas discharge will be notified prior to a purge or blowdown, if it is anticipated that the public might be affected by the process. The primary considerations for determining the need for notification are noise, odor, and the possibility of accidental ignition.

EXHIBIT “G”



PACIFIC ENERGY & MINING CO

August 30, 2017

VIA Email: cinda@wcstriegel.com

Cinda
WC Striegel
17030 CO-64
Rangely, CO 81648

RE: Delta Petroleum; Paradox Pipeline

Dear Cinda:

Pacific Energy and Mining Company acquired the Paradox Pipeline from Delta Petroleum in 2011. Subsequently, Fidelity Exploration and Production Company connected to the pipeline in 2014. As conditions to the connection, Pacific was required to become DOT compliant.

Pacific received all of the records from Delta, but evidently the qualifications for the welders were not included. Could you review your records and get us copies of the qualifications of the welders for this job?

Specifically, here is the language of the DOT requirements:

192.227/229 Qualification of welders and welding operators:

§ 192.227 Qualification of welders and welding operators.

(a) Except as provided in paragraph (b) of this section, each welder or welding operator must be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API Std 1104 (incorporated by reference, see § 192.7), or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC) (incorporated by reference, see § 192.7). However, a welder or welding operator qualified under an earlier edition than the listed in § 192.7 of this part may weld but may not requalify under that earlier edition.

(b) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in section I of Appendix C of this part. Each welder who is to make a welded service line connection to a main must first perform an acceptable test weld under section II of Appendix C of this part as a requirement of the qualifying test.

§ 192.229 Limitations on welders and welding operators.

(a) No welder or welding operator whose qualification is based on nondestructive testing may weld compressor station pipe and components.

(b) A welder or welding operator may not weld with a particular welding process unless, within the preceding 6 calendar months, the welder or welding operator was engaged in welding with that process.

(c) A welder or welding operator qualified under § 192.227(a) -

(1) May not weld on pipe to be operated at a pressure that produces a hoop stress of 20 percent or more of SMYS unless within the preceding 6 calendar months the welder or welding operator has had one weld tested and found acceptable under either section 6, section 9, section 12 or Appendix A of API Std 1104 (incorporated by reference, see § 192.7). Alternatively, welders or welding operators may maintain an ongoing qualification status by performing welds tested and found acceptable under the above acceptance criteria at least twice each calendar year, but at intervals not exceeding 7 1/2 months. A welder or welding operator qualified under an earlier edition of a standard listed in § 192.7 of this part may weld, but may not re-qualify under that earlier edition; and,

(2) May not weld on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS unless the welder or welding operator is tested in accordance with paragraph (c)(1) of this section or re-qualifies under paragraph (d)(1) or (d)(2) of this section.

(d) A welder or welding operator qualified under § 192.227(b) may not weld unless -

(1) Within the preceding 15 calendar months, but at least once each calendar year, the welder or welding operator has re-qualified under § 192.227(b); or

(2) Within the preceding 7 1/2 calendar months, but at least twice each calendar year, the welder or welding operator has had -

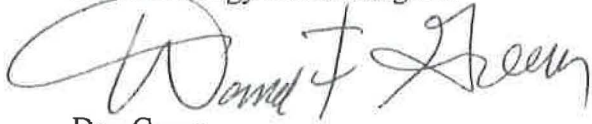
(i) A production weld cut out, tested, and found acceptable in accordance with the qualifying test; or

(ii) For a welder who works only on service lines 2 inches (51 millimeters) or smaller in diameter, the welder has had two sample welds tested and found acceptable in accordance with the test in section III of Appendix C of this part.

W.C. Striegel Construction
August 30, 2017
Page 3 of 3

Please feel free to call me if you have any questions. Also attached is a sample of the inspection reports and an inspection listing showing the dates in question.

Sincerely,
Pacific Energy and Mining Co.

A handwritten signature in black ink, appearing to read "Dan Green". The signature is fluid and cursive, with the first name "Dan" being the most prominent.

Dan Green
President

Cc: J Betham; via email: jbetham@utah.gov
T Ahmad; via email: taroil@yahoo.com

PARADOX PIPELINE X-RAY WELDING INSPECTION LISTING

NUMBER OF TOTAL WELDS: 1660+ (FB 1 TO FB 89) + (1-18)	1767
NUMBER OF WELDS THAT DID NOT COMPLY:	12
% THAT DID NOT COMPLY ON FIRST TRY:	0.68

S.N.	WELD NO.	DATE OF INSPECTION	LOCATION OF DEFECT	REASON	DATE OF RE-INSPECTION
1	143	4/19/2008	O-B	BURN THROUGH; BOTTOM, WORK SIDE	4/21/2008
2	325	4/25/2008	B-C	BURN THROUGH; WORK SIDE	4/26/2008
3	407	5/1/2008	B-C	BURN THROUGH; WORK SIDE	5/1/2008
4	412	5/2/2008	O-B	BURN THROUGH; WORK SIDE	5/2/2008
5	742	5/10/2008	C-0	CONCAVE STRINGER	5/10/2008
6	743	5/10/2008	B-C	CONCAVE STRINGER	5/10/2008
7	765	5/10/2008	C-0	CONCAVE STRINGER	5/10/2008
8	812	5/12/2008	O-B	CONCAVE STRINGER	5/13/2008
9	893	5/14/2008	C-0	LACK PENETRATION	5/14/2008
10	1376	5/29/2008	O-1	BURN THROUGH	?
11	FB 1	6/4/2008	1-2	BURN THROUGH CONCAVE	6/10/2008
12	XR 4	6/17/2008	O-1	STRINGER	6/17/2008

H & G Services, Inc.
 P.O. Box 722305 • Houston, Texas 77272
 (713) 771-1592

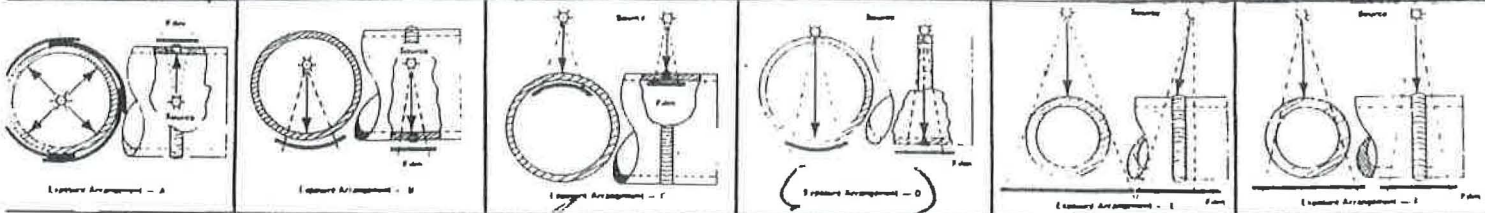
Contractor: W.C. Streifel

CLIENT: DELTA Petro.
 DATE: 04-17-08 Green Town Row

TYPE INSPECTION: RT-Weld Quality
 NO WELDS: 32
 MATERIAL THICKNESS: STD
 SOURCE: I-192
 EXPOSURE TIME: 40 sec.

SPECIFICATION: API 1104 19th ed.
 NO. FILM: 96 FILM SIZE: 70mm x 21"
 FILM TYPE: AGFA PENETRATOR: ASTM 1B
 SOURCE SIZE: 1 x 1 SOURCE STRENGTH: 70 Curies
 UG 00.02 max. SCREENS: Lead .005 x .005

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
1	16" x .250"	0-B-C-0	✓		1098 + 49
2			✓		
3			✓		
4			✓		
5			✓		
6			✓		
7			✓		
8			✓		
9			✓		
10			✓		
11			✓		
12			✓		
13			✓		1107 + 33
14			✓		1097 + 06
15			✓		
16			✓		
17			✓		
18			✓		
19			✓		
20			✓		
21			✓		
22			✓		
23			✓		
24			✓		
25			✓		
26			✓		
27			✓		
28			✓		
29			✓		
30			✓		
31			✓		
32			✓		1086 + 62



CR-CRACK · LP-LACK PENETRATION · LF-LACK FUSION · BT-BURN THROUGH · CCS-CONCAVE STRINGER · S-SLAG · WT-WAGON

INSPECTOR'S APPROVAL [Signature]
 TOTAL HOURS: 11 TOTAL WELDS: 32
 TECHNICIAN W. Duplo LEVEL II
 (Signature)
 ASST. TECH T. Privett

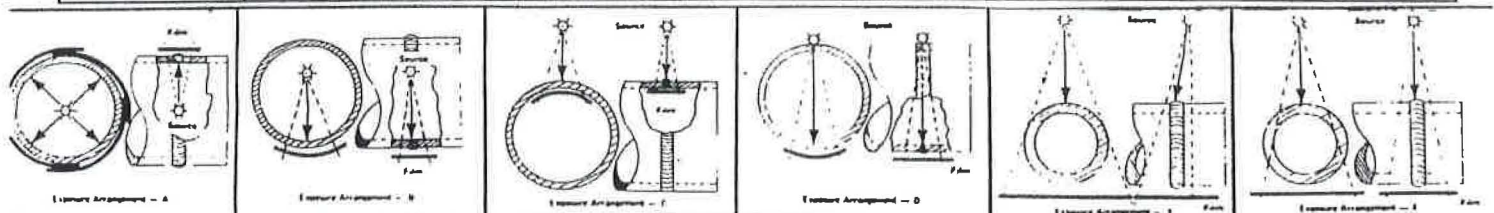
TRAVEL REPORT 1hr Per Diem
 MILES FROM _____ TO _____ TOTAL 40
 STANDBY (BAD WEATHER)
 CONTRACTOR NOT WORKING
 DATE 04/17/08 SHEET NO. 1

H & G Services, Inc.
 P.O. Box 722305 • Houston, Texas 77272
 (713) 771-1592

CLIENT: DELTA Petro. Green Town Row
 DATE: 04/17/08
 SPECIFICATION: API 1104 contractor: W.C. Streigel
 NO. FILM: 36 FILM SIZE: 70 mm x 21"
 FILM TYPE: AGFA PENETRATOR: ASTM 1B
 SOURCE SIZE: .1 x .1 SOURCE STRENGTH: 70 Curies
 SCREENS: Lead .005 x .005 UG UO U2 max.

TYPE INSPECTION: RT-Weld Quality
 NO WELDS: 12
 MATERIAL THICKNESS: STD
 SOURCE: Ir 192
 EXPOSURE TIME: 40 sec.

WELD NO. XIR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
33	16" x .250"	O-B-C-O	✓		1086+00
34			✓		
35			✓		
36			✓		
37			✓		
38			✓		
39			✓		
40			✓		
41			✓		
42			✓		
43			✓		
44	✓	✓	✓		1078+00



CR-CRACK · LP-LACK PENETRATION · LF-LACK FUSION · BT-BURN THROUGH · CCS-CONCAVE STRINGER · S-SLAG · WT-WAGON

INSPECTOR'S APPROVAL: [Signature]
 TOTAL HOURS: _____ TOTAL WELDS: 12
 TECHNICIAN: D. Duph LEVEL: II
 (Signature)
 ASST. TECH: T. Privett

TRAVEL REPORT Sheet - 1
 MILES FROM _____ TO _____ TOTAL _____
 STANDBY (BAD WEATHER)
 CONTRACTOR NOT WORKING
 DATE: 04/17/08 SHEET NO. 2

PARADOX PIPELINE X-RAY WELDING INSPECTION LISTING

NUMBER OF TOTAL WELDS: 1660+ (FB 1 TO FB 89) + (1-18)	1767
NUMBER OF WELDS THAT DID NOT COMPLY:	12
% THAT DID NOT COMPLY ON FIRST TRY:	0.68

S.N.	WELD NO.	DATE OF INSPECTION	LOCATION OF DEFECT	REASON	DATE OF RE-INSPECTION
1	143	4/19/2008	O-B	BURN THROUGH; BOTTOM, WORK SIDE	4/21/2008
2	325	4/25/2008	B-C	BURN THROUGH; WORK SIDE	4/26/2008
3	407	5/1/2008	B-C	BURN THROUGH; WORK SIDE	5/1/2008
4	412	5/2/2008	O-B	BURN THROUGH; WORK SIDE	5/2/2008
5	742	5/10/2008	C-0	CONCAVE STRINGER	5/10/2008
6	743	5/10/2008	B-C	CONCAVE STRINGER	5/10/2008
7	765	5/10/2008	C-0	CONCAVE STRINGER	5/10/2008
8	812	5/12/2008	O-B	CONCAVE STRINGER	5/13/2008
9	893	5/14/2008	C-0	LACK PENETRATION	5/14/2008
10	1376	5/29/2008	0-1	BURN THROUGH	?
11	FB 1	6/4/2008	1-2	BURN THROUGH CONCAVE	6/10/2008
12	XR 4	6/17/2008	0-1	STRINGER	6/17/2008

H & G Services, Inc.
 P.O. Box 722305 • Houston, Texas 77272
 (713) 771-1592

Contractor: W.C. Streigel

CLIENT: DELTA Petro.

DATE: 04-17-08 Green Town Row

TYPE INSPECTION: RT-Weld Quality

SPECIFICATION: API 1104 1st Ed.

NO. WELDS: 32

NO. FILM: 96

FILM SIZE: 70mm x 21"

MATERIAL THICKNESS: STD

FILM TYPE: AGFA

PENETRATOR: ASTM 1B

SOURCE: Ir-192

SOURCE SIZE: .1 x .1

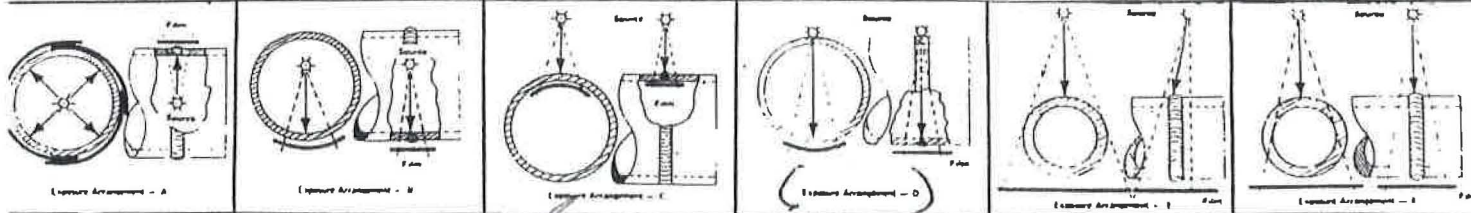
SOURCE STRENGTH: 70 Curies

EXPOSURE TIME: 40 sec.

SCREENS: Lead .005 x .005

UG 00.02 max.

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
1	16" x .250"	0-B-C-0	✓		1098 + 49
2			✓		
3			✓		
4			✓		
5			✓		
6			✓		
7			✓		
8			✓		
9			✓		
10			✓		
11			✓		
12			✓		
13			✓		1107 + 33
14			✓		1097 + 06
15			✓		
16			✓		
17			✓		
18			✓		
19			✓		
20			✓		
21			✓		
22			✓		
23			✓		
24			✓		
25			✓		
26			✓		
27			✓		
28			✓		
29			✓		
30			✓		
31			✓		
32			✓		1086 + 62



CR-CRACK · LP-LACK PENETRATION · LF-LACK FUSION · BT-BURN THROUGH · CCS-CONCAVE STRINGER · S-SLAG · WT-WAGON

INSPECTOR'S APPROVAL: [Signature]

TRAVEL REPORT 1 hr Per Diem

TOTAL HOURS: 11

TOTAL WELDS: 32

MILES FROM _____ TO _____

TOTAL 40

TECHNICIAN [Signature]

(Signature) LEVEL III

STANDBY (BAD WEATHER)
 CONTRACTOR NOT WORKING

ASST. TECH T. Privett

DATE 04/17/08

SHEET NO. 1

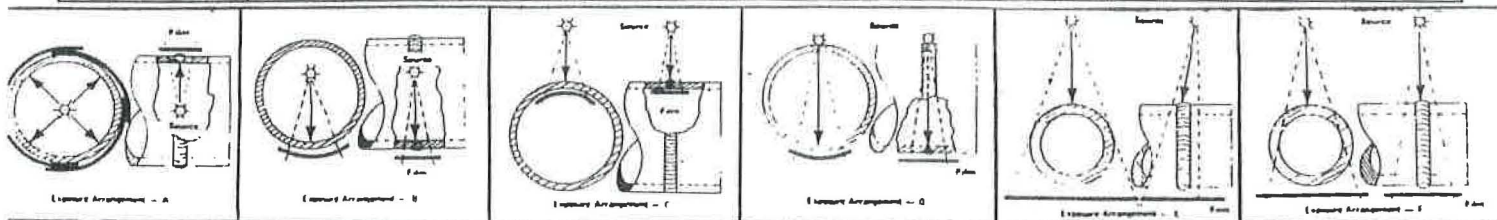
H & G Services, Inc.
 P.O. Box 722305 • Houston, Texas 77272
 (713) 771-1592

CLIENT: DELTA Petro. Green Town Row
 DATE: 04/17/08

TYPE INSPECTION: RT-Weld Quality
 NO. WELDS: 12
 MATERIAL THICKNESS: STD
 SOURCE: Ir 192
 EXPOSURE TIME: 40 sec.

SPECIFICATION: API 1104 contractor: W.C. Streigel
 NO. FILM: 36 FILM SIZE: 70 mm x 21"
 FILM TYPE: AGFA PENETRATOR: ASTM IB
 SOURCE SIZE: 1 x 1 SOURCE STRENGTH: 70 Curies
 SCREENS: Lead .005 x .005 UG 00.02 max.

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
33	16" x .250"	O-B-C-O	✓		1086+00
34			✓		
35			✓		
36			✓		
37			✓		
38			✓		
39			✓		
40			✓		
41			✓		
42			✓		
43			✓		
44			✓		1078+00



CR-CRACK · LP-LACK PENETRATION · LF-LACK FUSION · BT-BURN THROUGH · CCS-CONCAVE STRINGER · S-SLAG · WT-WAGON

INSPECTOR'S APPROVAL

TRAVEL REPORT Sheet - 1

TOTAL HOURS: _____ TOTAL WELDS: 12

MILES FROM _____ TO _____ TOTAL _____

TECHNICIAN D. Dupb LEVEL 75
 (Signature)

STANDBY (BAD WEATHER)
 CONTRACTOR NOT WORKING

ASST. TECH T. Privett

DATE 04/17/08

SHEET NO. 2

EXHIBIT “H”

Dan Green

From: "Pat Diffenbaugh" <Pat.Diffenbaugh@mistrasgroup.com>
Date: Tuesday, September 05, 2017 11:49 AM
To: <dfgreen1@dslextreme.com>; "Ricky Krebs" <Ricky.Krebs@mistrasgroup.com>
Attach: Inspection reports H and G 2008 20170905_0001.pdf
Subject: FW: Mistras Group

Dan,

Thanks. I have copied Ricky Krebs who is the GM for our pipeline group for Mistras (formerly H&G). He will begin trying to track down any certifications available.

Ricky,

Attached are some of the reports for the work that Dan is needing a cert for. What he is needing is the Level II technicians certification during that project can you help him please?

thanks

Pat Diffenbaugh
P: 281-478-1600
F: 713-473-6161
pat.diffenbaugh@mistrasgroup.com



MISTRAS Group, Inc.
4000 Underwood Road · La Porte · TX 77571
www.mistrasgroup.com

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From: Dan Green [mailto:dfgreen1@dslextreme.com]
Sent: Tuesday, September 05, 2017 1:46 PM
To: Pat Diffenbaugh <Pat.Diffenbaugh@mistrasgroup.com>
Subject: Re: Mistras Group

Hi Pat,

Here are 5 of the inspection reports. I looked through all of them and I didn't see any

other names.

Thanks for your help.

Dan

Dan Green
PO Box 45620
Los Angeles, CA 90045
(310) 337-2820 Office
(775) 636-3132 Cell

From: Pat Diffenbaugh
Sent: Tuesday, September 05, 2017 11:40 AM
To: dfgreen1@dslextreme.com
Subject: Mistras Group

Dan,

Please send me a few of the report sheets and I will try to have the pipeline group track down what they can....

Pat Diffenbaugh
P: 281-478-1600
F: 713-473-6161
pat.diffenbaugh@mistrasgroup.com



MISTRAS Group, Inc.
4000 Underwood Road · La Porte · TX 77571
www.mistrasgroup.com

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Dan Green

From: "Ricky Krebs" <Ricky.Krebs@mistrasgroup.com>
Date: Tuesday, September 05, 2017 12:16 PM
To: "Pat Diffenbaugh" <Pat.Diffenbaugh@mistrasgroup.com>; <dfgreen1@dslextreme.com>
Subject: RE: Mistras Group

Mr. Green,

We (Mistras Group) acquired H&G during this timeframe (April 2008) and unfortunately do not have any records or certifications for this individual. From my understanding, all records during the acquisition was stored on a sever and I was not aware of the ware-a-bouts being I was just starting that position approx.. 9 years ago. I wish I could be of more help. I did search the server I have now but with no avail.

If we can be of further service or you need NDE serveries, please do not hesitate and contact us.

Regards,

Ricky Krebs
General Manager
Services Division
P: 281-478-1706
M: 281-989-8667
F: 281-478-1785
ricky.krebs@mistrasgroup.com



MISTRAS Group, Inc.
4000 Underwood Road · La Porte · TX 77571
www.mistrasgroup.com

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From: Pat Diffenbaugh
Sent: Tuesday, September 05, 2017 1:50 PM
To: dfgreen1@dslextreme.com; Ricky Krebs <Ricky.Krebs@mistrasgroup.com>
Subject: FW: Mistras Group

Dan,

Thanks. I have copied Ricky Krebs who is the GM for our pipeline group for Mistras (formerly H&G). He will begin trying to track down any certifications available.

Ricky,

Attached are some of the reports for the work that Dan is needing a cert for. What he is needing is the Level II technicians certification during that project can you help him please?

thanks

Pat Diffenbaugh
P: 281-478-1600
F: 713-473-6161
pat.diffenbaugh@mistrasgroup.com



MISTRAS Group, Inc.
4000 Underwood Road · La Porte · TX 77571
www.mistrasgroup.com

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From: Dan Green [<mailto:dfgreen1@dslextreme.com>]
Sent: Tuesday, September 05, 2017 1:46 PM
To: Pat Diffenbaugh <Pat.Diffenbaugh@mistrasgroup.com>
Subject: Re: Mistras Group

Hi Pat,

Here are 5 of the inspection reports. I looked through all of them and I didn't see any other names.

Thanks for your help.

Dan

Dan Green
PO Box 45620
Los Angeles, CA 90045
(310) 337-2820 Office
(775) 636-3132 Cell

From: Pat Diffenbaugh
Sent: Tuesday, September 05, 2017 11:40 AM
To: dfgreen1@dslextreme.com
Subject: Mistras Group

Dan,

Please send me a few of the report sheets and I will try to have the pipeline group track down what they can....

Pat Diffenbaugh
P: 281-478-1600
F: 713-473-6161
pat.diffenbaugh@mistrasgroup.com



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Dan Green

From: "Dan Green" <dfgreen1@dslextreme.com>
Date: Tuesday, September 05, 2017 11:45 AM
To: "Pat Diffenbaugh" <Pat.Diffenbaugh@mistrasgroup.com>
Attach: Inspection reports H and G 2008 20170905_0001.pdf
Subject: Re: Mistras Group

Hi Pat,

Here are 5 of the inspection reports. I looked through all of them and I didn't see any other names.

Thanks for your help.

Dan

Dan Green
PO Box 45620
Los Angeles, CA 90045
(310) 337-2820 Office
(775) 636-3132 Cell

From: Pat Diffenbaugh
Sent: Tuesday, September 05, 2017 11:40 AM
To: dfgreen1@dslextreme.com
Subject: Mistras Group

Dan,

Please send me a few of the report sheets and I will try to have the pipeline group track down what they can....

Pat Diffenbaugh
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H & G Services, Inc.
 P.O. Box 722305 • Houston, Texas 77272
 (713) 771-1592

Contractor: W.C. Streigel

CLIENT: DELTA Petro.

DATE: 04-17-08 Green Town Row

PE INSPECTION RT-Weld Quality
 WELDS 32

SPECIFICATION API 1104 1st Ed.

NO FILM 96

FILM SIZE 70mm x 21"

MATERIAL THICKNESS STD

FILM TYPE AGFA

PENETRATOR ASTM 1B

SOURCE I + 192

SOURCE SIZE 1 x 1

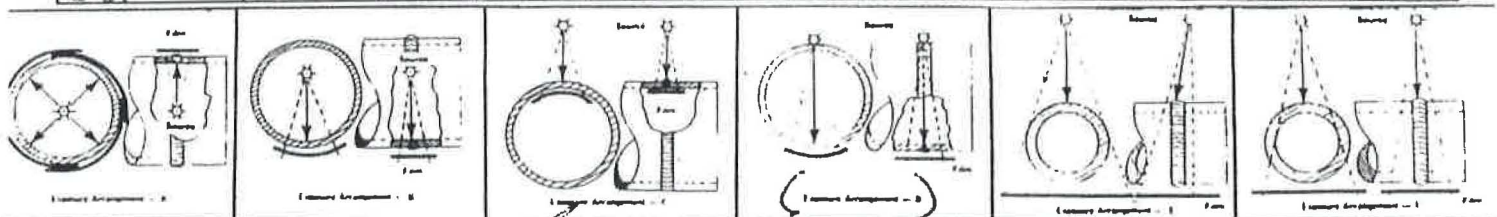
SOURCE STRENGTH: 70 Curies

EXPOSURE TIME: 40 sec.

SCREENS Lead 005 x 005

UG 00 02 max.

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
1	16" x .250"	O-B-C-O	✓		1098 + 49
2			✓		
3			✓		
4			✓		
5			✓		
6			✓		
7			✓		
8			✓		
9			✓		
10			✓		
11			✓		
12			✓		
13			✓		✓
14			✓		1107 + 33
15			✓		1097 + 06
16			✓		
17			✓		
18			✓		
19			✓		
20			✓		
21			✓		
22			✓		
23			✓		
24			✓		
25			✓		
26			✓		
27			✓		
28			✓		
29			✓		
30			✓		
31			✓		✓
32			✓		1086 + 62



CR-CRACK LP-LACK PENETRATION LF-LACK FUSION BT-BURN THROUGH CCS-CONCAVE STRINGER S-SLAG WT-WAGON

INSPECTOR'S APPROVAL [Signature]

TRAVEL REPORT

1 hr. Per Diem

TOTAL HOURS: 11 TOTAL WELDS: 32

MILES FROM _____ TO _____ TOTAL 40

TECHNICIAN W. Duplo LEVEL II
 (Signature)

STANDBY (BAD WEATHER)
 CONTRACTOR NOT WORKING

ASSI. TECH T. Privett

DATE 04/17/08 SHEET NO 1

Contractor: W.C. Steigel

H & G Services, Inc.

P.O. Box 722305 • Houston, Texas 77272
(713) 771-1592

CLIENT: Delta Petro.

DATE: 04/18/08 Green Town Row

TYPE INSPECTION RT-Weld Quality

SPECIFICATION API 1104 19th ed.

NO WELDS 32

NO. FILM 96

FILM SIZE 70mm x 21"

MATERIAL THICKNESS STD

FILM TYPE AGFA

PENETRATOR: ASTM 1B

SOURCE Ir 192

SOURCE SIZE 1 x 1

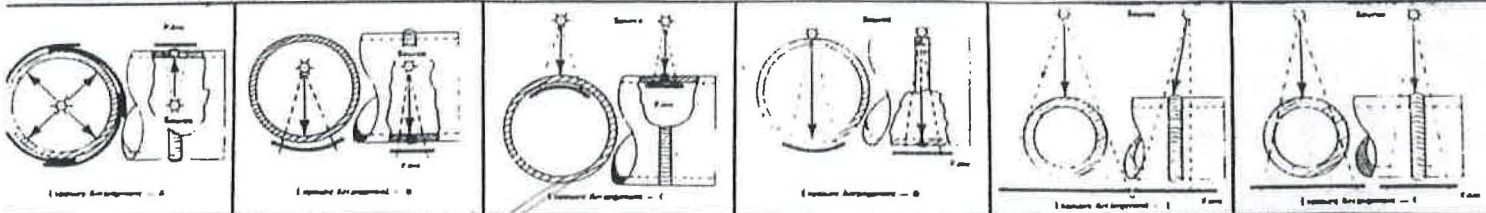
SOURCE STRENGTH: 69 Curies

EXPOSURE TIME 40 sec.

SCREENS Lead 005 x 005

UG 00 02 max.

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS
45	16" x .250"	0-B-C-0	✓		1077+40
46			✓		
47			✓		
48			✓		
49			✓		
50			✓		
51			✓		
52			✓		
53			✓		
54			✓		
55			✓		
56			✓		
57			✓		
58			✓		
59			✓		
60			✓		
61			✓		
62			✓		
63			✓		
64			✓		
65			✓		
66			✓		
67			✓		
68			✓		
69			✓		
70			✓		
71			✓		
72			✓		
73			✓		
74			✓		
75			✓		
76			✓		1055+32



CR-CRACK LP-LACK PENETRATION LF-LACK FUSION BT-BURN THROUGH CCS-CONCAVE STRINGER S-SLAG WT-WAGON

INSPECTOR'S APPROVAL

TRAVEL REPORT 1 hr. Per Diem

TOTAL HOURS: 11 TOTAL WELDS: 32

MILES FROM _____ TO _____ TOTAL 40

TECHNICIAN W. Dugan LEVEL II
(Signature)

STANDBY (BAD WEATHER)
CONTRACTOR NOT WORKING

ASST TECH T. Privett

DATE 04-18-07 SHEET NO. 1

H & G Services, Inc.

P.O. Box 722305 • Houston, Texas 77272
(713) 771-1592

Contractor: D.C. Strickland

CLIENT: Delta Petro.

DATE: 04-18-08 Green Town Road

TYPE INSPECTION: RT-Weld Quality

SPECIFICATION: API 1104

NO WELDS: 24

NO. FILM: 72

FILM SIZE: 70mm X 21"

MATERIAL THICKNESS: STD.

FILM TYPE: AGFA

PENETRATOR: ASTM 1B

SOURCE: Ir-192

SOURCE SIZE: 1x1

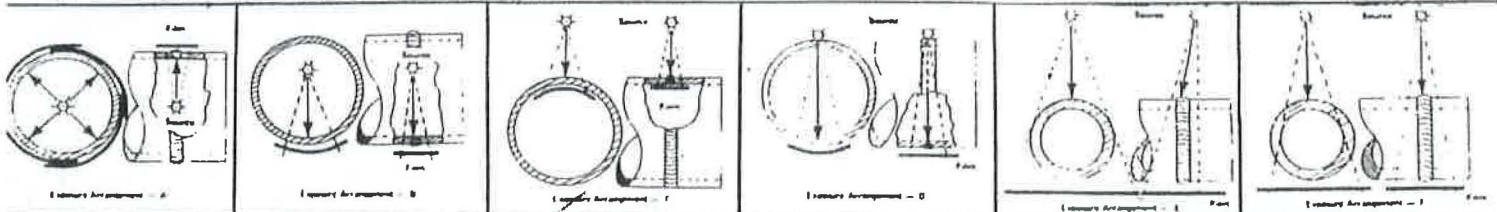
SOURCE STRENGTH: 69 Curies

EXPOSURE TIME: 40 sec.

SCREENS: Lead 005 x .005

UG 00 02 max

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS
77	16" x .250"	0-B-C-0	✓		1054 + 72
78			✓		
79			✓		
80			✓		
81			✓		
82			✓		
83			✓		
84			✓		
85			✓		
86			✓		
87			✓		
88			✓		
89			✓		
90			✓		
91			✓		
92			✓		
93			✓		
94			✓		
95			✓		
96			✓		
97			✓		
98			✓		
99			✓		
100	✓	✓	✓		1045 + 00



CR-CRACK · LP-LACK PENETRATION · LF-LACK FUSION · BT-BURN THROUGH · CCS-CONCAVE STRINGER · S-SLAG · WT-WAGON

INSPECTOR'S APPROVAL

TRAVEL REPORT

TOTAL HOURS: 1 TOTAL WELDS: 24

MILES FROM _____ TO _____ TOTAL _____

TECHNICIAN: A. Dupont LEVEL II
(Signature)

STANDBY (BAD WEATHER)
CONTRACTOR NOT WORKING

ASST TECH: T. Privett

DATE: 04-18-08 SHEET NO: 2

H & G Services, Inc.

P.O. Box 722305 • Houston, Texas 77272
(713) 771-1592

Contractor: W. C. Steigel

CLIENT: Delta Petro.

DATE: 04/19/08 Green Town Road

E INSPECTION RT-weld quality

WELDS: 32

SPECIFICATION: API 1104

NO. FILM: 96

FILM SIZE: 70mm

MATERIAL THICKNESS: STD

FILM TYPE: AGFA

PENETRATOR: ASTM 1B

SOURCE: Ir¹⁹²

SOURCE SIZE: 1 x 1

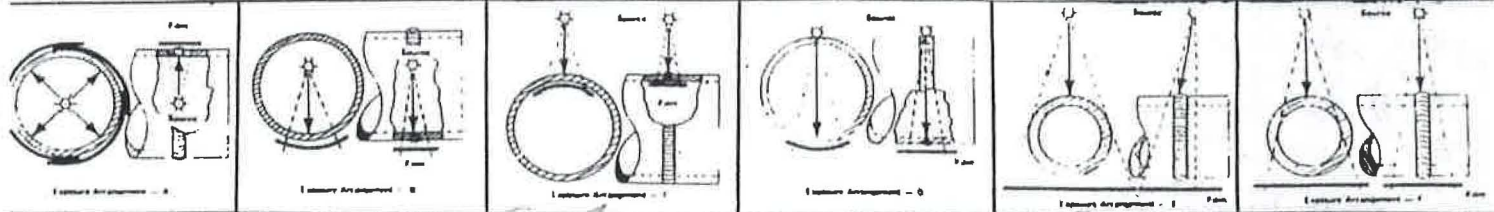
SOURCE STRENGTH: 69 Curies

EXPOSURE TIME: 40s

SCREENS: Lead 005 x 005

UG 00.02 max.

WELD NO. XR NO.	PIPE SIZE WALL THK.	LOCATION	COMPLIES	DOES NOT COMPLY	REMARKS STA. No.
101	16" X .250"	0-B-C-0	✓		1044+40
102			✓		
103			✓		
104			✓		
105			✓		
106			✓		
107			✓		
108			✓		
109			✓		
110			✓		
111			✓		
112			✓		
113			✓		
114			✓		
115			✓		
116			✓		
117			✓		
118			✓		
119			✓		
120			✓		
121			✓		
122			✓		
123			✓		
124			✓		
125			✓		
126			✓		
127			✓		
128			✓		
129			✓		
130			✓		
131			✓		
132			✓		1025+20



CR-CRACK LP-LACK PENETRATION LF-LACK FUSION BT-BURN THROUGH CCS-CONCAVE STRINGER S-SLAG WT-WAGON

INSPECTOR'S APPROVAL [Signature]

TRAVEL REPORT 1hr, Per Diem

TOTAL HOURS: 11 TOTAL WELDS: 32

MILES FROM _____ TO _____ TOTAL 40

TECHNICIAN W. Rupp LEVEL II
(Signature)

STANDBY (BAD WEATHER)
CONTRACTOR NOT WORKING

ASST TECH T. Privett

DATE 04/19/08 SHEET NO. 1