FRONTIER field services, llc
southern ute indian tribe

May 10, 2011

Mr. Daniel Sanchez
Enforcement and Compliance Manager
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

VIA EMAIL and FIRST CLASS MAIL
RETURN RECEIPT REQUESTED

RE: SUBMITTAL OF FRONTIER FIELD SERVICES, LLC MALJAMAR GAS PLANT H_2S CONTINGENCY PLAN PURSUANT TO §19.15.11 et seq. NMAC

Dear Mr. Sanchez:

Pursuant to your letter of March 1, 2011 regarding the requirements under current OCD rules pertaining to H_2S under §19.15.11 et seq. NMAC we submitted our existing Rule 118 plan on March 17th and at that time informed you that we were already in the process of having Geolex, Inc.® revise our plan to be consistent with Rule 11 and our intent to submit it prior to your August 2011 deadline.

As mentioned in our letter of March 17, 2011 and in keeping with Frontier's commitment to safety and to operating in compliance with all applicable state, federal and local regulations, attached you will find the plan revised to conform to all requirements of NMOCD's Rule 11 (§19.15.11 et seq. NMAC). I trust that this submission brings Frontier Field Services, LLC up to date with all of NMOCD's rules relative to H_2S contingency planning.

If you have any questions or require additional information, please contact me at 575-706-6983 or Ms. Julie W. Gutiérrez at 505-842-8000.

Sincerely,
Frontier Field Services, LLC.

John Prentiss
Area Manager

Enclosure

cc: Carl Chavez, NMOCD Environmental Bureau
OCD District Office Hobbs
Richard Goodyear, NMED-AQB w/o enclosure

Case No. 14664
FRONTIER
FIELD SERVICES
Exhibit #3

FRONTIER field services, llc
southern ute indian tribe

H_2S Contingency Plan

Frontier Maljamar Gas Processing Plant
1001 Conoco Road
PO Box 7
Maljamar, NM 88264
(575-676-3528)

May 10, 2011

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1) **Frontier Field Services, LLC, Maljamar Gas Processing Plant**
The physical location of the Plant is in Section 21, Township 17S, Range 32E, Lea County, NM. The plant is approximately three miles south of the town of Maljamar, NM, in a very isolated area. Driving Directions to the plant are as follows: (1) At the Junction of Highway 82 and County Road 126 go south 2.6 miles and turn right onto Conoco Road and take first paved road south to the office. (2) At the Junction of Highway 529 and County Road 126 go north 1.9 miles and turn left onto Conoco Road and take first paved road south to the office.

The mailing address of the plant is:
1001 Conoco Road
P.O. Box 7
Maljamar, NM 88264

2) **The Maljamar Gas Plant Measurement Office on the Plant site (See Map A-1)** will serve as the Communication Center during the response to an H_2S release. If this location must be evacuated, the secondary staging area located at the intersection to Conoco Road and CR 126A (See Map A-1) will be used to direct activities, utilizing cell phones and company radios.

I. Introduction

[API RP-55 7.1]

The Frontier Field Services Maljamar Processing Plant is a natural gas processing plant which process field gas containing hydrogen sulfide (H_2S) and handles and/or generates sulfur dioxide (SO_2). This H_2S contingency plan was created to document procedures that are to be followed in the event of an H_2S release that occurs at the plant. This plan complies with the ***New Mexico Oil Conservation Division (OCD) Rule 11(§ 19.15.11 et. seq. NMAC)***. The plan and operation of the Maljamar Plant also conform to standards set forth in ***API RP-55 "Recommended Practices for Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide".*** The Maljamar Plant does not have any storage tanks in which hydrogen sulfide or other gas or gas products are stored, and thus, API regulations and OCD regulations (specifically 19.15.11.12.E NMAC) relative to those types of storage are not applicable for this plant.

II. Scope

[API RP-55 7.2]

This contingency plan is specific to the Frontier Maljamar Gas Processing Plant. It contains procedures to provide an organized response to an unplanned release from the plant and documents procedures that would be followed to alert and protect any members of the public, residents in surrounding areas and/or contractors working on or around the plant in the event of an unplanned release. This H_2S Contingency Plan has been prepared to minimize the hazard resulting from an H_2S release. It will be used to inform company personnel, local emergency responders and the public of actions to be taken before, during and after an H_2S release. All operations shall be performed with safety as the primary goal. The primary concern of Frontier Field Services Maljamar Gas Plant, during an H_2S release, is to protect Company employees, contractors and the public; the secondary concern is to minimize the damage and other adverse effects of the emergency. Any part of the operation that might compromise the safety of individuals will cease until the operation can be re-evaluated and the proper engineering controls to assure safety are implemented. No individual should place the protection of the Plant property above his or her own personal safety.

It must be kept in mind that in a serious situation involving a Hydrogen Sulfide (H_2S) release, not only Frontier Field Services personnel are involved, but local Fire Departments, Law Enforcement, County and even State of New Mexico agencies may be interested parties. Cooperation will expedite all decisions. In any emergency situation involving a H_2S release, delegation of duties will be made to appropriate employees and groups. These duties will be reviewed on an annual basis to ensure complete understanding which will facilitate a well-coordinated response by all involved personnel to the emergency situation.

III. Plan Availability

[API RP-55 7.3]

This contingency plan shall be available to all personnel responsible for implementing any portion of the plan (see Appendix E for distribution list). Copies of the plan will be distributed to the following agencies: OCD; New Mexico Department of Public Safety (DPS), Local Emergency Planning Committee (LEPC); Maljamar, Lovington, Artesia, Hobbs and Loco Hills, Fire Departments; New Mexico State Police Lea County District Office; Hobbs, Lovington and Carlsbad Sheriff's Offices. The Plan will be available at the following Frontier Field Services, LLC locations: Maljamar Processing Plant, Maljamar, NM; Frontier Field Services Main Office, 4200 Skelly Drive, Suite 700, Tulsa, OK 74135.

IV. Emergency Procedures
[NMAC 19.15.11.9.B(2)(a)] [API RP-55 7.4 a] [29 CFR 1910.1200]

A. Responsibilities and Duties of Personnel during an Emergency

Plant evacuation for all visitors and Plant personnel that are not operators begins with the 10 ppm H_2S intermittent alarm and/or flashing yellow beacon. The Plant operators will make a determination of the level of the incident as detailed below and will respond immediately, if required, by donning 30-minute Self Contained Breathing Apparatus (SCBA). They will determine if any personnel are in distress and will assist any distressed personnel to evacuate to a designated Emergency Assembly Area. Emergency services (911) will be contacted if there are injuries or as otherwise deemed necessary. At the sound of the alarm and/or upon observation of the flashing beacons, all other personnel in the Plant are to stop work, check the prevailing wind direction and immediately proceed along designated evacuation routes and/or upwind to the pre-designated Emergency Assembly Area(s) that are described in Appendix D.

Roll call shall be conducted at the Emergency Assembly Area to assure all personnel have evacuated safely. This facility requires that all visitors check in before entering the Plant, and thus the check-in sheet will be used at the Emergency Assembly Areas to make a full accounting of all personnel and visitors.

The Plant Manager or designee will serve as the Incident Commander (IC) and head of the Incident Command Team. The IC will bear the overall responsibility to see that objectives of the Plan are met and to insure the safety of the public and all personnel involved in the response. The IC will monitor all activities being carried out. Members of the Maljamar Plant Incident Response Team will keep him informed of conditions throughout the release emergency. The IC's role is to ensure control of the emergency incident. He will notify or delegate responsibility for notification of all Frontier or contract personnel and any civil authorities needed to respond to the incident. The IC will assign any additional personnel to support roles as needed. Upon notification or discovery of an H_2S release, the following steps will be initiated by the Frontier IC or designee:

1. Assume the role of Incident Commander (IC) and gather as much information as possible regarding the release of H_2S.
2. Alert other emergency response personnel of the potential hazard.
3. Arrange for support personnel to be sent to the location of the release.
4. Proceed to the site to assess emergency response actions needed
5. Set up an on-site command station
6. Implement the H_2S Incident Response Plan as necessary
7. Remain on site as IC until relieved or the incident is under control.

The following is a description of key personnel responsibilities during an Incident Response. Depending on the specific circumstances surrounding the release, a single individual may serve multiple roles for key personnel outlined below.

Incident Commander (IC).

a. Obtain initial incident briefing from on scene or prior IC, if available
b. Ensure the safety of all personnel involved in the response.
c. Assess the incident situation and develop appropriate strategies. Conduct site investigations as needed. Establish response priorities.
d. Conduct initial and ongoing briefings with IC staff..
e. Activate elements of the Incident Command System as required.
f. Ensure planning response meetings are conducted.
g. Keep Frontier Field Services line and senior management informed of response situation.
h. Manage all incident operations.
i. Ensure a Frontier Field Services media representative has approved all information releases prior to release or issue.

1. **Operations Section Chief.**
   a. Obtain briefing from IC.
   b. Ensure the safety of all personnel under Operations Section Chief supervision.
   c. Brief and assign operations personnel in accordance with Incident Response needs.
   d. Supervise operations; ensure personnel have the equipment, materials supplies and support needed to respond in a safe, efficient and effective manner.
   e. Determine Operations Section needs and request additional resources as necessary.
   f. Report information about special activities, events and occurrences to the IC.
   g. Ensure site security.

2. **Safety Officer**
   a. Obtain briefing from IC.
   b. Exercise emergency authority to stop and prevent unsafe acts.
   c. Apply for manpower, equipment and services necessary to ensure safe operations at all sites.
   d. Ensure hazard communications systems, including Material Safety Data Sheets (MSDS's), are in place at all involved field locations.
   e. Identify hazardous situations associated with the incident.
   f. Ensure all regulatory requirements as related to safety are satisfied.
   g. Ensure that employees and contractors entering the clean-up sites are properly briefed as to the dangers and precautions to be observed at the site. Ensure only those involved in the response are involved in the clean-up of hazardous materials; otherwise, review their training and qualifications.
   h. Determine the types of air monitoring equipment (direct reading, personal monitoring, etc.) necessary to support response operations.
   i. Participate in response planning meetings.
   j. Lead Incident Investigation Teams for any incident occurring during or after the emergency. Document and review findings with all team members

3. **Logistics Section Chief**
   a. Obtain briefing from the IC.
   b. Identify and provide logistics support for planned and expected operations.
   c. Coordinate and process requests for additional resources.
   e. Assist Officers and Section Chiefs from other functions in resources procurement.
   f. Advise on current service and support capabilities.

5. **Information Officer**
   a. Obtain briefing from IC.
   b. Establish a single incident information center whenever possible.
   c. Identify and communicate public, community, and media concerns to the IC.
   d. Respond to special requests for information.

6. **Planning Section Chief**
   a. Obtain briefing from IC.
   b. Reassign initial response and incident personnel into incident positions as needed.
   c. Assemble information on alternative strategies.
   d. Identify need for use of specialized resources.
   e. Advise IC staff of any significant changes in incident status.
   f. Distribute IC's orders and prepare plans for implementation.

7. Other Employees

All employees on duty should be on standby awaiting instructions from the IC. They may be called on to provide support contacting vendors for supplies, contacting local support groups for assistance to the general public, provide onsite logistical support to the responders, blocking roads, assist with evacuations, etc.

No employee or contractor will be asked to provide incident scene support that they are not comfortable in their ability to perform or have not been specifically trained to perform.

B. Immediate Action Plan

1. The following outlines the Immediate Action Plan that is illustrated by the response flow diagrams included in Appendix B. The Immediate Action Plan is divided into three levels which are activated in response to increased severity of an unanticipated release of H_2S at the Plant. The following procedures are to be used when responding to an H_2S release. In the event of activation of an H2S alarm, the Plant Operator will assess the situation pursuant to Paragraph IV. A above and determine the appropriate level of response consistent with Immediate Action Plan. Additional or long-term response actions will be determined on a case-by-case basis, if needed, once the Incident Command Center (ICC) and System (ICS) are established following the immediate response.

Level	Alarms	Actions
I	Continuous audible alarm sounded and flashing blue lights activated for H_2S at 10 ppm or greater.	**1.** The audible signal for a Plant emergency and evacuation is a continuous siren alarm and a flashing red beacon. An H_2S alarm is activated and a blue light flashes when 10 ppm or greater are detected. The audible alarm and flashing blue lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate back-up battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure. A computer in the control room and in the Plant Operator's office establishes which H_2S monitor has activated the alarm and/or flashing blue beacon. At the initial sound of the intermittent alarm or the flashing blue beacon, assigned operator will assess the location of the alarm and make an initial determination of the cause of the alarm. The operator will attempt to rule out potential false alarms based on sensor malfunction or other conditions and if a release is detected, he will make a determination of prevailing wind and estimated magnitude of the release. If the cause of the release is a minor problem such as a packing or seal leak, the operator will take the necessary steps to correct the situation and eliminate the source of the release. If necessary, the operator will make a call to the supervisor on call for back-up. Once the operator has back-up they will put on a 30 minute self-contained breathing apparatus (SCBA). (There is one operator at the plant at all times, and at least 13 SCBA devices are located where they are accessible to the operator.) All other personnel in the Plant complex shall immediately evacuate the Plant and go to the closest Emergency Assembly Area (see Appendix D, Map D-1). The operators, using a buddy system will first help any persons in distress evacuate to the Emergency Assembly Area. If deemed necessary by the Plant Manager (IC) or Plant Supervisor, local emergency response service providers will be contacted by Plant personnel designated by the IC or Plant Supervisor. **2.** All entities within the 500 ppm radius of exposure (ROE) will be notified (by telephone) of a release if the audible alarm is activated at 10 ppm H_2S or greater. Notification will be done by personnel designated by the IC or his designee. The nature of the release and status of containment will be conveyed. Businesses will be advised to report the incident to employees working near the Plant and to alert any third party contractors or service companies working in the Plant vicinity or imminently scheduled to work in the vicinity of the release. All individuals will be instructed to leave the area and not to enter/re-enter area until further notice. There are no known residences within the 500 or 100 ppm ROE. The only businesses within the 100 ppm ROE are an unmanned compressor station owned by Mid America Pipeline Company and an unmanned Conoco Phillips Field Warehouse. In the event of an H_2S release, the Conoco Philips Field Warehouse will be contacted by Frontier personnel, and if individuals are present they will be advised either to evacuate to an Emergency Assembly Area or to shelter in place, as deemed appropriate by the IC. Frontier personnel will also make a visual inspection of the ROE area to insure that no individuals are seen inside the ROE, and if any are observed, they will be advised to immediately evacuate to the designated Emergency Assembly area, described above. **3.** Wearing the SCBAs, the operator(s) will attempt to fix the cause of the release. The H_2S levels at the Emergency Assembly Area will be monitored with a hand held or personal monitor. If H_2S levels in the Emergency Assembly Areas exceed 10 ppm H_2S, everyone will evacuate to an alternate Emergency Assembly Area, as designated by the IC (See Appendix D, Map D-1). **4.** The IC will set up secondary re-entry team(s) with 30 minute SCBAs to re-enter and resolve the situation. Re-entry will occur in 15 minute shifts at the direction of the IC until the problem is resolved or the emergency shutdown (ESD) is activated. If release is resolved and monitored levels in the Plant are less than 10 ppm H_2S, personnel may re-enter the Plant. The OCD shall be notified within four hours of any release that activates the Plan. If the release is not resolved and H_2S levels continue to increase, Level II Response is indicated.

Levels	Alarms	Actions
II	Continuous audible alarm sounded and flashing blue lights activated and H_2S greater than 20 ppm measured with handheld device	**1.** The continuous audible alarm and blue flashing lights indicate the detection of H_2S greater than or equal to 10 ppm and the operator(s) have been unable to stop the release of H_2S or level measured with handheld device exceeds 20 ppm. The audible alarm and flashing lights are redundant systems which function independently of one another so that should one system fail, the other would remain active. These systems incorporate back-up battery capabilities as recommended in API RP 55 which insure their operation in the event of a power failure. A control panel in the Process Control Room establishes which H_2S monitor has activated the alarm and or flashing blue beacon. If Level II Response is activated, operators will immediately put on 30 minute SCBAs, and all other personnel in the Plant complex will put on emergency escape packs (located throughout the plant) and evacuate using the evacuation routes to the Emergency Assembly Area specified by the IC or his designee (see Appendix D Map D-1). The operators, upon suit up with the SCBAs, will first help any persons in distress evacuate to the Emergency Assembly Area. See Section IV. F. (see Page12) for a listing of respirator equipment available at the Plant. If deemed necessary, local emergency response service providers will be contacted by the IC or his designee. **2.** All other entities within the 100 ppm ROE will be contacted by phone and notified of release and asked to evacuate. The nature of the release and status of containment will be conveyed. Depending on release status and prevailing wind conditions, some entities within the 100 ppm ROE may be asked to shelter in place rather than evacuate. Those entities will be instructed to close any windows and shut off any air conditioning/heating until further notice. In addition, they will be instructed to contact other employees/residents not currently present and instruct them not to enter/reenter the area until further instruction. **3.** The LEPC and law enforcement will be contacted by phone and notified of the release and status of containment. The IC will assign responsibility for notification to appropriate personnel. There are no known residences within the 100 ppm ROE. The only businesses are an unmanned compressor station owned by Mid America Pipeline Company and an unmanned Conoco Phillips Field Warehouse. In the event of an H_2S release, the Conoco Philips Field Warehouse will be contacted by Frontier personnel, and if personnel are present, they will be advised either to evacuate to an Emergency Assembly Area or to shelter in place, as deemed appropriate by the IC. Frontier personnel will also make a visual inspection of the ROE area to insure that no individuals are seen inside the ROE, and if any are observed, they will be advised to immediately evacuate to the designated Emergency Assembly Area as described above. **4.** Operator(s) with 30 minute SCBAs will assess the release and attempt to resolve it. If after 15 minutes on scene there is no resolution, the operator(s) will notify the Plant Manager to determine if the emergency shutdown (ESD) should be activated. **5.** If monitored H_2S levels at the Emergency Assembly Area exceed 10 ppm, everyone will evacuate to an alternate Emergency Assembly Area, as designated by the IC. **a)** Re-entry will occur in full SCBA and in 15 minute shifts at the direction of the IC until IC determines problem has been resolved or emergency shut downs (ESDs) are activated. **b)** If release is resolved and monitored levels of H_2S in the Plant are less than 10 ppm, personnel may return to Plant. The OCD shall be notified within four hours of any release that activates the Plan. All entities previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels at the Plant. **c)** No resolution requires activation of Level III Response with notifications and reporting as per Plan. If the release is not resolved and/or H_2S levels continue to increase, Level III Response is indicated. **5.** Initiate and maintain a Chronological Record of Events log.

Level	Alarms	Actions
III	Continuous audible alarm sounded and flashing blue lights activated for catastrophic release; red lights for fire or explosion ESD alarm is a continuous audible alarm with flashing red lights	**1.** Level III Response indicated in the event of a catastrophic release; fire; explosion; a continuous release of maximum volume for 24 hours; or NMAC 19.15.11: mandatory activation of indication of 100 ppm in any defined public area; 500 ppm at any public road; or 100 ppm at a distance greater than 3000 feet from the site or the release. If H_2S is at 20 ppm or greater and repair efforts at Level II have been unsuccessful, then a Level III response may be implemented at the discretion of the IC. Emergency Shutdown (ESD) procedures will immediately be implemented if a Level III Response is initiated. **2.** Road blocks will be set up at Conoco Rd and CR 126. (See Appendix D, Map D-1). **3.** All personnel shall have evacuated to a designated Emergency Assembly Area. Evacuation of all entities within the 100 ppm ROE will have been confirmed. Full H_2S Plan with all notifications and public agency involvement will be implemented. Notifications to all entities within the 100 ppm ROE will include the nature of the release and status of containment. Notifications will include but are not limited to the following: **a)** All businesses within the 100 ppm ROE will be instructed to immediately alert all company personnel, third party contractors and/or services companies working in the area, and those imminently scheduled to work in the area, of the release and evacuation status of the Plant. They will be instructed to immediately leave and/or not enter/reenter the area within the roadblocks until further instruction. **b)** All other entities within the 100 ppm ROE will be instructed to immediately shelter in place, if appropriate, based on the source of the release and the wind direction. Those entities will be instructed to close any windows and shut off any air conditioning/heating until further notice. In addition, they will be instructed to contact other employees/residents not currently present and instruct them to not enter/reenter the area until further instruction. **c)** The IC will make the decision based on, but not limited to, H_2S concentration and wind direction, whether a safe evacuation can be implemented, and recommend an evacuation route. There are no known residences within the 100 ppm ROE. The only businesses within the 100 ppm ROE are an unmanned compressor station owned by Mid America Pipeline Company and an unmanned Conoco Phillips Field Warehouse. In the event of an H_2S release, the Conoco Philips Field Warehouse will be contacted by Frontier personnel, and if personnel are there, they will be advised either to evacuate to an Emergency Assembly Area or to shelter in place, as deemed appropriate by the IC. Frontier personnel will also make a visual inspection of the 500 ppm ROE area to insure that no individuals are seen inside the ROE, and if any are observed, they will be advised to immediately evacuate to the designated Emergency Assembly area, described above. **4**. If escaping vapors have ignited, the vapors should be allowed to continue to burn unless the fire endangers personnel, other property, or other equipment. **5.** When applicable, maintain communication with the Plant Manager, or his designee, to keep him up-to-date of the situation and the action taken prior to his arrival at the location. **6.** Initiate and maintain a Chronological Record of Events log. **7.** Within one hour after the activation of the H_2S Plan, begin agency notifications by calling OCD and National Response Center (NRC). **8.** Establish media staging area adjacent to the Emergency Assembly Area and direct all media to it. **9.** Once resolved and monitored levels in the Plant and at Emergency Assembly Area are less than 10 ppm, roadblocks will be removed, and all entities within the 100 ppm ROE will be allowed to return. All entities previously notified will be informed that the release has been resolved and advised of the current monitored H_2S levels. **10.** Monitoring will continue after problems are abated, at the direction of the Plant Manager **11.** Agency reports to be submitted as required.

C. Telephone Numbers and Communication Methods

1. Emergency Services

AGENCY	TELEPHONE #
Lovington Fire Department	(575) 369-2359
Maljamar Fire Department	(575) 676-4100
Artesia Fire Department	(575) 746-5050
Hobbs Fire Department	(575) 397-9308
Loco Hills Fire Department	(575) 677-2349
Ambulance Services Hobbs	(575)397-9308
Artesia	(575) 746-5050
Carlsbad	(575) 885-2111
Lovington	(575) 396-2359
Hospitals	
Artesia General	(575) 748-3333
Carlsbad Medical Center	(575) 887-4100
Lovington-Nor Lea	(575) 396-6611
Hobbs- Lea Regional	(575) 392-6581
Lubbock University Medical Center (UMC) Level I Trauma Center	(806)775-8200
State Police (HMER) Eddy County	(575) 885-3137
Poison Control (Albuquerque)	(800) 222-1222
Helicopter Services	
Lifeguard (Albuquerque)	1-888-866-7256
Southwest Medivac (Hobbs)	1-800-971-4348
AeroCare (Lubbock)	1-800-823-1991
Air Med (El Paso)	(915) 772-9292

2. Government Agencies

AGENCY	TELEPHONE #
Oil Conservation Division, Santa Fe, NM (OCD) Oil Conservation District Office (Artesia) Air Quality Bureau, Santa Fe, NM	(505) 476-3440 (575) 748-1283 (505) 827-1494
US BLM (Carlsbad District Office)	(575) 887-6544
Local Emergency Planning Committee (LEPC)	(575) 887-9511
National Response Center (NRC)	1-800-424-8802

3. Operators and Contractors

COMPANY	SERVICE	CONTACT	PHONE
B&H Construction	Construction/Maint.	Mike Wright	505-887-9755
Cooper Cameron Valves	Valve Repair	Dean Bohannon	432-362-1151
Cubix Corp.	Emissions Testing	Marc McDaniel	512-243-0202
Desert X-Ray	X-Ray Services	Elic Brymer	432-363-0669
E. D. Walton Const.	Construction Services	Wade Lancaster	800-657-9190
Environmental Plus	Spill Remediation	Gabino Rosa	505-394-3481
Ferguson Const.	Construction Services	Mark Wieser	505-396-3689
Fite Fire & Safety	Safety Services	Tim Nolen	432-689-6492
Gandy Corp.	Oilfield Service	Larry Gandy	505-396-4948
Hanover Compression	Compression Service	Vicki Egan	281-447-8787

Hughes Services	Vacuum Service	Donnie Mathews	505-677-3113
Industrial Insulation	Insulation Service	Scott Fulton	432-332-8203
Kenemore Welding	Welding Service	George Kenemore	505-676-2332
Mark's Crane & Rigging	Crane Services	David Landreth	432-337-1538
Mobile Labs	Laboratory Service	Jenny Linley	432-337-4744
Permian Valve Repair	Valve Repair	Raymond Tucker	432-381-1313
Plant Maint. Services	Chemical Cleaning	Dale Carter	432-580-5900
BJ-Coiltec	Nitrogen Services	Stephen Baugh	432-683-1887
Smith & Son's	Construction Service	Randy Smith	505-397-1852
Southwest Safety	Safety Services	Scott Magness	505-392-8080
TWS, Inc.	Crane, Man Lift Service	Randy Gandy	505-398-3811

4. Public

N/A There are no residences within the 100 ppm ROE. The plant is located in a very isolated area.

5. Frontier Internal Call List

NAME	TITLE	Office #	Cell #	Home #
	Maljamar Plant Control Room	(575) 676-2400		
	24 Hour Emergency Number	(800) 503-5545		
Mike Hicks	President	(918) 388-8417	(918) 699-5738	
John Prentiss	Plant Manager/Incident Commander	(575) 676-3528	(575) 706-6983	(575) 885-1265
Joe Ysusi	Manager, Compliance Safety Officer	(575) 676-3505	(575) 706-9670	(575) 746-2213
Steve Maker	Operations Section Chief	(575) 676-3502	(575) 361-3108	(575) 396-3771
Rudy Lizardo	Maintenance Foreman, Planning Section Chief	(575) 676-3504	(575) 361-0135	(575) 396-3771
Jerry Wright	Measurement Foreman, Information Officer	(575) 676-3506	(575) 361-0154	(575) 396-5556
Joe Calderon	Field Foreman, Logistics Section Chief	(575) 676-3506	(575) 361-0148	(575) 885-3504

6. Frontier Field Services, LLC will use 2-way radios and telephones to communicate internally. Telephone will be used for external communication. Land lines and high speed internet access are available at the plant office.

D. Location of Nearby Residences, Roads, and Medical Facilities

1. There are no residences are located within the ROE of the Plant.

2. The following roads are located within the ROE:
   a) Various lease roads.
   b) Conoco Phillips Field Warehouse service roads
   c) Mid America Pipeline Compressor Station service roads

3. The following facilities are located within the ROE of the Plant:
   a) Mid America Pipeline Compressor Station
   b) Conoco Philips Field Warehouse
   The Mid America Compressor Station is an unmanned facility. The Conoco Philips Field Warehouse has no employees who regularly work at that facility. In the event of an H2S release, Conoco Philips will be contacted by Frontier personnel identified by the IC or his designee. If personnel are there, they will be advised to evacuate or shelter in place as deemed appropriate the IC.

4. There are no medical facilities located within the ROE.

5. In addition to notifying the facilities listed above, Frontier personnel will make a visual inspection of the ROE area to insure that no individuals are seen inside the ROE, and if any are observed, they will be advised to immediately evacuate to the designated Emergency Evacuation Area, described above.

E. Evacuation Routes, Emergency Assembly Areas, and Road Block Locations

1. The Maljamar Gas Plant Measurement office will serve as the Communication Center during the response to an H_2S release. If this location must be evacuated, the secondary staging area located at the intersection to Conoco Road and CR 126A will be used to direct activities, utilizing cell phones and company radios. Personnel not directly involved in the response will be instructed to refrain from using company mobile phones, hand held radios and telephones during a response.

2. Evacuation Routes and Emergency Assembly Areas are depicted on Map D-1 in Appendix D.

3. Pre-planned road block locations are designated near the Emergency Evacuation areas on County Road 126 and Conoco Road and are depicted on Map D-1 in Appendix D. Each location will have pre-positioned, portable road barriers with lights. The locations will have flashing lights and warning signs. The IC will designate a representative to staff each of the roadblocks. If deemed necessary by the IC, the State or Local Police will be asked to assist with maintaining the roadblocks.

F. Monitoring Equipment, Alarm Systems, Safety Equipment, and Supplies Available

1. EMERGENCY SHUTDOWN SYSTEM (ESD): There are 12 ESD manual stations located at various points in the facility. See Maps A-2 and A-3 in Appendix A. The Plant ESD can be activated at any time by any employee or at the direction of the IC. If a Level III Response is initiated, then ESD will immediately be activated.
When any one of the 12 manual stations is activated, the system will be shutdown and the natural gas inlets and outlets will be blocked. The operators are also able to auto close the one (1) main block valve on the incoming gas line to the Plant. Activating these should allow the plant to avoid a Level III response. The IC can send trained personnel to designated off-site manual block valves. There are also various methods to shut down gas flow at the various wellheads and incoming gathering lines. These can and would be evaluated on a case by case basis. Designated employees will have remote access to the plant controls including ESD capabilities.

2. PLANT ALARMS, VISIBLE BEACONS & WIND INDICATORS: Colored beacons, horns, and wind direction indicators are located in various locations throughout the Plant and are depicted in Appendix A on Map A-2.

Wind direction indicators are installed throughout the plant. At least one wind direction indicator can be seen at any location within the Plant complex, as well as from any point on the perimeter of the plant. There are 5 windsocks located at the Plant.

3. GAS DETECTION EQUIPMENT: The Plant uses Otis Notis Stand Alone fixed H_2S Sensors. These sensors are part of a fixed point monitoring system used to detect the presence of hydrogen sulfide in ambient air. The blue flashing beacon is activated at H_2S concentrations of 10 ppm or greater. The horn is also activated with a continuous alarm at H_2S concentrations of 10 ppm or greater. The fixed hydrogen sulfide monitors are strategically located throughout the Plant to detect an uncontrolled released of hydrogen sulfide. The Plant operators are able to monitor the H_2S levels of all the Plant sensors on the control monitor located in the control room. In addition, select employees can access this information remotely. These sensors are located on the plot plan in Appendix A, Maps A-2 and A-3. These sensors all have to be acknowledged and will not clear themselves. This requires immediate action for any occurrence or malfunction. The Plant sensors have battery backup systems and are calibrated monthly. Audible alarm systems are also calibrated monthly.

Handheld gas detection monitors are available to plant personnel to check specific areas and equipment prior to initiating maintenance or working on equipment. There are 4 handheld monitors and

each individual is assigned a personal H_2S monitor. The handheld gas detection devices are RKI GSX-2900 4-way monitors. The detectors have sensors for oxygen, LEL (lower explosive limit hydrocarbon atmospheres), hydrogen sulfide, and carbon monoxide. They indicate the presence of H_2S with a beeping sound at 10 ppm. The beeps change in tone as H_2S increases to 20 ppm. The personal monitors are set to alarm (beep) at 10 ppm with the beeps becoming closer together as the H_2S concentration increases to 20 ppm. Both the handheld and personal monitors have digital readouts of H_2S ppm concentration.

The compressor building has two methane sensors; one sends a call out at the 30% lower explosive limit (LEL); the second shuts the compressors down at 50% LEL. The methane sensors are visual and audible alarms. The compressor building also is equipped with fire eyes that will also shut the units down. The four product pumps also have LEL sensors.

4. RESPIRATORS: The facility has 13 Drager 30-minute self-contained breathing apparatus (SCBA) respirators and 6 Scott 5-minute escape packs strategically located throughout the Plant. There are also 2 emergency packs with supplied air lines distributed throughout the plant. The respirator locations are identified in Appendix A on Map A-2. All Plant personnel are certified to use the self-contained breathing apparatus (SCBAs) respirators and emergency packs.

5. FIRE FIGHTING EQUIPMENT: The Plant personnel are trained only for insipient stage fire fighting. The fire extinguishers located in the Plant process areas, compressor buildings, process buildings, and company vehicles are typically an Ansul 30# ABC dry chemical fire extinguisher. See Appendix A, Map A-3 for location. The Plant does not have a fire water system, only a utility water system that is not designed for fire fighting.

- 6. TRAFFIC CONTROL KIT: The Plant has a Traffic Control Kit located in the office which contains the necessary equipment to initiate and maintain traffic control.

7. FIRST AID EQUIPMENT LOCATIONS:
   a) First Aid Kits are located at the following locations:
   - Control Room
   - Office

   b) Eye Wash stations are located at the following locations:
   - Lab
   - Office
   - Engine Buildings, Maintenance Shop, Welding Shop

8. PERSONAL H_2S MONITORS: All Frontier personnel assigned to the Plant and associated field personnel are issued and required to use personal H_2S monitors while on duty.

10. SIGNS and MARKERS: The Plant has warning, caution and notice signs indicating the presence of "H_2S/Poisonous Gas" and high pressure gas at the entrance to the Plant. Emergency response phone numbers are posted at the entrance to the Plant. Signs are located at the Plant gate entrance indicating that all visitors are to sign in.

V. Characteristics of Hydrogen Sulfide (H_2S), Sulfur Dioxide (SO_2) and Carbon Dioxide (CO_2) [NMAC 19.15.11.9.B(2)(b)] [API RP-55 7.4 b.]

A. Hydrogen Sulfide (H_2S): Hydrogen Sulfide (H_2S): The proposed inlet gas streams into the Plant will contain a maximum of 1,800 ppm (or 0.18 mole percent) of hydrogen sulfide based on data generated from the sampling of the inlet gas at least daily. Hydrogen sulfide is a colorless, toxic and flammable gas, and has the odor of rotten eggs. Hydrogen sulfide gas is heavier than air. Hydrogen sulfide presents a significant health hazard by paralyzing the respiratory system resulting in serious injury or death.

Hydrogen Sulfide Properties and Characteristics	
CAS No.	7783-06-4
Molecular Formula	H_2S
Molecular Weight	34.082 g/mol
Ceiling Concentration	20 ppm (OSHA)
Ceiling Peak Concentration	50 ppm (OSHA)
Threshold Limit Value (TLV)	15 ppm (ACGIH)
Time Weighted Average (TWA)	10 ppm (NIOSH)
Short Term Exposure Level (STEL)	15 ppm (ACGIH)
Immediately Dangerous to Life or Health (IDLH)	100 ppm
Specific Gravity Relative to Air (Air=1.0)	1.189
Boiling Point	-76.5F
Freezing Point	-121.8F
Vapor Pressure	396 psia
Autoignition Temperature	518F
Lower Flammability Limit	4.3%
Upper Flammability Limit	46.0%
Stability	Stable
pH in water	3
Corrosivity	Reacts with metals, plastics, tissues and nerves

Physical Effects of Hydrogen Sulfide		
Concentration		
ppm	%	Physical Effects
1	0.00010	Can be smelled (rotten egg odor)
10	0.0010	Obvious & unpleasant odor; Permissible exposure level; safe for 8 hour exposure
20	0.0020	Acceptable ceiling concentration
50	0.0050	Loss of sense of smell in 15 minutes
100	0.0100	Immediately dangerous to life and health(IDLH) loss of sense of smell in 3-15 minutes; stinging in eyes & throat; Altered breathing
200	0.0200	Kills smell rapidly; stinging in eyes & throat
500	0.0500	Dizziness; Unconscious after short exposure; Need artificial respiration
700	0.0700	Unconscious quickly; death will result if not rescued promptly
1000	0.1000	Instant unconsciousness; followed by death within minutes

B. Sulfur Dioxide (SO_2): Sulfur dioxide is produced as a by-product of H_2S combustion at the flare. The flare unit receives the residual hydrogen sulfide and carbon dioxide stream that is routed from the amine unit. It is colorless, transparent, and is non-flammable, with a pungent odor associated with burning sulfur. Sulfur dioxide is heavier than air, but will be picked up by a breeze and carried downwind at elevated temperatures. Sulfur dioxide can be extremely irritating to the eyes and mucous membranes of the upper respiratory tract.

Sulfur Dioxide Properties & Characteristics	
CAS No.	7446-09-5
Molecular Formula	SO_2
Molecular Weight	64.07 g/mol
Permissible Exposure Limit (PEL)	5 ppm(OSHA)
Time Weighted Average (TWA)	2 ppm(ACGIH)
Short Term Exposure Level (STEL)	5 ppm(ACGIH)
Immediately Dangerous to Life and Health (IDLH)	100 ppm
Specific Gravity Relative to Air (Air = 1.0)	2.26
Boiling Point	14°F
Freezing Point	-103.9°F
Vapor Pressure	49.1 psia
Autoignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
Corrosivity	Could form an acid rain in aqueous solutions

Physical Effects of Sulfur Dioxide	
Concentration	**Effect**
1 ppm	Pungent odor, may cause respiratory changes
2 ppm	Permissible exposure limit; Safe for an 8 hour exposure
3-5 ppm	Pungent odor; normally a person can detect sulfur dioxide in this range
5 ppm	Short Term Exposure Limit (STEL); Safe for 15 minutes of exposure
12 ppm	Throat irritation, coughing, chest constriction, eyes tear and burn
100 ppm	Immediately Dangerous To Life & Health (IDLH)
150 ppm	So irritating that it can only be endured for a few minutes
500 ppm	Causes a sense of suffocation, even with first breath
1,000 ppm	Death may result unless rescued promptly.

C. **Carbon Dioxide (CO_2)**: The proposed inlet streams into the Plant will contain a maximum of 11,105 ppm (or 1.1105 mole percent) of carbon dioxide based on data generated from the sampling of the inlet gas at least daily. Carbon dioxide gas is colorless, odorless and non-flammable and is heavier than air.

Carbon Dioxide Properties & Characteristics	
CAS No.	124-38-9
Molecular Formula	CO_2
Molecular Weight	44.010 g/mol
Time Weighted Average (TWA)	5,000 ppm
Short Term Exposure Level (STEL)	30,000 ppm
Immediately Dangerous to Life and Health (IDLH)	40,000 ppm
Specific Gravity Relative to Air (Air = 1.0)	1.5197
Boiling Point	-109.12°F
Freezing Point	-69.81°F
Vapor Pressure	830 psia
Autoignition Temperature	N/A
Lower Flammability Limit	N/A
Upper Flammability Limit	N/A
Stability	Stable
pH in Saturated Solution	3.7
Corrosivity	dry gas is relatively inert & not corrosive; can be corrosive to mild steels in aqueous solutions

Physical Effects of Carbon Dioxide	
Concentration	**Effect**
1.0 %	Breathing rate increases slightly
2.0 %	Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness
3.0 %	Breathing rate increases to twice normal rate and becomes labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate
4 – 5 %	Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt
5 – 10 %	Characteristic sharp odor noticeable. Very labored breathing, headache, visual impairment, and ringing in the ears. Judgment may be impaired, followed within minutes by loss of consciousness
10 – 100 %	Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation

D. Radii of Exposure [NMAC 19.15.11.7.K]

The basis for worst case scenario calculations is as follows:

- The hydrogen sulfide content of the inlet natural gas stream into the Frontier Maljamar Gas Plant is variable, ranging up to 1800 parts per million (ppm) or 0.18 mole percent as determined from average daily inlet gas analyses.

- The plant has a maximum daily (24 hour) processing volume of 60 MMSCF.

- The worst case scenario ROE also assumes an uncontrolled instantaneous release of the entire 24-hour throughput from the inlet contactor at the facility. Because the Plant is a throughput process plant, it is impossible that the entire 24-hour throughput volume of the Plant could be released instantaneously as is assumed in the worst case scenario calculations of the ROE. However, to comply with NMAC 19.15.11, that assumption is the worst case scenario in the formulas and calculations are provided here and in Appendix C.

It should further be noted that the reason this rate, used as worst case, could not ever be released over a 24-hour period is the Plant's emergency shutdown (ESD) systems would be activated. The ESD would prevent the flow of gas into the Plant in the event of an emergency. Appendix C contains the ROE calculation and a map (C-1) showing the ROE around the Plant.

The formulas for calculating the 100 ppm and the 500 ppm radii of exposure are as follows:

100 ppm ROE Calculation (as per 19 NMAC 15.11.7.K.1):

$$X=[(1.589)(\text{hydrogen sulfide concentration})(Q)]^{(0\ 6258)}$$

500 ppm Radius of Exposure Calculation (as per 19 NMAC 15.11.7.K.2):

$$X=[(0.4546)(\text{hydrogen sulfide concentration})(Q)]^{(0\ 6258)}$$

Where:
X = radius of exposure in feet
"hydrogen sulfide concentration" = the decimal equivalent of the mole or volume fraction of hydrogen sulfide in the gaseous mixture
Q = Escape rate expressed in cubic feet per day (corrected for standard conditions of 14.73 psi absolute and 60 degrees Fahrenheit)

Amine Unit (Facility)

500-ppm ROE	**862 feet**
100-ppm ROE	**1887 feet**

Both the 500 ppm and the 100 ppm radii of exposure for the facility are shown on Map C-1 of Appendix C. This ROE pattern is designed to include the 100 and 500 ppm radii for a potential worst case failure.

VI. Facility Description, Maps, and Drawings [NMAC 19.15.11.9.B(2)(c)] [API RP-55 7.4 c.]

A. Maljamar Processing Plant Description of Operations: The primary function of the plant is to remove H_2S and CO_2 from sour field gas so that the gas can meet pipeline specifications. The plant has been designated a primary Standard Industrial Classification (SIC) Code of 1311. The operation of the Frontier Maljamar Gas Plant is intended to process up to 60 MMSCFD of gas. The facility is authorized to

operate continuously (8760 hr/yr) at design maximum capacity processing rates with a cap of five tons per day of sulfur emissions. The gas is treated to remove acid gas components, dehydrated to remove water and processed to remove heavy (liquid) hydrocarbons from the gas stream. Several plant systems are involved in performing these functions.

The amine unit is designed to remove acid gas components (carbon dioxide, hydrogen sulfide and mercaptans) from the natural gas stream. These components are removed from the natural gas because they are corrosive, hazardous to health, and reduce the heating value of the natural gas stream. In addition, the carbon dioxide can freeze in the cryogenic unit forming dry ice and forcing the shutdown of the facility. This process is known as the gas sweetening process. The acid gas removed by the amine unit is routed to the flare for incineration.

Molecular sieve dehydration is used upstream of the cryogenic processes to achieve a -150°F dew point. The process uses two molecular sieve vessels with one vessel in service absorbing moisture from the gas stream and the other vessel in the regeneration mode. The cryogenic unit is designed to liquefy natural gas components from the sweet, dehydrated inlet gas by removing work (heat) from the gas by means of the turbo expander. The cryogenic unit recovers natural gas liquids (NGL) by cooling the gas stream to extremely cold temperatures (-150°F) and condensing components such as ethane, propane, butanes and heavier hydrocarbons. Once the sweet, dry gas (essentially 100 % methane) exits the cryogenic unit, it needs to be recompressed to approximately 600 - 700 psi before the gas is sent to the main transportation pipeline. This is accomplished with one 2500 horsepower electric drive compressor and two combined 2300 horsepower gas driven compressors.

B. Map of Plant
See Appendix A, Map A-1

VII. Training and Drills
[NMAC 19.15.11.9.B(2)(d)] [API RP-55 7.4 d]

A. Responsibilities and Duties of Essential Personnel
Please See Section IV. Emergency Procedures (Page 2) for a detailed listing of responsibilities of essential personnel during a response. Personnel responsible for implementing this plan shall be trained on their duties and responsibilities related to this plan during the annual on-site or table top training exercises. All Plant personnel, visitors, and contractors must attend a Plant overview orientation prior to obtaining permission to enter the Plant. A refresher course on this training is required annually for all persons. This training also complies with the requirements of the Frontier Field Services, LLC Corporate Safety Program.

B. On-site or Classroom Drills
Frontier Field Services, LLC may use table top exercises as well as hands-on emergency response training methods. Training and drills in emergency response procedures help ensure personnel are adequately prepared to handle most emergency situations. Frontier personnel will be trained on the H_2S Incident Response Plan and procedures annually. Everyone's role and responsibilities will be covered. The need for emergency preparedness will be emphasized through the use of drills and other exercises that simulate an emergency in which personnel perform or demonstrate their roles in the emergency. These drills can be either "table-top" discussions or realistic drills in which equipment will be deployed and contractors will participate. Frontier Field Services, LLC shall conduct a table top exercise annually at a minimum.

C. Notification and Training of Others on Protective Measures in Emergency Situations
At the time of submission of this plan there are no residences within the 100 ppm ROE. However, in the event of a release, Frontier personnel will make a visual inspection of the ROE area to insure that no individuals are seen inside the ROE, and if any are observed, they will be advised to immediately

evacuate to the designated Emergency Evacuation Area. Businesses located within the 100 ppm ROE include an unmanned Mid America Pipeline Company Compressor Station and a Conoco Phillips Field Warehouse. The Conoco Phillips Warehouse has no employees who regularly work at that facility. Conoco Philips personnel will, however, be invited to participate in and/or observe annual drills where they will be briefed on notification, evacuation and shelter in place plans such as shutting off any air conditioning/heating units until they are notified that it is safe. The Conoco Philips Field Warehouse will be contacted by Frontier personnel in the event of a release.

D. Training and Attendance Documentation

All training and drills will be documented. Documentation of the training, drills and reviews will be on file at the Frontier Field Services office at the Maljamar Plant Documentation shall include sign in sheets, synopsis of the training conducted, and an after action review of the training.

E. Briefing of Public Officials on Evacuation and Shelter in Place Plans

Local law enforcement, first responders, and fire personnel will also be invited to participate and/or observe annual drills, as well as being briefed on notification, evacuation, and shelter in place plans.

VIII. Coordination with State Emergency Plans

[NMAC 19.15.11.9.B(2)(e)]

A. Oil Conservation Division (OCD)

OCD will be notified with an automatic email to the District II office advising of the activation of the H_2S Contingency Plan if any of the alarms are activated at 10 ppm H_2S or greater. In the event of a power failure, a phone call will be made within four hours. All subsequent paperwork will be filed in a timely fashion.

B. New Mexico State Police/ New Mexico Hazardous Materials Emergency Response Plan

The New Mexico State Police are responsible for overall scene management and coordination of all resources. A designated Emergency Response Officer (ERO) will establish the National Interagency Incident Management System (NIIMS) Incident Command System (ICS) as the Incident Commander (IC) and be responsible for management of all response resources on scene. Off-scene coordination of response resources will be handled through designated Headquarters Emergency Response Officers. Law enforcement-related activities will be coordinated by State Police.

IX. Plan Activation

[NMAC 19.15.11.9.C] [API RP-55 7.4 d]

A. Activation Levels

Level I– Continuous audible alarm sounded and/or flashing blue beacons activated for H_2S greater than or equal to 10 ppm

Level II – Continuous audible alarm sounded and/or flashing blue beacons activated for H_2S greater than or equal to 10 ppm and H2S release unable to be resolved or level of H2S in excess of 20 ppm measured with handheld detection devices.

Level III–Catastrophic release; fire; explosion; a continuous release of maximum volume for 24 hours; or NMAC 19.15.11: mandatory activation of indication of 100 ppm in any defined public area; 500 ppm at any public road; or 100 ppm at a distance greater than 3000 feet from the site or the release.

B. Events that Could Lead to a Release of H_2S

- Inlet and plant piping failure
- Amine still failure
- Flange/gasket leaks on inlet and plant piping
- Valve packing
- Failure of flare to ignite

X. Submission of H_2S Contingency Plans [NMAC 19.15.11.9.D]

A. Submission

1. Frontier Field Services, LLC has submitted this H_2S Contingency Plan to the OCD.

B. Retention

1. Frontier Field Services, LLC shall maintain a copy of the contingency plan at the Maljamar Gas Plant and at Frontier Field Services Headquarters office in Tulsa Oklahoma. The plan shall be will be submitted to the OCD and will be readily accessible for review by the OCD at the facility upon request.

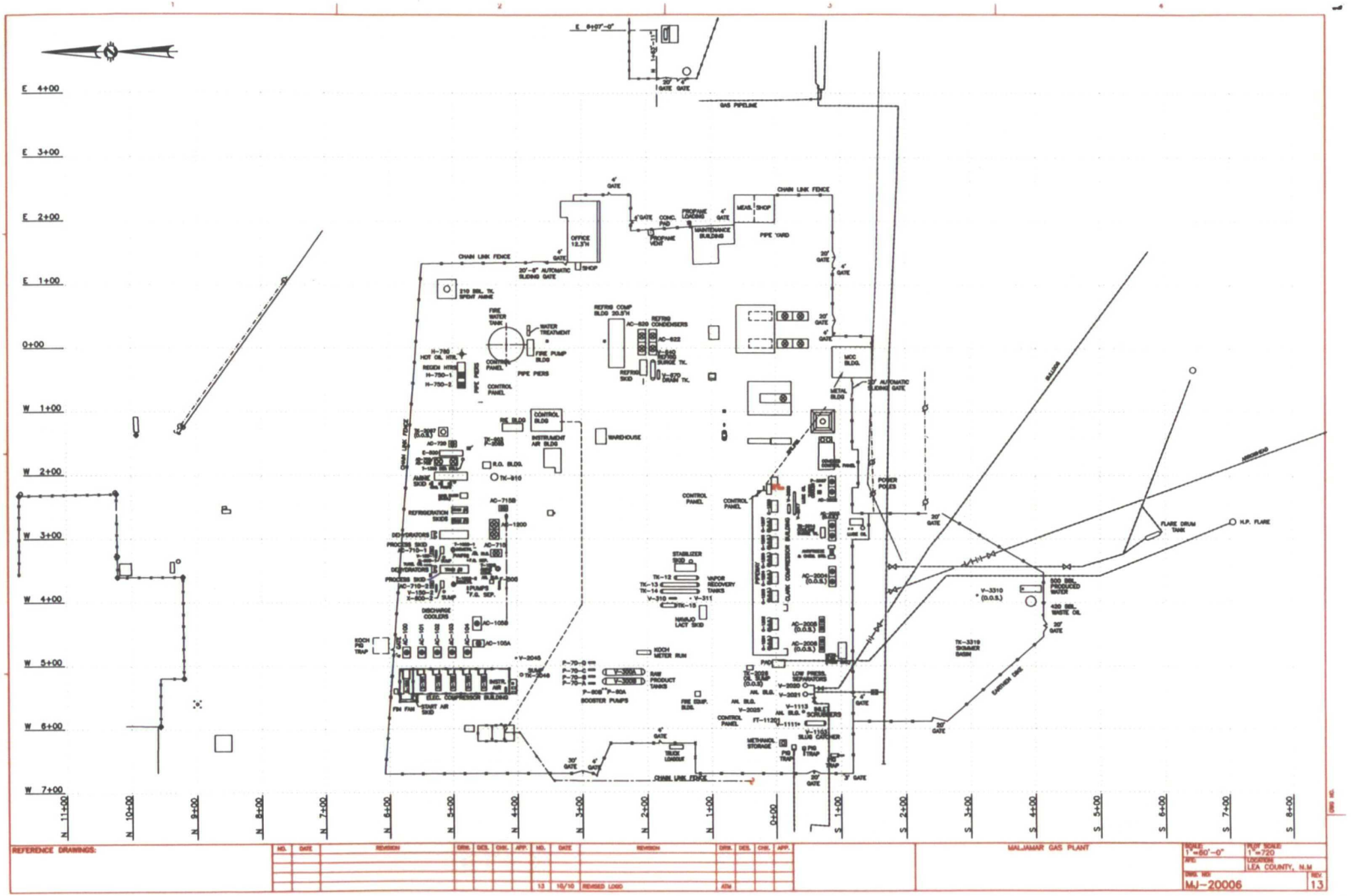
C. Inventory

1. Frontier Energy Company will file an annual inventory of wells, facilities and operations for which plans are on file with the OCD, to the Local Emergency Planning Committee (LEPC) and the State Emergency Response Commission as per NMAC 19.15.11.
2. The inventory shall include the name, address, telephone number, and point of contact for all operations in which plans are on file.

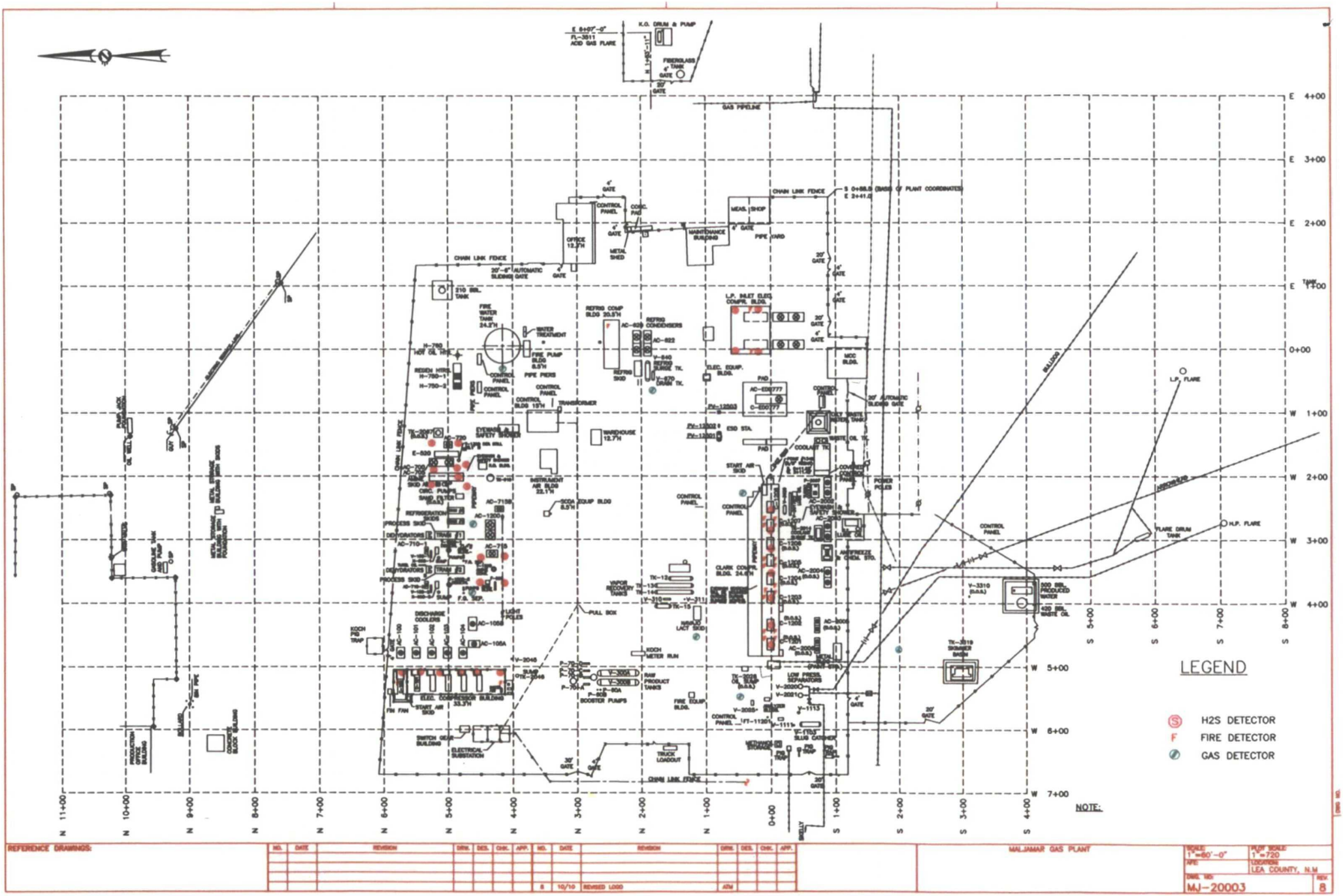
APPENDICES

Appendix A – Facility Maps and Drawings

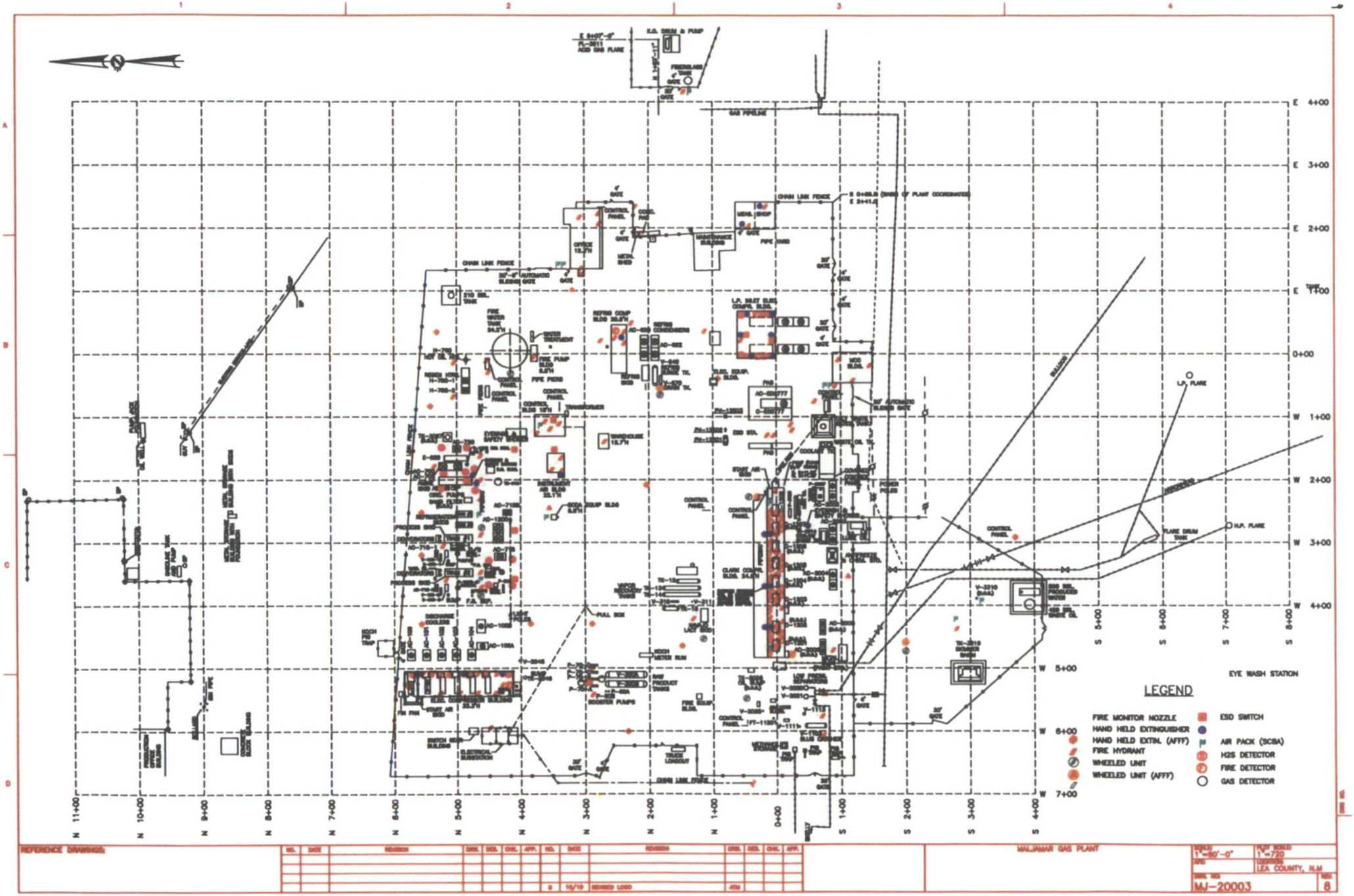
Map A-1:	**Facility Map**
Map A-2:	**Alarm and Monitor Locations**
Map A-3:	**Safety and Fire Equipment Locations**



Map A-1: Facility Map



Map A-2: Alarms and Monitors



Map A-3: Safety and Fire Equipment

Appendix B – Response Flow Diagrams

LEVEL I RESPONSE

CALL 911 for death or injury for emergency assistance

H_2S detected at levels greater than or equal to 10 ppm:
Continuous audible alarm and flashing blue lights

- Evacuate all personnel to appropriate Emergency Assembly Area
- Notify Frontier Management
- Assign operators to suit up in SCBA
- Notify all entities in the 500 ppm ROE
- Operators wearing SCBA will attempt to locate and repair leak
- Rotate Operators in 15 minute shifts
- If H_2S levels exceed 10 ppm in Emergency Assembly Area relocate to an Alternate Emergency Assembly area

- If H_2S levels exceed 20 ppm proceed to Level II response

Once resolved and monitored levels in Plant are less than 10 ppm H_2S: return to plant and continue to monitor

LEVEL II RESPONSE

CALL 911 for death or injury for emergency assistance

H_2S detected greater than or equal to 20 ppm or Level I release not resolved: continuous audible alarm and flashing blue lights

- Operators put on SCBA
- Others put on Emergency Respirators
- Evacuate all personnel from plant to designated Emergency Assembly Area
- Assign operators to suit up in SCBA
- Notify entities in the 100 ppm ROE to shelter in place or evacuate depending on weather and release conditions (IC determines this) if perimeter alarms are activated
- Operators wearing SCBA attempt to locate and repair leak
- Rotate Operators in 15 minute shifts
- Re-entry will occur for 45 minutes or until the IC determines the ESD must be activated
- Notify LEPC
- If H_2S levels exceed 10 ppm in Emergency Assembly Area relocate to an alternate Emergency Assembly Area

Once resolved and monitored levels in Plant are less than 10 ppm H_2S: return to plant and continue to monitor

- If H_2S levels exceed 20 ppm and repair efforts are unsuccessful, worst case scenario and/or catastrophic release have occurred then implement Level 3 response

LEVEL III RESPONSE

CALL 911 for death or injury for emergency assistance

H_2S detected greater than 20 ppm: continuous audible alarm and flashing blue lights
repair efforts are unsuccessful, worst case scenario and/or catastrophic release have occurred

- **Set up road blocks on Conoco Rd and CR 126**
- **Confirm all personnel have evacuated the 500 ppm ROE**
- **Instruct all personnel in the 100 ppm ROE to evacuate to Emergency Asembly Area or shelter in place as determined by the IC**
- **If vapors have ignited, continue to let burn unless fires endanger personnel**
- **Initiate a chronological record of events**
- **Within one hour of activation of the plan notify NMOCD and the NRC**
- **Establish a Media staging area**
- **Submit agency reports as required**

Once resolved and monitored levels in Plant are less than 10 ppm H_2S: return to Plant continue to monitor

Appendix C – ROE Calculations

ROE Calculations Worksheet
Map C-1: Facility ROE

The radius of exposure is calculated using the following equations:
100 ppm ROE calculation (as per 19 NMAC 15.11.7.K.1)
$X_{100ppm} = [(1.589)(Conc_{H2S})(Q)]^{(0.6258)}$
500 ppm ROE calculation (as per 19 NMAC 15.11.7.K.2)
$X_{500ppm} = [(0.4546)(Conc_{H2S})(Q)]^{(0.6258)}$
Where:
X = radius of exposure (ft)
$Conc_{H2S}$ = the decimal equivalent of the mole or volume fraction of H_2S in the gas
Q = daily plant throughput corrected to standard conditions (SCFD)

Plant parameters			
Q =	60 MMSCFD =	60000000 SCFD	
$Conc_{H2S}$ =	1800 ppm =	0.18 % =	0.0018 fraction
ROE calculation:			
X_{100ppm} =	[(1.589)*(0.0018)*(60000000)]^(0.6258)		
X_{100ppm} =	1887 ft =	0.36 miles	
X_{500ppm} =	[(0.4546)*(0.0018)*(60000000)]^(0.6258)		
X_{500ppm} =	862 ft =	0.16 miles	

Appendix C ROE Calculations for Maljamar Gas Plant

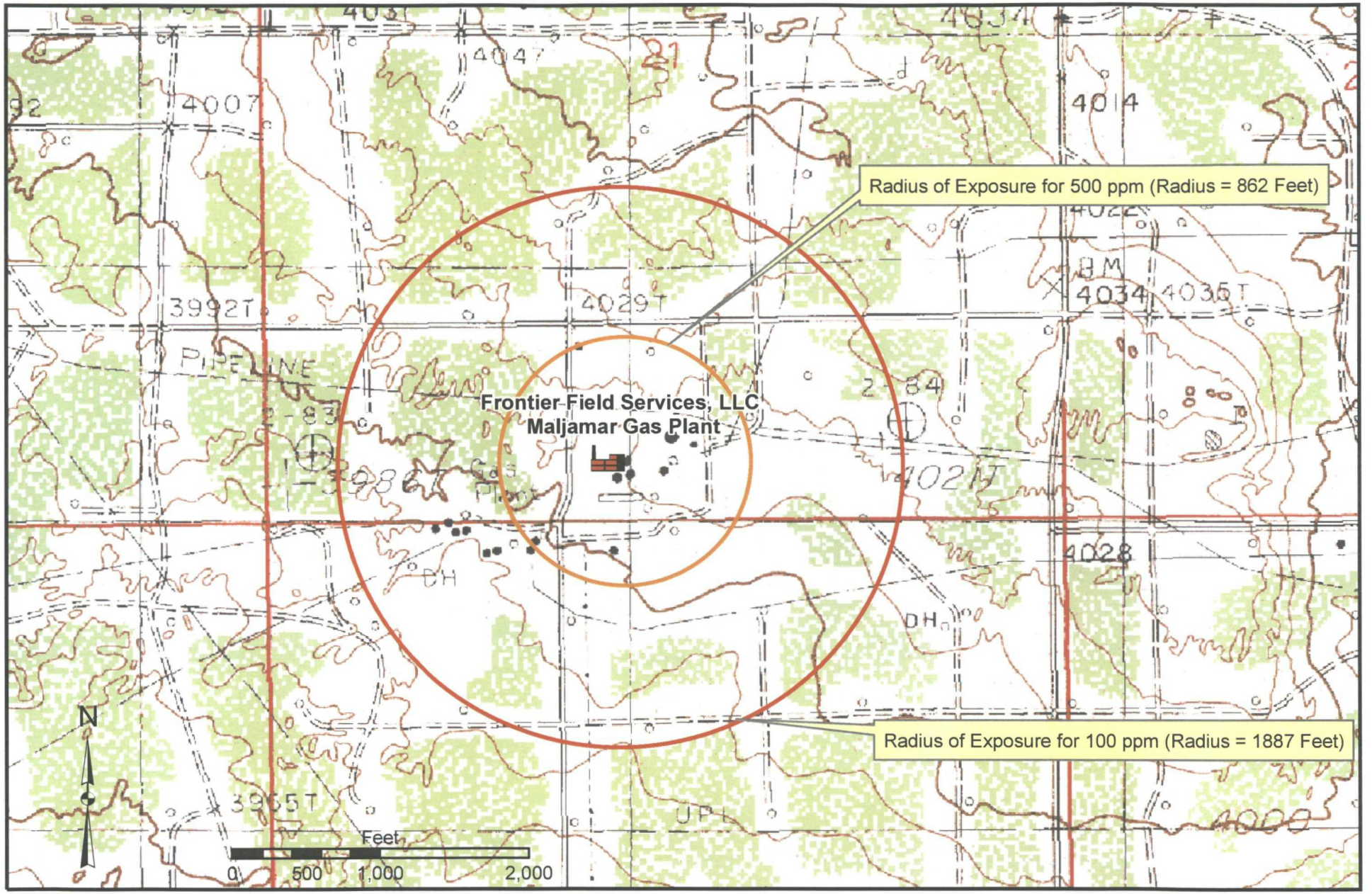


Figure C-1: Radii of Exposure for 100 ppm and 500 ppm

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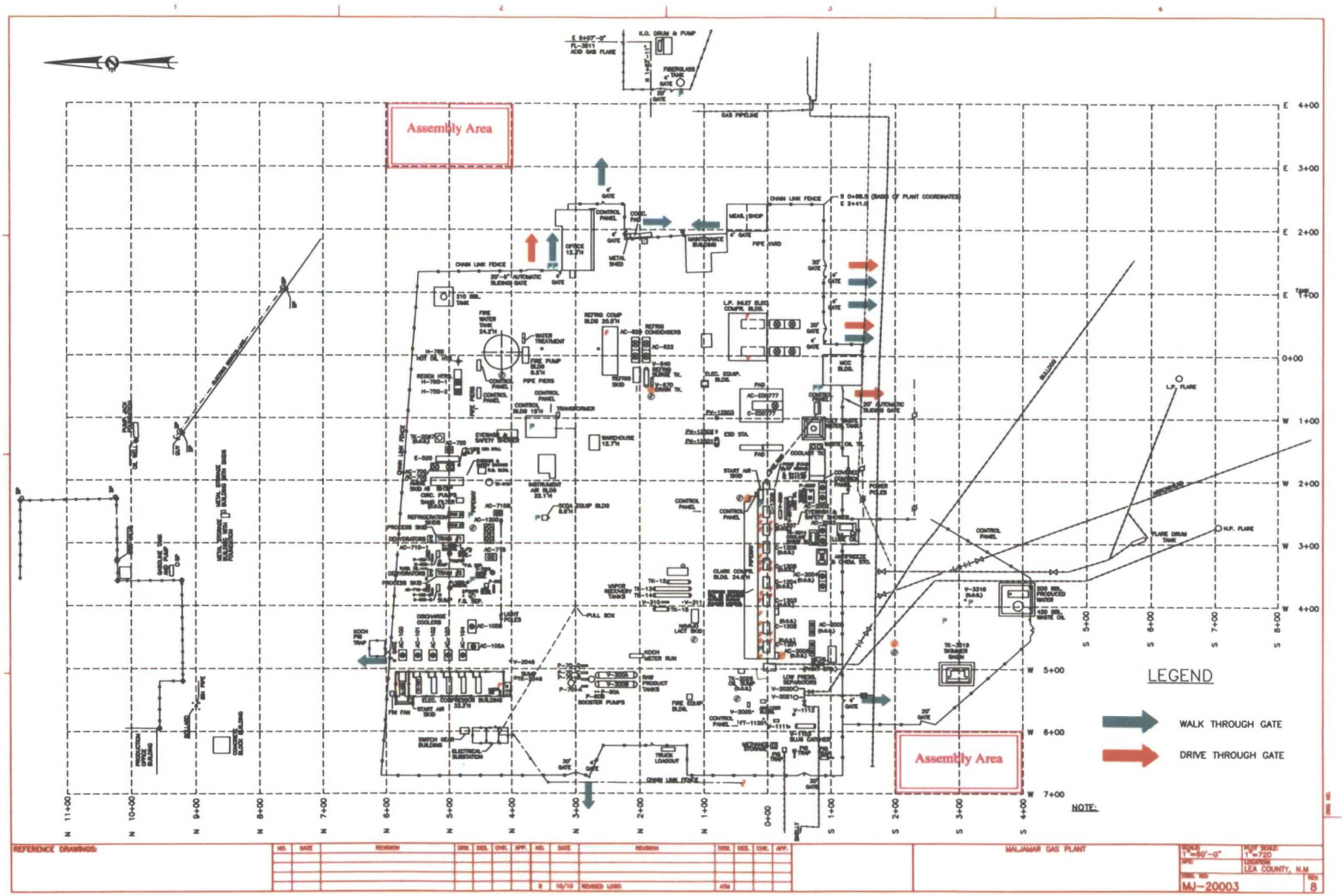
FRONTIER field services, llc

Appendix D – Emergency Assembly Areas and Evacuation Routes

Map D-1: Evacuation Route and Emergency Assembly Area Locations



Map D-1: Evacuation Routes and Emergency Assembly Area Locations

Appendix E – Distribution List

APPENDIX E – H_2S Contingency Plan Distribution List

New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240

New Mexico Department of Public Safety
5100 Jack Gomez Blvd.
Hobbs, NM 88240

Lea Co. Local Emergency Planning Committee
100 North Main
Lovington, NM 88260

Artesia Fire Department
309 North 7th Street
Artesia, NM 88210-1913

Hobbs Fire Department
301 E White Street
Hobbs, NM 88240

Lea County Sheriff's Department
215 E. Central
Lovington, NM 88260

Maljamar Gas Plant
1001 Conoco Rd.
Maljamar, NM 88264

Frontier Field Services LLC Main Office
4200 Skelly Drive, Suite 700
Tulsa, OK 74135

Conoco Phillips Lovington Office for Conoco Phillips Field Warehouse
29 Vacuum Complex Lane
Lovington, NM 88260

Mid America Pipeline Company LLC for Mid America Compressor Station
P.O. Box 4018
Houston, TX 77210