



H₂S Contingency Plan

H₂S Contingency Plan Holders:

Attached is an H₂S Contingency Plan for COPC Permian Drilling working in the West Texas and Southeastern New Mexico areas operated by ConocoPhillips Company.

If you have any questions regarding this plan, please call Tom Samarripa at ConocoPhillips Company, 432.368.1263.

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HYDROGEN SULFIDE (H₂S) OPERATIONS

Contingency Plan
For
Permian Drilling Operations

HOBBS OCD

JUN 06 2016

RECEIVED

ConocoPhillips Company
Mid-Continent Business Unit
Permian Asset Area

I. PURPOSE

The purpose of this Contingency Plan is to provide an organized plan of action for alerting and protecting the public following the release of a potentially hazardous volume of hydrogen sulfide. This plan prescribes mandatory safety procedures to be followed in the event of a release of H₂S into the atmosphere from exploration and production operations included in the scope of this plan. The extent of action taken will be determined by the supervisor and will depend on the severity and extent of H₂S release. Release of H₂S must be reported to the Drilling Superintendent and documented on the IADC and in Wellview.

II. SCOPE

This Contingency plan shall cover the West Texas and Southeastern New Mexico areas, which contain H₂S gas and could result in a release where the R.O.E. is greater than 100 ppm at 50' and less than 3000' and does not include a public area and 500 ppm R.O.E. does not include a public road. Radius of exposure is defined as the maximum distance from the source of release that a specified calculated average concentration of H₂S could exist under specific weather conditions.

III. PROCEDURES

First Employee on Scene

_____ Assess the incident and ensure your own safety.

Note the following:

- _____ Location of the incident.
- _____ Nature of the incident.
- _____ Wind direction and weather conditions.
- _____ Other assistance that may be needed.

_____ Call local supervisory personnel (refer to Section V: Emergency Call List) until personal contact is made with a person on the list.

_____ Perform emergency assessment and response as needed. The response may include rescue and/or evacuation of personnel, shutting in a system and/or notification of nearby residents/public (refer to Section VII: Public Notification/Evacuation).

_____ Secure the site.

_____ Follow the direction of the On-scene Incident Commander (first ConocoPhillips supervisor arriving on-scene).

First Supervisor on Scene (ConocoPhillips On-scene Incident Commander)

_____ Becomes ConocoPhillips' On-scene Incident Commander upon arrival to location.

_____ Follow the principles of the **D.E.C.I.D.E.** process below to assess the incident. (Note wind direction and weather conditions and ensure everyone's safety).

DETECT the problem
ESTIMATE likely harm without intervention
CHOOSE response objectives
IDENTIFY action options
DO the best option
EVALUATE the progress

_____ Complete the Preliminary Emergency Information Sheet (refer to Section VIII: Forms/Reports).

_____ Call your supervisor (refer to Section V: Emergency Call List).

- Perform emergency response as necessary. (This may include notification & evacuation of all personnel and/or nearby residents/public (refer to Section VII: Public Notification/Evacuation), requesting assistance from ConocoPhillips personnel or outside agencies (refer to Section V: Emergency Call List) and obtaining any safety equipment that may be required (refer to Section IV: Emergency Equipment and Maintenance).
- Notify appropriate local emergency response agencies of the incident as needed. Also notify the appropriate regulatory agencies. (refer to Section V: Emergency Call List).
- Ensure site security.
 - Set barricades and /or warning signs at or beyond the calculated 100 ppm H₂S radius of exposure (ROE). All manned barricades must be equipped with an H₂S monitor and a 2-way radio.
 - Set roadblocks and staging area as determined.
- Establish the Incident Command Structure by designating appropriate on-scene response personnel as follows:

Recording Secretary	
Public Information Officer	
Safety/Medical Officer	
Decontamination Officer	
- Have the “Recording Secretary” begin documenting the incident on the “Incident Log” (refer to Section VIII: Forms/Reports).
- If needed, request radio silence on all channels that use your radio tower stating that, until further notice, the channels should be used for emergency communications only.
- Perform a Site Characterization and designate the following:

Hot Zone	--	Hazardous Area
Warm Zone	--	Preparation & Decontamination Area
Cold Zone	--	Safe Area

AND

On-Scene Incident Command Post	(Cold Zone)
Public Relations Briefing Area	(Cold Zone)
Staging Area	(Cold Zone)
Triage Area	(Cold Zone)
Decontamination Area	(Warm Zone)

_____ Refer all media personnel to ConocoPhillips' On-Scene Public Information Officer (refer to Section VI: Public Media Relations).

_____ Coordinate the attempt to stop the release of H₂S. You should consider closing upstream and downstream valves to shut-off gas supply sources, and/or plugging or clamping leaks. Igniting escaping gas to reduce the toxicity hazard should be used **ONLY AS A LAST RESORT**. (It must first be determined if the gas can be safely ignited, taking into consideration if there is a possibility of a widespread flammable atmosphere.)

_____ Once the emergency is over, return the situation to normal by:

Confirming the absence of H₂S and combustible gas throughout the area,

Discontinuing the radio silence on all channels, stating that the emergency incident is over,

Removing all barricades and warning signs,

Allowing evacuees to return to the area, and

Advising all parties previously notified that the emergency has ended.

_____ Ensure the proper regulatory authorities/agencies are notified of the incident (refer to Section V: Emergency Call List).

_____ Clean up the site. (Be sure all contractor crews have had appropriate HAZWOPER training.)

_____ Report completion of the cleanup to the Asset Environmentalist. (Environmentalist will report this to the proper State and/or Federal agencies.)

_____ Fill out all required incident reports and send originals to the Safety Department. (Keep a copy for your records.)

- Company employee receiving occupational injury or illnesses.
- Company employee involved in a vehicle accident while driving a company vehicle.
- Company property that is damaged or lost.
- Accident involving the public or a contractor; includes personal injuries, vehicle accidents, and property damage. Also includes any situation, which could result in a claim against the Company.
- Hazardous Material Spill/Release Report Form
- Emergency Drill Report

_____ Assist the Safety Department in the investigation of the incident. Review the factors that caused or allowed the incident to occur, and modify operating, maintenance, and/or surveillance procedures as needed. Make appropriate repairs and train or retrain employees in the use and operation of the system.

_____ If this incident was simulated for practice in emergency response, complete the Emergency Drill Report found in Section VIII: Forms/Reports and submit a copy to the Drilling Manager. (Keep one copy in area files to document exercising of the plan.)

Emergency Procedures **Responsibility**

In the event of a release of potentially hazardous amounts of H₂S, all personnel will immediately proceed upwind/ crosswind to the nearest designated briefing area. The COPC Drilling Rep. will immediately, upon assessing the situation, set this into action by taking the proper procedures to contain the gas and notify appropriate people and agencies.

1. In an emergency situation, the Drilling Rep. on duty will have complete responsibility and will take whatever action is deemed necessary in an emergency situation to insure the personnel's safety, to protect the well and to prevent property damage.
2. The Toolpusher will assume all responsibilities of the Drilling Rep. in an emergency situation in the event the Drilling Rep. becomes incapacitated.
3. Advise each contractor, service company, and all others entering the site that H₂S may be encountered and the potential hazards that may exist.
4. Authorize the evacuation of local residents if H₂S threatens their safety.
5. Keep the number of persons on location to a minimum during hazardous operations.
6. Direct corrective actions to control the flow of gas.
7. Has full responsibility for igniting escaping gas to reduce the toxicity hazard. This should be used **ONLY AS A LAST RESORT.**

IV. EMERGENCY EQUIPMENT and MAINTENANCE

Emergency Equipment Suppliers

Safety International – Odessa, Tx.

H₂S monitors 432.580.3770
Breathing air includes cascade systems
First aid and medical supplies
Safety equipment
H₂S Specialist

Total Safety US Odessa, Tx/ Hobs, NM

H₂S monitors 432.561.5049 Odessa, Tx.
Breathing air includes cascade systems 575.392.2973 Hobbs, NM
Fire fighting equipment
First aid and medical supplies
Safety equipment

Indian Fire & Safety – Hobbs, NM

H₂S monitors 575.393.3093
Breathing air including cascade systems trailer mounted
30 minute air packs
Safety Equipment

Emergency Equipment and Maintenance (continued)

General Information

Materials used for repair should be suitable for use where H₂S concentrations exceed 100 ppm. In general, carbon steels having low-yield strengths and a hardness below RC-22 are suitable. The engineering staff should be consulted if any doubt exists on material specifications.

Appropriate signs should be maintained in good condition at location entrance and other locations as specified in Texas Rule 36 and NMOCD Rule 118.

All notification lists should be kept current with changes in names, telephone numbers, etc.

All shutdown devices, alarms, monitors, breathing air systems, etc., should be maintained in accordance with applicable regulations.

All personnel working in H₂S areas shall have received training on the hazards, characteristics, and properties of H₂S, and on procedures and safety equipment applicable for use in H₂S areas.

H2S Safety Equipment and Monitoring Systems

An H2S emergency response package will be maintained at locations requiring H2S monitoring. The package will contain at a minimum the following:

3 – Fixed H2S sensors located as follows:

- 1 – on the rig floor
- 1 – at the Bell Nipple
- 1 – at the Shale Shaker or Flowline

1 – Entrance Warning Sign located at the main entrance to the location, with warning signs and colored flags to determine the current status for entry into the location.

2 – Windsocks that are clearly visible.

1 – Audible warning system located on rig floor

2 – Visual warning systems (Beacon Lights)

- 1 – located at the rig floor
- 1 – located in the mud mixing room

Note: All alarms (audible and visual) should be set to alarm at 10 ppm.

2 - Briefing areas clearly marked

- 2 - SCBA's at each briefing area
- 1- SCBA located at the Drilling Reqs office

Note:

- 1. All SCBA's must be positive pressure type only!!!**
- 2. All SCBA's must either be Scott or Drager brand.**
- 3. All SCBA's face pieces should be size large, unless otherwise specified by the Drilling Supervisor.**

5 – Emergency Escape Paks located at Top Doghouse.

Note: Ensure provisions are included for any personnel working above rig floor in derrick.

1 – Tri or Quad gas monitor located at the Drilling Reqs office. This will be used to determine if the work area is safe to re-enter prior to returning to work following any alarm.

V. EMERGENCY CALL LIST:

The following is a priority list of personnel to contact in an emergency situation:

Supervisory Personnel	Office No.	Home	Cellular
R.W. "Cotton" Hair Permian Drilling Supt.	432.368.1302	432.563.9467	432.556.9116
Dennis Paschall Permian Drilling Field Supt.	432.368.1517	432.683.9400	432.238.3150
Tom Samarripa WSER	423.368.1263	432.367.4961	432.556.9113
Ty Maxey Permian Asset Operations Manager	432.368.1100		281.217.8492
Leo Gatson Safety and Environmental Coordinator	432.368.1248		432.631.066
Lynn Dooley Drilling Mngr.	832.486.2567	281.225.8063	281.435.3517

EMERGENCY CALL LIST: State Officials

Regulatory Agencies

New Mexico Oil Conservation Commission

P. O. Box 1980
Hobbs, New Mexico 88240-1980

Office: 575.393.6161

Bureau of Land Mngt.

Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220

Office: 575.234.5972

Fax: 575.885.9264

BLM 24 Hr on call # Lea County: 575-393-3612

EMERGENCY CALL LIST: Local Officials

Refer to the Location Information Sheet

Note: The LIS should include any area residents (i.e. rancher's house, etc)

ConocoPhillips Emergency Call List and Location Information Sheet

VI. Public Media Relations

The **Public Information Officer** becomes the ConocoPhillips on-scene contact (once designated by the Phillips On-Scene Incident Commander).

Confers with Houston Office's Human Relations Representative, who is responsible for assisting in the coordination of local public relations duties.

Answer media questions honestly and **only with facts**, do not speculate about the cause, amount of damage, or the potential impact of the incident of the community, company, employees, or environment. (This information will be formally determined in the incident investigation.)

If you are comfortable answering a question or if you are unsure of the answer, use terms such as the following:

- "I do not know. I will try to find out."
- I am not qualified to answer that question, but I will try to find someone who can."
- "It is under investigation."

Note:

Do Not Say "No Comment." (This implies a cover-up.)

Do Not Disclose Names of Injured or Dead! Confer with the Houston Office's Human Relations Representative, who is responsible for providing that information.

VII. Public Notification/Evacuation

Alert and/or Evacuate People within the Exposure Area

1. Public Notification – If the escape of gas could result in a hazard to area residents, the general public, or employees, the person **first** observing the leak should take **immediate** steps to cause notification of any nearby residents. The avoidance of injury or loss of life should be of prime consideration and given top priority in all cases. If the incident is of such magnitude, or at such location as to create a hazardous situation, local authorities will be requested to assist in the evacuation and roadblocks of the designated area until the situation can be returned to normal.

Note: Bilingual employees may be needed to assist in notification of residents.

2. Evacuation Procedures – Evacuation will proceed upwind from the source of the release of H₂S. Extreme caution should be exercised in order to avoid any depressions or low-lying areas in the terrain. The public area within the radius of exposure should be evacuated in a southwesterly and southeasterly direction so as to avoid the prevailing southern wind direction.

Roadblocks and the staging area should be established as necessary for current wind conditions.

Note: In all situations, consideration should be given to wind direction and weather conditions. H₂S is heavier than air and can settle in low spots. Shifts in wind direction can also change the location of possible hazardous areas.

VIII. FORMS & REPORTS

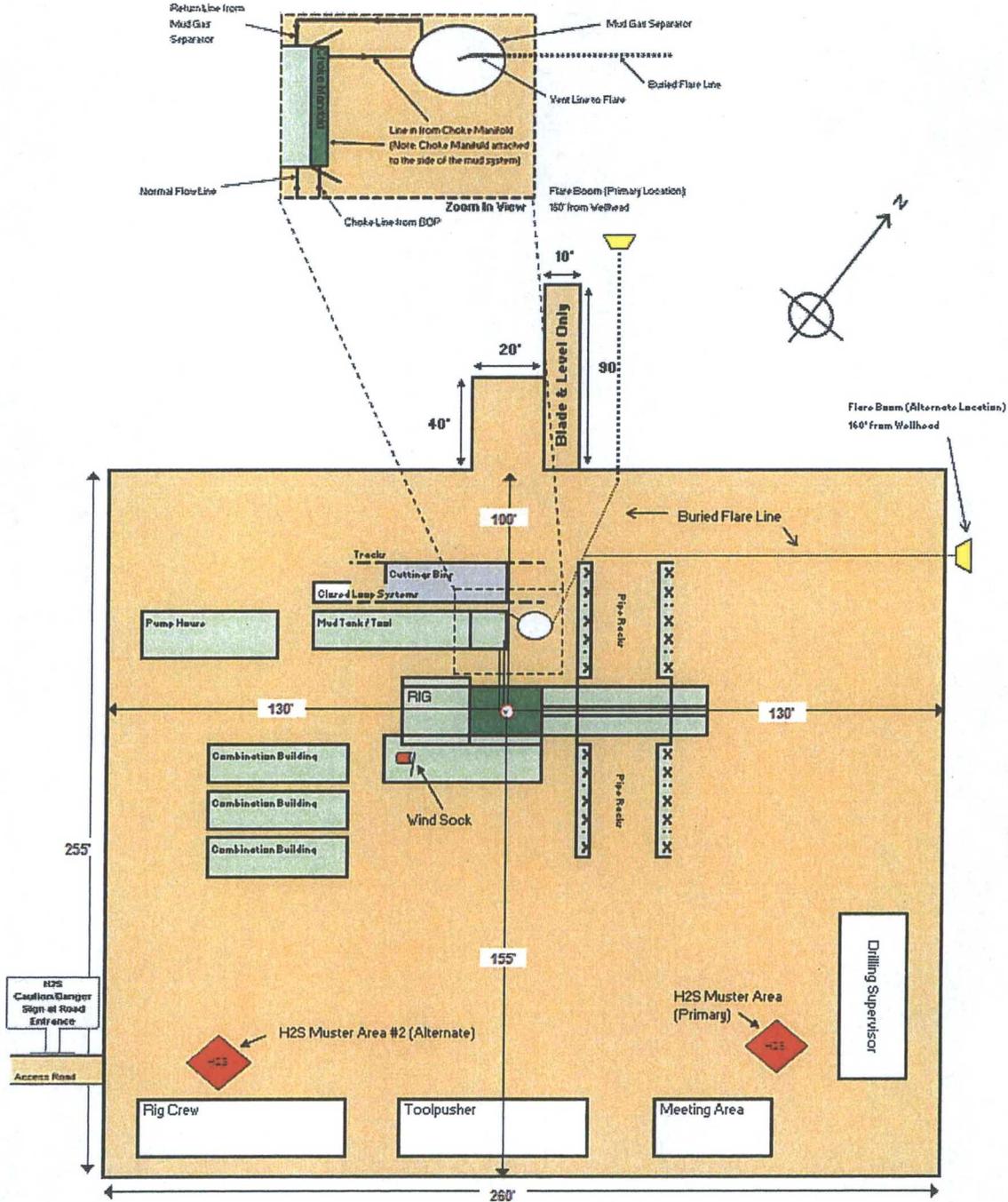
- I. Incident Log
- II. Preliminary Emergency Information Sheet
- III. Emergency Drill Report
- IV. Onshore Hazardous Material Spill/Release Report Form
- V. Immediate Report of Occupational Injury or Illness
Report of Accident-Public Contractor
Report of Loss or Damage to Company Property
Report of Automotive Incident

ConocoPhillips
Location Schematic and Rig Layout
for Closed Loop System

Drawn by:
 James Chen
 Drilling Engineer, ConocoPhillips Company
 Date: 12-November-2012 (updated March 2013)

(PICTURE NOT TO SCALE)

NOTE: There are two muster areas (primary & secondary) depending on the prevailing wind direction. The muster area that is furthest upwind/crosswind will be the designated area for briefing and assessing the situation. In the situation that a full evacuation is deemed necessary, all personnel will exit the location on the main access road. Otherwise, if the main access road is blocked off, they will exit on the secondary road or walk off road in the upwind/crosswind direction.



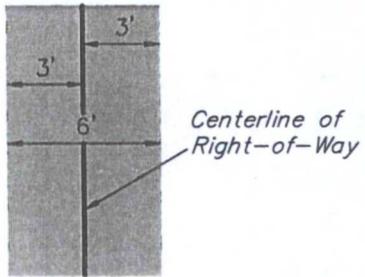
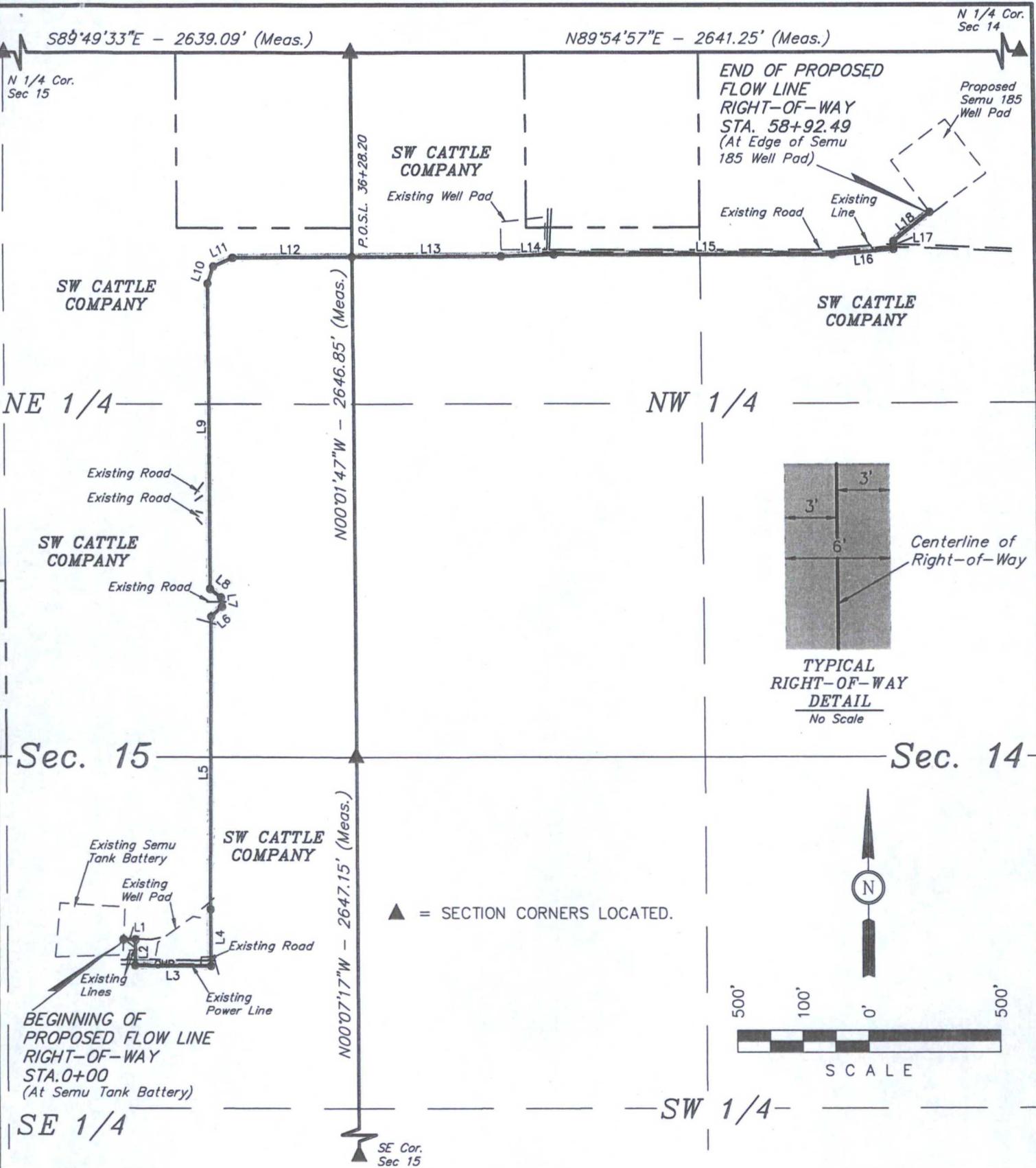
FLOW LINE RIGHT-OF-WAY DESCRIPTION

A 6' WIDE RIGHT-OF-WAY 3' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN THE NE 1/4 SE 1/4 OF SECTION 15, T20S, R37E, N.M.P.M., WHICH BEARS S52°21'09"W 1114.29' FROM THE EAST 1/4 CORNER OF SAID SECTION 15, THENCE N89°57'24"E 46.29'; THENCE S00°44'25"W 99.09'; THENCE S89°42'55"E 286.56'; THENCE N00°07'50"W 213.36'; THENCE N00°26'46"E 1098.96'; THENCE N48°59'41"E 55.94'; THENCE N06°24'10"W 34.92'; THENCE N52°02'12"W 52.38'; THENCE N00°00'07"W 1143.68'; THENCE N19°03'55"E 67.72'; THENCE N66°24'40"E 80.69'; THENCE N89°45'33"E 448.62' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 15, WHICH BEARS S00°01'47"E 770.17' FROM THE NORTHEAST CORNER OF SAID SECTION 15, N89°45'33"E 564.81'; THENCE N88°09'50"E 200.39'; THENCE S89°56'46"E 1059.01'; THENCE N85°02'10"E 234.61'; THENCE N00°17'53"W 28.84'; THENCE N52°13'54"E 176.62' TO A POINT IN THE NE 1/4 NW 1/4 OF SAID SECTION 14, WHICH BEARS S36°04'12"W 753.35' FROM THE NORTH 1/4 CORNER OF SAID SECTION 14. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.812 ACRES MORE OR LESS.

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N89°57'24"E	46.29'
L2	S00°44'25"W	99.09'
L3	S89°42'55"E	286.56'
L4	N00°07'50"W	213.36'
L5	N00°26'46"E	1098.96'
L6	N48°59'41"E	55.94'
L7	N06°24'10"W	34.92'
L8	N52°02'12"W	52.38'
L9	N00°00'07"W	1143.68'
L10	N19°03'55"E	67.72'
L11	N66°24'40"E	80.69'
L12	N89°45'33"E	448.62'
L13	N89°45'33"E	564.81'
L14	N88°09'50"E	200.39'
L15	S89°56'46"E	1059.01'
L16	N85°02'10"E	234.61'
L17	N00°17'53"W	28.84'
L18	N52°13'54"E	176.62'

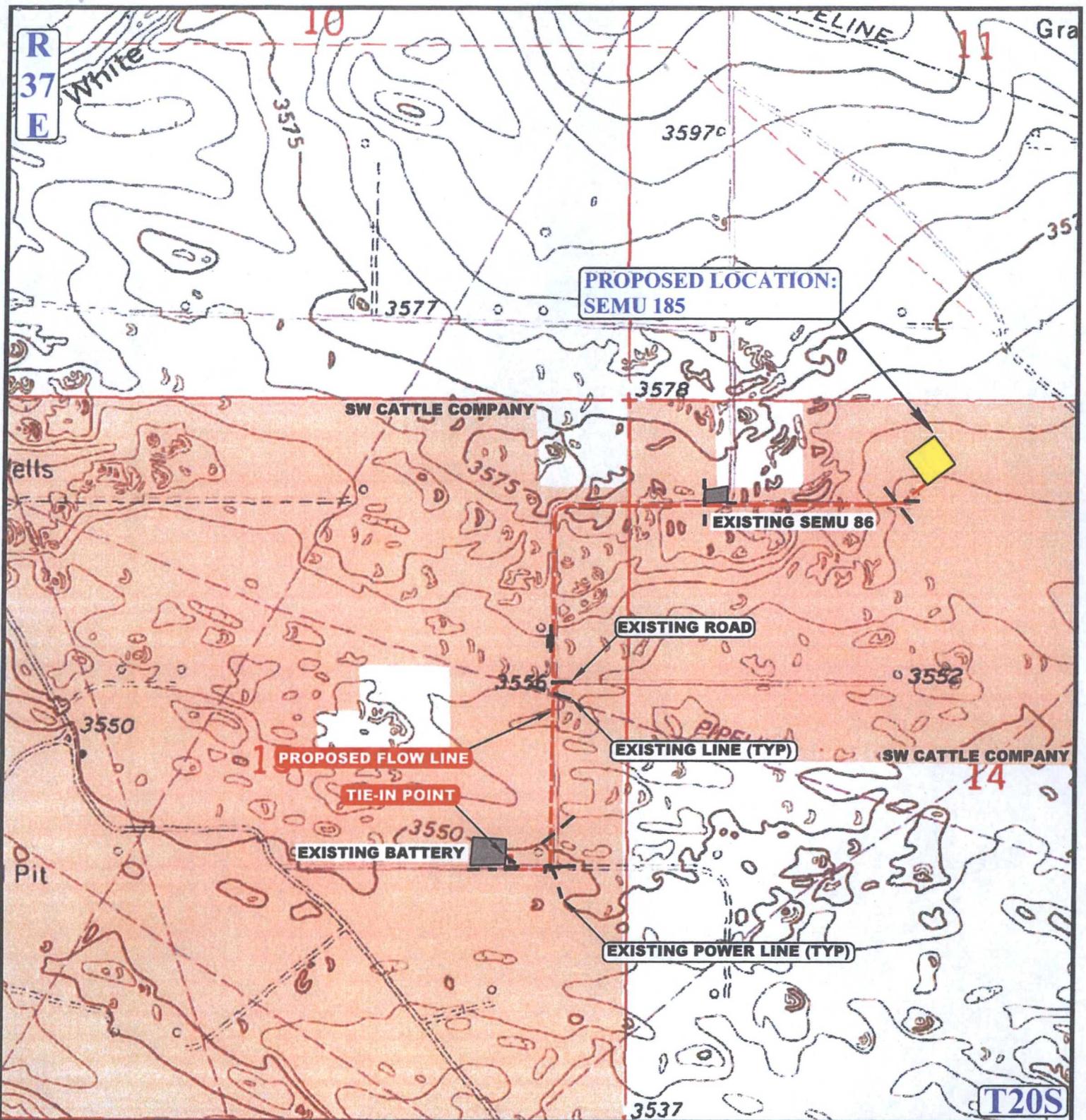
RIGHT-OF-WAY LENGTHS			
DESCRIPTION	FEET	ACRES	RODS
SE 1/4 SECTION 15 SW CATTLE COMPANY	1214.82	0.168	73.63
NE 1/4 SECTION 15 SW CATTLE COMPANY	2413.38	0.332	146.27
NW 1/4 SECTION 14 SW CATTLE COMPANY	2264.29	0.312	137.23
TOTAL	5892.49	0.812	357.13



RIGHT-OF-WAY LENGTHS			
DESCRIPTION	FEET	ACRES	RODS
SE 1/4 SECTION 15 SW CATTLE COMPANY	1214.82	0.168	73.63
NE 1/4 SECTION 15 SW CATTLE COMPANY	2413.38	0.332	146.27
NW 1/4 SECTION 14 SW CATTLE COMPANY	2264.29	0.312	137.23
TOTAL	5892.49	0.812	357.13

BEGINNING OF FLOW LINE STA. 0+00 BEARS S52°21'09"W 1114.29' FROM THE EAST 1/4 CORNER OF SECTION 15, T20S, R37E, N.M.P.M.

CERTIFICATE PROFESSIONAL SURVEY



APPROXIMATE TOTAL FLOW LINE DISTANCE = 5892' +/-

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- EXISTING ROAD
- PROPOSED FLOW LINE
- EXISTING POWER LINE
- EXISTING LINE (PIPELINE/FLOW LINE)

ConocoPhillips Company

SEMU 185
SECTION 15, T20S, R37E, N.M.P.M
415' FNL 425' FEL



DRAWN BY: C.B.	DATE DRAWN: 12-23-14
SCALE: 1" = 1000'	REVISED: 00-00-00

FLOW LINE MAP

TOPO D



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Vernal, UT 84078 * (435) 789-1017