

30-025-40383



HOBBS OCD

DEC 14 2011

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**Devon Energy Corporation  
20 North Broadway  
Oklahoma City, Oklahoma 73102-8260**

# **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Green Wave 20 Federal 1H**

**Sec-20, T-26S R-34E  
330' FSL & 330' FWL,  
LAT. = 32.0225849'N (NAD83)  
LONG = 103.4993511'W**

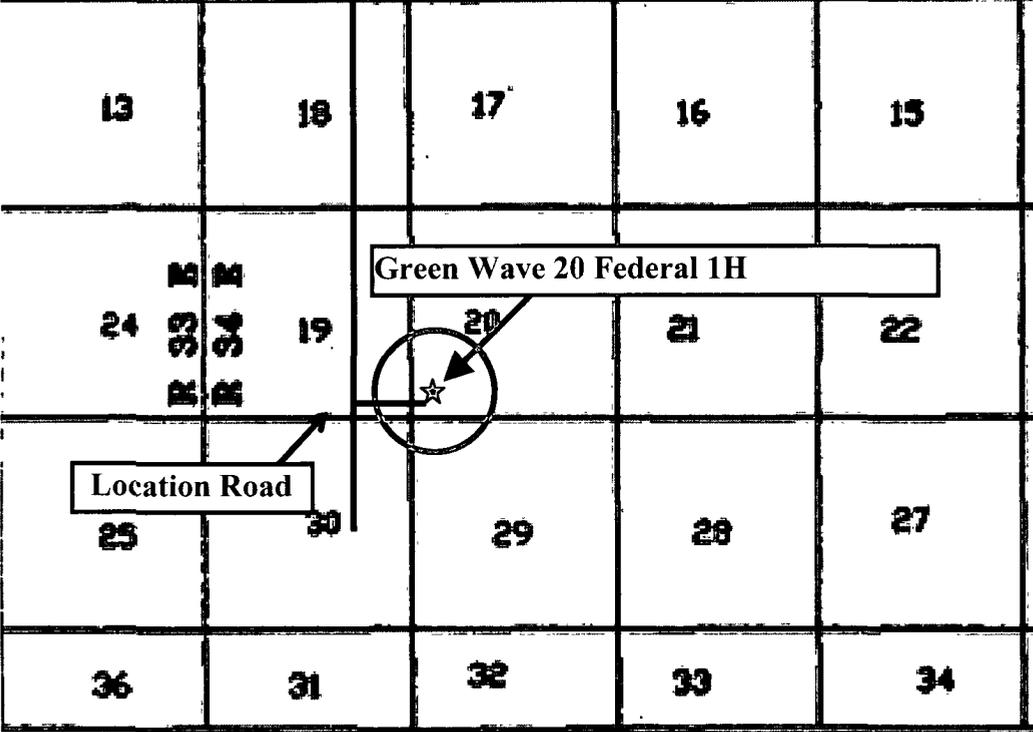
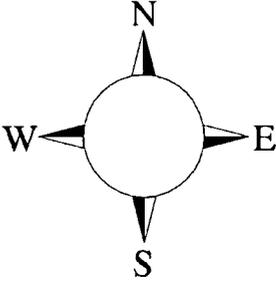
**Lea County NM**

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BUREAU OF LAND MGMT  
OPERATIONS OFFICE

**Green wave 20 Federal 1H**  
 This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**Assumed 100 ppm H<sub>2</sub>S = 3000' (Radius of Exposure)**  
 100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

**Escape**

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated West then North on caliche road. Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

**Assumed 100 ppm ROE = 3000'**  
 100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

## Emergency Procedures

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the “buddy system” to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - Detection of H<sub>2</sub>S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

### **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

### **Characteristics of H<sub>2</sub>S and SO<sub>2</sub>**

<b>Common Name</b>	<b>Chemical Formula</b>	<b>Specific Gravity</b>	<b>Threshold Limit</b>	<b>Hazardous Limit</b>	<b>Lethal Concentration</b>
<b>Hydrogen Sulfide</b>	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
<b>Sulfur Dioxide</b>	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

### **Contacting Authorities**

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

**Devon Energy Corp. Company Call List**

<u>Artesia (575)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell.....	748-7448 .....	748-0178 .....	746-2991
Asst. Foreman –Tommy Polly.	748-5290 .....	748-0165 .....	748-2846
Don Mayberry.....	748-5235 .....	748-0164 .....	746-4945
Montral Walker.....	390-5182 .....	748-0193 .....	936-414-6246
Engineer – Marcos Ortiz.....	(405) 317-0666.....	(405) 552-8152.....	(405) 381-4350

**Agency Call List**

<u>Lea County (575)</u>	<u>Hobbs</u>	
	State Police .....	392-5588
	City Police .....	397-9265
	Sheriff's Office.....	393-2515
	Ambulance.....	911
	Fire Department.....	397-9308
	LEPC (Local Emergency Planning Committee).....	393-2870
	NMOCD .....	393-6161
	US Bureau of Land Management .....	393-3612

<u>Eddy County (575)</u>	<u>Carlsbad</u>	
	State Police .....	885-3137
	City Police .....	885-2111
	Sheriff's Office.....	887-7551
	Ambulance.....	911
	Fire Department.....	885-2111
	LEPC (Local Emergency Planning Committee).....	887-3798
	US Bureau of Land Management .....	887-6544
	New Mexico Emergency Response Commission (Santa Fe) ...	(505)476-9600
	24 HR .....	(505) 827-9126
	National Emergency Response Center (Washington, DC) ..	(800) 424-8802

**Emergency Services**

	Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
	Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
	Halliburton .....	(575) 746-2757
	B. J. Services.....	(575) 746-3569
<i>Give</i>	Flight For Life - Lubbock, TX .....	(806) 743-9911
<i>GPS</i>	Aerocare - Lubbock, TX .....	(806) 747-8923
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM .....	(575) 842-4433
	Lifeguard Air Med Svc. Albuquerque, NM .....	(575) 272-3115

Prepared in conjunction with  
Wade Rohloff



Green Wave 20 Fed 1H  
S20-T26S-R34E  
330' FSL & 330' FWL

Production System:          Closed

- 1) Oil sales by tank gauge to tank truck.
- 2) Seal requirements:
  - A. Production Phase: On all Tanks
  - (1) All valves 5 sealed closed.

Sales Phase: On Tank being hauled.

- (1) Valve 1 sealed closed. 1
  - (2) Valve 3 sealed closed. 3
  - (3) Valve 4 sealed closed. 4
  - (4) Valve 5 sealed closed. 5
  - (5) Misc. Valves: Plugged or otherwise inaccessible. ●
- NOTE: Valve 2 is either a test or roll line if there is a valve 2 it will be sealed closed. 2

Ledger for Site Diagram

- Valve #1: Production Line 1
- Valve #2: Test or Roll line 2
- Valve #3: Equalizer Line 3
- Valve #4: Circ./Drain Line 4
- Valve #5: Sales Line 5
- Valve #6: BS&W Load Line 6

Buried Lines:

Firewall:

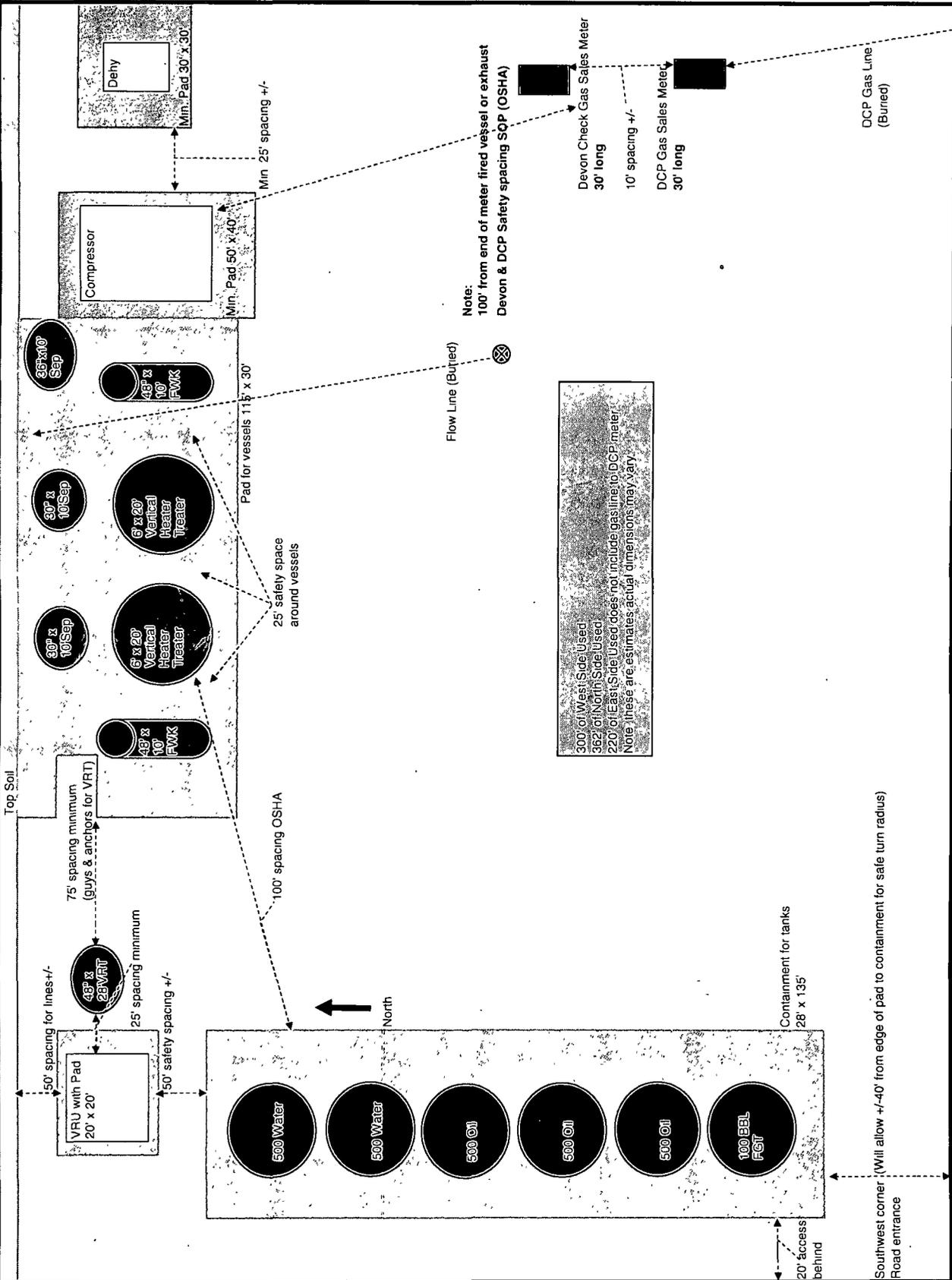
Wellhead:

Stak-pak: Stak-pak

Production line:

Water line:

Gas Meter A M C



Southwest corner (Will allow +/-40' from edge of pad to containment for sale turn radius) Road entrance