## State of New Mexico Energy Minerals and Natural Resources

Form C-101 May 27, 2004

1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit to appropriate District Office

☐ AMENDED REPORT

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IMPERIAL OIL PROPERTIES, INC. 200 E. First Wichita. KS 67202							30-07			0.11		
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			° 7	Proposed Pool 1 Wildcat	Abe C	3:1 970	19		10 Propo	sed Pool 2		
						<sup>7</sup> Surface	Location					
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				<sup>8</sup> Propo	sed Bott	om Hole Locat	ion If Differer	nt From S	urface			
UL or lot no.	Section	Town	ship	Range	Lot	1		outh line	Feet from the	East/Wes	t line	County
						ditional We						
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8	lultiple N			<sup>17</sup> Proposed Dep 3000'	th	<sup>ik</sup> Fort Al		Stewart	<sup>19</sup> Contractor Brothers Drilling C	Co.		<sup>20</sup> Spud Date 7/6/05
Depth to Grou	ındwater	200'			Distanc	e from nearest fres	h water well		Distance from	nearest su	ırface w	ater None
	-		_	s thick Clay	] Pit Vo	lume:_1000	-	•	hod: Rotary		٦.	П
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	·	<u> </u>									<u>L</u>	
Propose comme	Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary Propose to drill to 3,000' and test the Abo and intermediate horizons. Approximately 400 feet of surface casing will be set and cemented to surface. If commercial pay is encountered, will run 5 ½" casing and cement to surface. Standard testing will be run plus drill stem tests, if deemed necessary and coring will be done if the drill cuttings show a geologic reason to run them.											
NOTIFY OCD OF SPUD & TIME TO WITNESS CEMENTING OF SURFACE CASING  Production Casing												
23			<del></del> .				per					
best of my kr	iowledge ar	nd belie	f. I fu	n given above is the retify the	at the dril	ling pit will be	1//	OIL C	ONSERVAT			ION
constructed according to NMOCD guidelines X, a general permit $\square$ , or an (attached) alternative OCD-approved plan $\square$ .				THE L., OF AN	Approved by:	ום	TIM V STRICT II			SOR		
Printed name	George	e R. Sı	mith	Deorg	uk,	Imeth	Title:		ን <b>በ</b>			SSIA S A MANUS
Title: Agen	ıt						Approval Date	JUN	S 9 S002 E	epiration E	Date:	AOM SA ŠÔĐE
E-mail Address: grsmith1@prodigy.net 623 4940												

#### rench Dr., Hobbs, NM 88240

<u>astrict II</u> 1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Axtec, NM 87410

District IV

#### State of New Mexico

Energy, Minerals & Natural Resources Department

### **OIL CONSERVATION DIVISION**

1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

1220 S. St. Francis Dr., S	Santa Fe, NM 87505						☐ AME	NDED REPORT
	W	ELL LO	CATION	AND ACR	EAGE DEDIC	ATION PLA	T	
API I	Number	9	Pool Code	a W	ILDCAT;	Ab. Oi	me	
Property Code Property Name Well Number NEW MEXICO STATE						Well Number		
212253 IMPERIAL OIL PROPERTIES, INC. 46					4686	Elevation		
<sup>10</sup> Surface Location								
Lor lot no. S	Section Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
waswia a	2 215.	$7\omega$		1981.28	South	659.52	WEST	LUNA
		11 Bot	tom Hol	e Location I	Different Fron	n Surface		
UL or lot no.	Section Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 13	Joint or Infill 14 C	onsolidation C	ode 13 Or	der No.				
NO ALLOWARIA	E WILL DE ASSI	CATED TO	TUIS CO	MADI ETION II	NELL VII INLEE	DESTS HAVE E	PEEN CONSOLIT	NATED OD A N

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

			<del></del>	
16			NE	<sup>17</sup> OPERATOR CERTIFICATION
NW SEC.2			NE SEC2	I hereby certify that the information contained hereif is true
Jec. C	1			and complete to the best of my knowledge and belief.
				LIDAT Jallianda
				Kauthwelliam.
	1			
				KOBERT L. WILLIAMS, VE.
				rluiliano je carthlint
				rewilliams from met
				Title and E-mail Address
				316.265.6977 Date May 26,2005
		1		Dete
				WAY 26 2005
				4
<b>(</b>				<sup>18</sup> SURVEYOR CERTIFICATION
`	<b>√</b>			I hereby certify that the well location shown on this plat was
	<u>`</u>			plotted from field notes of actual surveys made by me or
659.52' well				under my supervision, and that the same is true and correct
ľ.				to the best of my belief.
	<b>X</b>			MAY 26+ 2005
<u> </u>				Date of Survice
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#### APPLICATION FOR DRILLING

#### IMPERIAL OIL PROPERTIES, INC.

New Mexico State, Well No. 1 1980' FSL & 660' FWL, Sec. 2-T21S-R7W Luna County, New Mexico (Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Imperial Oil Properties, Inc. submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Tertiary Valley Fill and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Mncos Shale	1050'
Sarten Sand	2100'
Abo	2700'
T.D.	3000'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 200' - 320'.

Oil: Possible in the Abo. Gas: None expected.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	J-55	ST&C	2 400'	Circ. 175 sx "C" + add.
8 3/4"	5 1/2"	14.0#	J-55	ST&C	3,000'	Circ. 450 sx "C" + add. *

5. Proposed Control Equipment: A 9" 3000 psi wp Townsend 81 Ram Type double hydraulic ram BOP will be installed on the 8 5/8" casing and will be used as a 2,000 psi system. Casing and BOP will be tested before drilling out with 8 3/4. See Exhibit "E".

6	MUD PROGRAM:		MUD WEIGHT	VIS.	W/L CONTROL
	0' - 400':	Fresh water, gel mud:	8.4 - 8.7 ppg	40	No W/L control
	400' - 1500':	Fresh water, gel mud:	8.9 - 9.0 ppg	36 - 38	W/L control <10cc
	3200' - 5500':	Fresh water, gel mud:	8.8 - 9.0 ppg	36 - 42	W/L control <10cc

- 7. Auxiliary Equipment: Blowout Preventer and choke manifold.
- 8. Testing, Logging, and Coring Program:

Drill Stem Tests: As deemed necessary.

Logging: T.D - 400': GR, CD-CN, CAL, Electric (16", 64", FP, SPR)

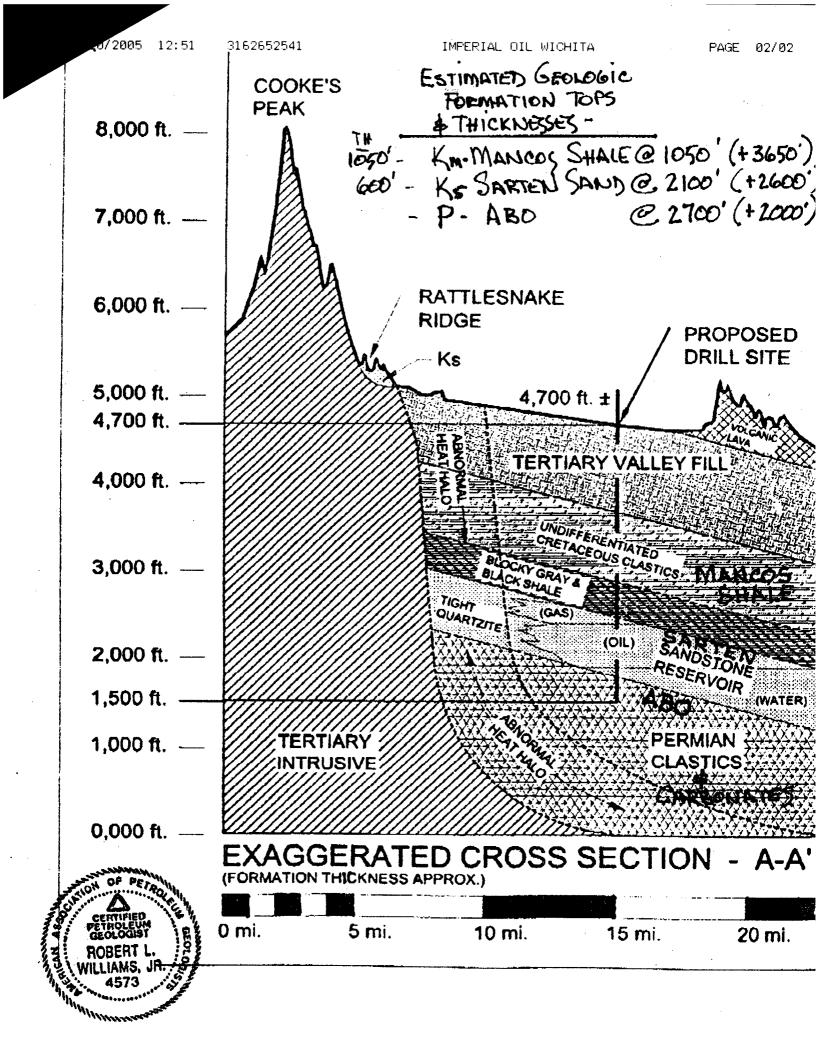
T.D. to Surface: GR-Neutron

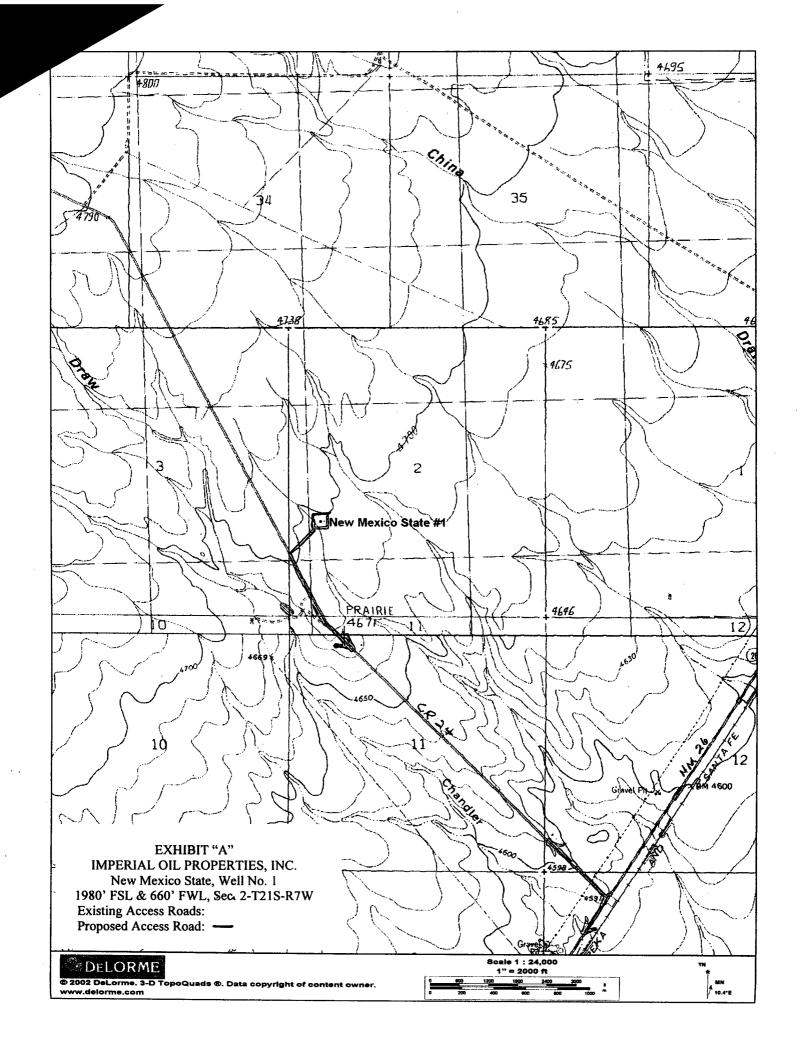
Coring: Rotary Sidewall: as dictated by geologic examination of drilling samples.

- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 1320 psi with a temperature of 90°.
- 10. H,S: None expected. Any crude oil encountered is expected to be of the "sweet" variety and will not contain H,S. In the interest of safety and to comply State requirements an H,S program is being installed by Southwest Safety Specialists of Hobbs, NM for the Stewart Brothers Drilling Co. and Imperial Oil Properties Inc. See copy of the basic plan, Exhibit "C" and a copy of the entire contingency plan and educational guide is also enclosed.

IMPERIAL OIL PROPERTIES, INC. New Mexico State, Well No. 1 Page 2

11. Anticipated starting date: July 6, 2005
Anticipated completion of drilling operations: Approximately 30 days.







5381 W. 42ND STREET • P.O. BOX 14170 ODESSA, TX 79768 OFFICE 432/381-8750 • FAX 432/281-6324

## **TYPE 81 RAM TYPE BOP**

HYDRAULIC & MANUAL DIMENSIONS & SPECIFICATION DATA



DINENBONS						
8/ZE	\$TYLE	7-4M6 X 3M	7-1/18 X 6M	9 X 3M	9 X 8M	
OVERALL HEIGHT	SINGLE	13"	13-1/4*	13-1/4*	13-1/4"	
STUDDED	DOUBLE	20-1/2"	20-1/2	22-1/2	22-1/2	
(FE33 3T/D3)	TRUPLE	30"	31"	31"	31"	
	SINGLE	21-3/8"	26-1/2"	23-3/4"	23-3/4"	
OVERALL HEIGHT FLANGED	DOUBLE	30-3/8"	38-3/4"	372	23.	
	TRIPLE	39-3/8	48-1/4"	41-1/2"	41-1/2	
OVERALL LENGTH		63*	65"	70"	70*	
OVERALL WIDTH		22"	25"	<b>36.</b>	54.	
OPENING THROUGH PR	EVENTER	7-1/16"	, 7-1/16°	9"	8.	
WORKING PRESSURE (	(1881)	3,000	5,000	3,000	6,000	
TEST PRESSURE (LBC.)		6,005	10,000	6,000	10,000	

2M CHOKE MANIFOLD ROUPMENT - CONFIGURATION OF CHOKES MAY VARY

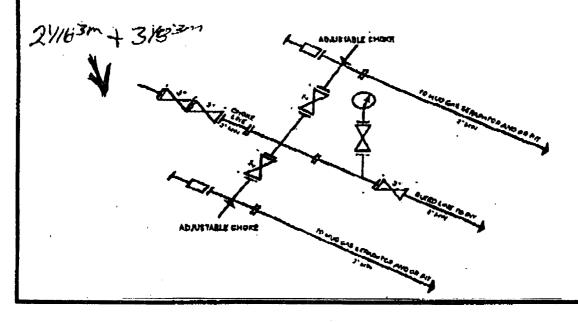


EXHIBIT "B"

IMPERIAL OIL PROPERTIES, INC.

New Mexico State, Well No. 1

BOP Specifications

#### **EXHIBIT "C"**

#### **IMPERIAL OIL PROPERTIES**

H<sub>2</sub>S DRILLING OPERATIONS PLAN For: New Mexico State, Well No. 1 1980' FSL & 660' FWL, Sec. 2-T21S-R7W

#### I. HYDROGEN SULFIDE TRAINING

All key personnel whether regularly assigned, contracted or employed on an unscheduled basis will receive or represent that they have received training in accordance with the general training requirements outlined in the API RP49 for safe drilling of wells containing hydrogen sulfide, Section 2.

In addition, supervisory personnel will be trained in the following areas:

- 1. The corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention in well control procedures.
- 2. The contents and requirements of the H<sub>2</sub>S drilling operations plan.

#### II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H<sub>2</sub>S safety equipment and systems will be installed, tested and operational when drilling commences. Southwest Safety Specialists of Hobbs, NM will be responsible for the installation and personnel training.

#### 1. Well Control Equipment:

- a. Choke manifold with a minimum of one choke.
- b. Blind rams and pipe rams and pipe rams to accommodate all drill pipe sizes with a properly sized closing unit.

#### 2. Protective Equipment:

 a. Proper protective breathing apparatus shall be readily accessible to all essential personnel on the drill site.

#### 3. H<sub>2</sub>S and Monitoring Equipment:

a. Three portable  $H_2S$  monitors positioned on location for best coverage and response. These units have warning lights and audible sirens.

#### 4. Visual Warning Systems:

- a. Wind direction indicators as shown on well site diagram.
- b. Caution/Danger signs shall be posted on roads providing direct access to location.

Imperial Oil Properties, Inc. New Mexico State, Well No. 1 Page 2

#### 5. Mud Program:

a. The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface. Proper mud weight and safe drilling practices will minimize hazards when penetrating possible H<sub>2</sub>S bearing zones.

#### 6. Communications:

a. Cell phone communication available in all vehicles and at the drilling site.

#### 7. Well Testing:

a. Drillstem testing, if required, will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. When drillstem testing intervals known to or reasonably expected to contain 100 ppm or more H<sub>2</sub>S, the drillstem test will be conducted during daylight hours and formation fluids will not be flowed to the surface.

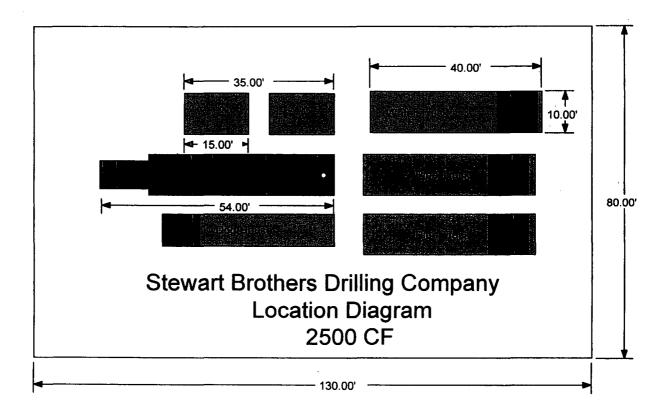


EXHIBIT "D"

IMPERIAL OIL PROPERTIES, INC.

New Mexico State, Well No. 1

Pad & Pit Layout



Stewart Brothers Drilling Co. P.O. Box 2067, 306 Airport Road Milan, New Mexico 87021, USA (505) 287-2986 -- Fax (505) 287-7660 http://www.stewartbrothers.com

## Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan Imperial Oil Properties, Public and Worksite Protection Guide

For

New Mexico State 1 Sec. 2 – T21S– R7W

Luna County NM



#### SOUTHWEST SAFETY SPECIALISTS

140 100 300

2325 W. County Road P.O. Box 5169 Hobbs, NM 88241 505-393-3072 Fax 505-393-3082 1-800-477-2918

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Agency Call List	

## **Emergency Response Planning**

#### **Philosophy**

Stewart Brothers Drilling Co., along with Southwest Safety Specialists, is committed to minimizing health, safety and environmental risks involved in our operations. While covering all possible emergency situations is impossible, this plan addresses basic emergency response procedures and our plan containing/controlling those hazards. This plan covers the "basics" of an emergency situation and should be viewed as a guidance document. It is an initial response plan designed to provide guidance in most emergency situations.

#### Using this Manual

This plan covers the "basics" of an emergency situation and should be viewed as a guidance document. Good communication protocols are set forth as primary and should be regarded in a serious fashion. Contact Management first so as to take advantage of collective reasoning regarding an emergency situation.

This document can also be used in training and preparedness of emergency situations for all personnel.

## **Site Specific Emergency Information**

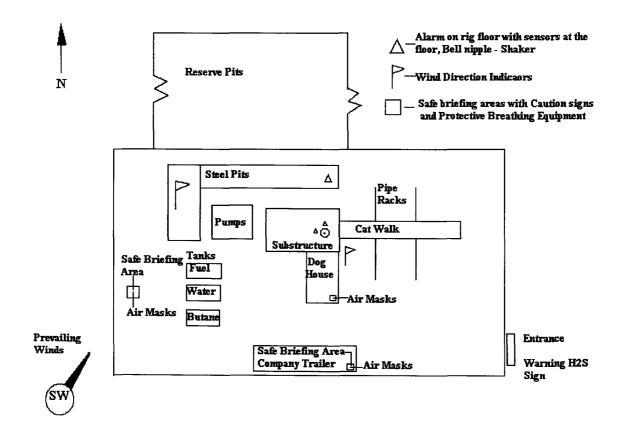
Well: New Mexico State #1

This is an open drill site. Southwest Safety Specialists will rig up on location H<sub>2</sub>S monitoring equipment and emergency response equipment which will be used within 500ft. of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators, and a 3 channel H<sub>2</sub>S rig monitor.

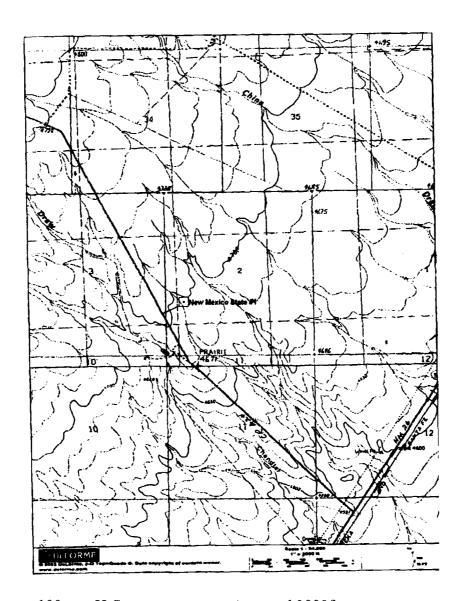
Prevailing Wind Direction: S-SW

A Warning sign shall be displayed at the entrance to the location.

- 2 Safe Briefing areas with SCBA's will be set up as a first staging/planning area in an emergency.
- 1 Personal H<sub>2</sub>S monitor will be available for the Pusher. 6 Escape Packs, 1 Flare Gun, & H<sub>2</sub>S color metric tubes will be placed at certain locations.



## Site Specific Emergency Information Cont'd...



100ppm H<sub>2</sub>S Assumed 3000ft. An unanticipated release of sour gas shall trigger activation of this plan.

Hydrogen Sulfide Issue: As our target zone is Lower Cretaceous Sandstone (Sarten Sand), a Dakota age equivalent (a common oil reservoir in the intermontane basins of the Western US) and is located above 3000 feet in depth, it is our considered opinion that any crude oil encountered will be of the "sweet" variety and will contain no H2S. However, in the interest of safety, we will comply with State requirements for H2S detection and prevention, if any.

## Site Specific Emergency Information Cont'd...

#### **Escape**

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from Southwest Lease Road until out of the ROE. Drivers in the area must be flagged and stopped so as to prevent entry into a hazardous area.

## **Emergency Procedures**

In the case of a release of gas containing H<sub>2</sub>S, Southwest Safety Specialists as well as the first responders(s) will/must isolate the area and prevent entry by other persons in the ROE. Additionally the first responders must evacuate any inhabited places encompassed by the ROE. First responders must take care not to injure themselves during this operation. Stewart Brothers Drilling, Imperial oil Properties, & Southwest Safety Specialists officials must be contacted to aid in this operation.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must 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 during the response.

### Site Specific H2S Safety Information

## **Emergency Preparedness**

Blowout Prevention equipment has been upgraded for H2S service.

H<sub>2</sub>S service equipment complies with API Spec 6A (10<sup>th</sup> Edition).

### Pressure Control Equipment

During operation: A 3000-psi working pressure BOP, consisting of a double-ram type preventer, choke manifold and closing unit. Remote control unit(s) will hydraulically operate BOP & CHOKE Manifold unit. The BOP will be nippled up on an 8.58" 3000-psi casing head. To 300 – 400 feet, Run 300 – 400 feet of new. 24lb/ft, J-55, 8 5/8" casing with cementing shoe and float.

During Completion: Townsend Type 81 Ram type BOP. A double-ram type preventer will be utilized w/ one set of pipe rams, and one set of blind rams that are hydraulically operated by remote control unit(s) and a manually operated choke manifold.

Production Casing is 5.5in., J-55, 14lb/ft casing set at TD.

#### Well Control Equipment to be utilized:

 Required control equipment will be rigged up for drilling the production hole/plugging operation.

### Safety Equipment

- A stationary H<sub>2</sub>S monitor with 3 sensors will be installed within proximity of any point of source discharge.
- Portable monitor for H2S will be available onsite for rig pusher
- At least 3 wind indicators will be installed at the entrance to the location, far enough in advance to provide adequate pre-warning.

## Site Safety Planning Checklist

#### **Evacuation**

- Evacuate well site personnel and account for all by name and company affiliation.
- Account for all by location.
- Notify local emergency services, outline problem and requirements.

#### Select "Safe Briefing Area"

- Accessible by heavy trucks
- Accessible to well site
- Upwind
- 0% LEL
- <5ppm H<sub>2</sub>S
- <85 dB Noise Level</p>

## Define "Hot Zone" Boundary

- >25% LEL
- Surface pooling of hydrocarbons, gas bubbling or water vapor fog
- >3 kW/sq. meter heat load
- >10ppm H<sub>2</sub>S
- Boundary is generally a shorter distance upwind than downwind from the well and is variable as blowout and weather conditions change.
- Restrict "Hot Zone" access to only blowout specialists and personnel they brief and accompany. Minimize personnel in "Hot Zone."

### Prepare Control Plan

- Pollution Containment
- Blowout Control Operational Plan Review
- Safety meeting Guidelines:
  - Pre-job Rundown
  - Individual responsibilities and job site duties discussed
  - Hazards review and mitigation steps
  - Evacuation route

# Site Safety Planning Checklist Cont'd

Task Action Items to Emergency Response Team

- Individual responsibilities and job site duties discussed
- Hazards review and mitigation steps
- Evacuation route

#### **H2S Release Decision Chart**

#### **ROE Explained**

- 100-PPM Radius of Exposure- This is the minimum safe distance for evacuation purposes for normal, healthy workers. Personnel should not remain in this area unprotected. The public should not be allowed to enter this area.
- 300 PPM Radius of Exposure- Take extreme precautions when working in this area. All personnel should be counseled and prepared to evacuate from within this area upon a sudden release of H<sub>2</sub>S.

The ROE depicts the area that H<sub>2</sub>S could occupy in any direction should the wind carry it that way. This is the distance the H<sub>2</sub>S will dilute to stated (300 ppm or 100 ppm) level. Concentrations within the ROE could exceed stated level. Always evacuate upwind to maximize you escape potential!

## Windsock Usage

- The way the windsock blows is pointing toward the downwind direction. This is not the direction you should evacuate toward. Evacuate in the opposite direction.
- Windsock pointing West means evacuate East
- Never escape toward the point source discharge of H2S even if that is the upwind area

### H2S Emergency Immediate Action Plan

### Alert and Account for All Personnel On Location

- Move away form the source of the H<sub>2</sub>S and get out of the affected area. Move upwind from the well bore. Avoid inhalation of H<sub>2</sub>S.
- Don proper personal breathing equipment 30 min SCBA.
- Assist any personnel in distress using the "buddy system"
- Alert other affected personnel on location.
- Proceed to pre-designated meeting area.
- Account for all personnel on location.

Take action to control the release of the H<sub>2</sub>S. Eliminate all possible sources of ignition.

<u>Do not re-enter the affected area without appropriate breathing</u> equipment.

## If The Above Actions Cannot Be Safely Accomplished

- Take all appropriate measures to shut in the H<sub>2</sub>S gas source.
- Put out all open flames in the affected area and shut down all motors.
- Notify Supervisors.
- Notify the Stewart Bros./Imperial Oil Properties/Southwest Safety personnel or refer to the Stewart Bros./ Imperial Oil Properties / Southwest Safety call list and notify the office to assess the situation to re-gain control.
- Notify local law enforcement agencies, residences down wind of release, other personnel, and any affected highway or street traffic.
- The on-site Supervisor will handle emergency vehicles.
- Any press inquiries are to be referred to Imperial Oil Properties.

# H2S Emergency Immediate Action Plan Cont'd

Alert The Public That May Be Immediately Affected.

- Contact the appropriate Government Agency(s) (911, Sheriff, Fire Dept, State Police)
- Request help to evacuate the public if necessary and to help maintain roadblocks.
- Make any necessary recommendations, wind direction, affected area, etc.
- Start evacuation procedures where appropriate.
- Proceed with best plan (at the time) to regain control of the leak.
- Maintain tight security and safety procedures.

## Rescue & First Aid for Victims of Hydrogen Sulfide Poisoning

- Do not panic!
- Don (put on) breathing apparatus
- Remove victim to fresh air as quickly as possible (i.e. Upwind from source or crosswind to achieve upwind). Do not run Downwind!
- Provide artificial respiration and/or CPR as necessary. (Use proper technique of turning your head after each breath to avoid inhaling exhaled H<sub>2</sub>S). If victim's clothing is contaminated with fluid that contains H<sub>2</sub>S then strip them to the waist.
- Remain calm and think!
- Provide for prompt medical attention

Notify the medical personnel beforehand that the victim has been poisoned by H<sub>2</sub>S (Mimbres Memorial Hospital; Deming, NM 505-544-0006)

In addition to basic First Aid, everyone on location should have a good working knowledge of CPR.

#### Physical Effects of Hydrogen Sulfide (H2S)

Concentrations	Physical Effects
0.001% 10ppm	Obvious and unpleasant odor – safe for
	8-hour exposure.
0.005% 50ppm	Causes Flu-like symptoms and may cause pneumonia
0.01% 100ppm	Numbs sense of smell in 3-5 minutes – may sting eyes and throat
0.02% 200ppm	Numbs sense of smell rapidly, severely stings eyes and throat, severe flu-like symptoms. 4 or more hours may cause lung damage and/or death.
0.06% 600ppm	Unconsciousness quickly, death will result if not rescued immediately. Initiate rescue breathing.

Caution: H<sub>2</sub>S is a colorless, transparent gas and is flammable. It is heavier than air and may accumulate in low places.

#### **Public Evacuation Plan**

- 1. When the Safety Supervisor determines the H<sub>2</sub>S or other emergency cannot be limited to the well location, Imperial Oil Properties and the public will be involved; he will activate the evacuation plan.
- 2. The supervisor will notify local government agencies that a hazardous condition exists and evacuation needs to be implemented.
- 3. A Southwest Safety Person who has been trained in the use of H<sub>2</sub>S detection equipment and self-contained breathing apparatus shall monitor H<sub>2</sub>S concentrations, wind directions, and area of exposure. He will delineate the outer perimeter of the hazardous gas area. Extension to the evacuation area shall be determined from the information gathered.
- 4. Law enforcement shall be called to aid in setting up and maintaining roadblocks. They will also aid in evacuation of the public if necessary, but they shall not be asked to enter the hazardous zone.
- 5. Constant communication shall be maintained between company personnel and law enforcement personnel.
- 6. After the discharge of gas has been controlled, the Southwest Safety person will determine when the area is safe for re-entry.

All atmospheric monitoring equipment shall have an established minimum level capability of reading H<sub>2</sub>S values.

## **Controlling Public Access**

Blocking off all public access within the ROE is necessary in the event of a release of high concentrations of H<sub>2</sub>S. Escaping upwind is a temporary safe measure. Do not assume that the upwind area will remain safe! We must utilize the ROE because of the potential for the wind to shift directions. Access to the ROE must be controlled. If the ROE encompasses a public area, controlling access is a temporary function for company personnel, until local authorities take over.

## **Emergency Communication Procedures**

## Displaying The Numbers

- Emergency aid telephone numbers shall be conspicuously displayed near the best available outside communication, i.e. radio or phone. The emergency telephone numbers to be listed should include, but are not limited to: Doctor, Ambulance, Hospital and Sheriff. Landlines and cellular phones are to be available prior to drilling.
- Emergency telephone numbers should be updated as needed!

#### Air Ambulance

- Air ambulance is available in this area, Refer to call list and give following info:
  - Identification (Longitude = W107'32'48.92031" Latitude = N32'30'23.61932")
  - County, Section, Range and Township (CNM SW Sec. 2 T215 R7W)
  - Nature and type of injury or illness
  - Preferred landing zone
  - Phone Number (Stewart Brothers)

## Landing Zone

The on-site landing zone can be established with very little effort. The on-site supervisory staff should preplan it. Daylight hours require an area of approximately 100ft X 100ft to land safely. The area should be clear of obstacles, such as poles, trees, power lines, debris, etc. A smoke flare on the downwind side of the intended site to demonstrate wind direction to the approaching aircraft would be helpful. Nighttime hours require a slightly larger area for and extra margin of safety, again clear of obstacles and debris. The area should be established by lighting the four (4) corners of the intended site either with magnesium flares or with vehicles shining their headlights toward the center of the site from each of the four corners providing good illumination of the actual touchdown area. Never approach the helicopter while the blades are in motion, and never approach without a signal acknowledgment from the pilot or out or the line of site from the pilot.

## Call List

## **Stewart Brothers Drilling**

Office - (505) 287-2986

### Imperial Oil Properties, Inc.

Office - (316) 265-6977

\*Robert L. Williams Jr. Ofc. 316-265-6977 Cell 316-680-1670 Jon T. Williams Jr. Ofc. 316-263-5596 Cell 316-619-0677 \*Robert E. Williams Ofc. 316-268-0230 Cell 316-841-4598

## **Southwest Safety Specialists**

Office - 1-800-477-2918

Scott Magness Cell – 505-441-2479 Home – 505-392-7487

#### **Agency Call List**

State Police (505) 546-3481
Luna Co. Sheriff's Office (505) 546-2655
Emergency911
Ambulance911
Cooks Peak Vol. Fire Department911
Local Emergency Planning Committee-887-3798
US Bureau of Land Management887-6544
NM Emergency Response Comm476-9600
24hr827-9126
National Emergency Response Center-800-424-8802

#### **Emergency Services**

Boots and Coots IWC	1-800-256-9688 or 281-931-8884
Cudd Pressure Control	432-699-0139 or 432-563-3356
Halliburton	505-746-2757
B.J. Services	505-746-3569
Maclaskey	505-393-1016
Southwest Safety Specialists	1-800-477-2918

<sup>\*</sup>Will be at Well site