s, NM 88240

State of New Mexico Energy Minerals and Natural Resources

Form C-101 May 27, 2004

of III
O 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.

JUN 0 9 2005

SURFACE CASING

☐ AMENDED REPORT

RECEIVED mit to appropriate District Office

Santa Fe, NM 87505 OOD-AFITEOIA

Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County						23, 1423 231 121	324, 131311131	1, I LUGDA		ADD A ZONE
Property Code Proposed Pool 1 Proposed Pool 1 Proposed Pool 1 Proposed Pool 1 Proposed Pool 2 Carlsbad; Strawn, South (Gas) 74120 / Tansil Dam; Atol (Gas) 85900 / Wildcat; Wolfcamp Proposed Pool 2 Proposed Pool 3 Proposed Pool 2 Proposed Pool 3 Proposed				Pure Resource	es, L. P.			150628		
Section Township Range Lot ldn Feet from the North/South line Feet from the East/West line County								30 - 01	API Numb	s 3
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or tot no. Section Township Range Lot Idn Feet from the 1,155° South 1,129° East EDDY **Proposed Bottom Hole Location If Different From Surface or tot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County **Additional Well Information **I Work Type Code N Well Type Code N Section Well Type Code N Section N	Carlsbad;	Morrow		•)			rawn, South (G	as) 74120 /	Tansil Dam; Atoka
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8 Proposed Bottom Hole Location If Different From Surface or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County Additional Well Information 11 Work Type Code G R P P Surface 12 Well Type Code R P P Surface 13 Cable/Rotary P Surface 14 Lease Type Code Nabors P Surface 15 Ground Level Elevation P Surface 16 Mahilple P Proposed Depth Morrow Nabors When Approved 17 Proposed Depth Morrow Nabors When Approved 18 Supul Date When Approved 19 Liner: Synthetic ☐ 12 mils thick Clay D Pit Volume: 2000 bbls Drilling Method: Closed-Loop System ☐ P Proposed Casing and Cement Program Hole Size Casing Size Casing weight/foot Setting Depth Sacks of Cement Estimated TOC 17-1/2" 13-3/8" 48# H-40 375' 400 Surface 12-1/4" 9-5/8" 36# J-55 1,850' 1,200 Surface 8-3/4" 7" 23# P-110 HC 8,900' 8880 1,700' 6-1/8" 4-1/2" Liner 11.6 P-110 HC 12,000' 315 Liner fully cemente 22 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. 22 Describe the proposed program. If this application of drill & complete a 12,000' Morrow gas well. This well is an infill well at a notard location in the same standup 320 acre (E/2 Sec. 8) proration unit as dedicated to Mead #7 well. Proposed drilling plan as follows: Drill at 12-1/4" hole to 18,50', run & set 13-3/8" 48# H-40 (seg. w/400 x Class "C" cmt. + additives, circ. to surface. 27 Describe Test Procedure & schematic, proposed mud program and drilling site layout plat. Also see attached C-102 tst/maps/water well maps & info as available from State Engineers web site. Contingency & Emergency Response Plans attached. 28 Proposed Casing Size OIL CONSERVATION DIVISION to form the feet from the feet of the state of the proposed and belief 1 further certify that the drilling pit will be	UL or lot no.	9 1			Lot Idn					
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Liner: Synthetic \(\ \] 12 mils thick \(\) Pit Volume: 2000_bbls \(\) Drilling Method: \(\) Fresh Water \(\) Brine \(\) Diescel/Oil-based \(\) Gas/Air \(\) \(\) 12 Proposed Casing and Cement Program \(\) 13-3/8" \(\) 48# H-40 \(\) 375' \(\) 400 \(\) Surface \(\) 12-1/4" \(\) 9-5/8" \(\) 36# J-55 \(\) 1,850' \(\) 1,200 \(\) Surface \(\) 8-3/4" \(\) 7" \(\) 23# P-110 HC \(\) 8,900' \(\) 380 \(\) 1,700' \(\) 6-1/8" \(\) 4-1/2" Liner \(\) 11.6 P-110 HC \(\) 12,000' \(\) 315 \(\) Liner fully cements \(\) 20 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. The Resources, L. P. respectfully submits this application to tof i'll & complete a 12,000' \(\) 315 \(\text{ Liner fully cements} \) 120 mil a 12-1/2" hole to 375', run & set 13-3/8" 48# H-40 esg, w/400 sx Class "C" cmt + additives, circ. to surface. Drill a 17-1/2" hole to 1,850', run & set 72/3# P-110 esg, w/880sx Class "C" cmt + additives, circ. to surface. Drill a 8-3/4" hole to 1,850', run & set 72/3# P-110 esg, w/880sx Class "H" cmt + additives, circ. to surface. Drill a 8-3/4" hole to 1,2000', run & set 72/3# P-110 esg, w/880sx Class "H" cmt + additives, circ. to surface. Drill a 6-1/8" hole to 12,000', run & set 4-1/2" liner from 8,700'-12,000' w/315sx Class "H" cmt + additives, circ. to surface. Drill a 6-1/8" hole to 12,000', run & set 4-1/2" liner from 8,700'-12,000' w/315sx Class "H" cmt + additives, circ. to surface. Drill a 6-1/8" hole to 12,000', run & set 9-5/8" 36# J-55 esg, w/580sx Class "H" cmt + additives, circ. to sur			i	12,000	Distance from		well		m nearest surfac	
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nail Address: abohling@pureresources.com te: 06/08/2005 Phone: (432) 498-8662 Conditions of Approval Attach TO WITNESS CEMENTING OF	prevented name Fitle: Regular Private Resource of the second of the se	roductive zerorces, L. Focation in 7-1/2" hol 2-1/4" hol 8-3/4" hol 6-1/8" holie & treat ed BOPE water we retify that the nowledge are according all alternatives. Alan W.	ne. Describ? respectfuthe same set o 375', let o 1,850' let o 8,900' let o 12,000 well in More ll maps & let information de belief. If to NMOCD we OCD-app	ogram. If this appet the blowout preside the blowout the set 13-3, run & set 13-3, run & set 4-3, run & set 4-3, run & set 4-3, run & schema info as available an given above is urther certify the guidelines , soroved plan .	plication is to D evention program is application re (E/2 Sec. 8) 8" 48# H-40 /8" 36# J-55 23# P-110 csg 1/2" liner fro this zone is no atic, proposed le from State true and comple at the drilling	EEPEN or PLUG B n, if any. Use addit to drill & comple proration unit a ssg. w/400 sx Cla ssg. w/580sx Clas s. w/880sx Class m 8,700°-12,000° ot viable, then at mud program a Engineers web s te to the oit will be it will be Title:	ACK, give the data ional sheets if nece ete a 12,000' Mo iss dedicated to Miss "C" cmt. + add "H" cmt. + add i w/315sx Class tempt up-hole rend drilling site lite. Contingency OIL Coved by:	on the present prossary. rrow gas well. The ditives, circ. to solitives, circ. to solitives, circ. cmt. to the completions in ayout plat. Also we Emergency of the constant o	ductive zone ar This well is a oposed drilli urface. urface. o +/- 1,700'. ives. Fully co Strawn & A see attached Response Pla	ind proposed new in infill well at a ing plan as follows: ement liner. toka & Wolfcamp. C-102 ins attached. VISION Learn Le

State of New Mexico

DISTRICT I 1625 M. PRENCH DR., HOBBS, NM 86240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brasos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

	STRICT IV 0 s. st. francis dr., santa pr. nd 07505	WELL LOCATION AN	ND ACREAGE DEDICATION PLAT	□ AMENDED REPORT
	API Number	Pool Code	Pool Name	
		73960	Carlsbad; Morrow, South (P	ro Gas)
	Property Code		Property Name	Well Number
1	32891		MÉAD	8
	ocrid No. 150628	PURE	Operator Name RESOURCES, LP	Elevation 3086'

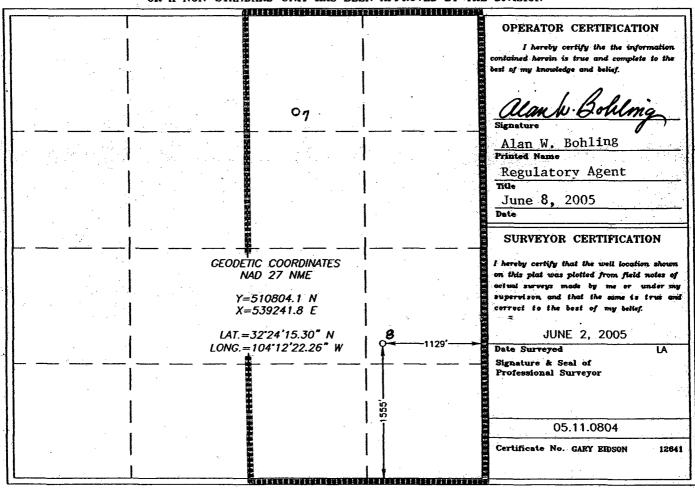
Surface Location

١	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County
	1.5	8	22-S	27-E		1555	SOUTH	1129	EAST	EDDY

Bottom Hole Location If Different From Surface

ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	Dedicated Acres	Joint o	r infili Co	nsolidation (ode Or	ler No.				
1	320				1					

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



DISTRICT I

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. CRAND AVENUE, ARTESIA, NM 88210

Dedicated Acres

320

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

Joint or Infilt

Consolidation Code

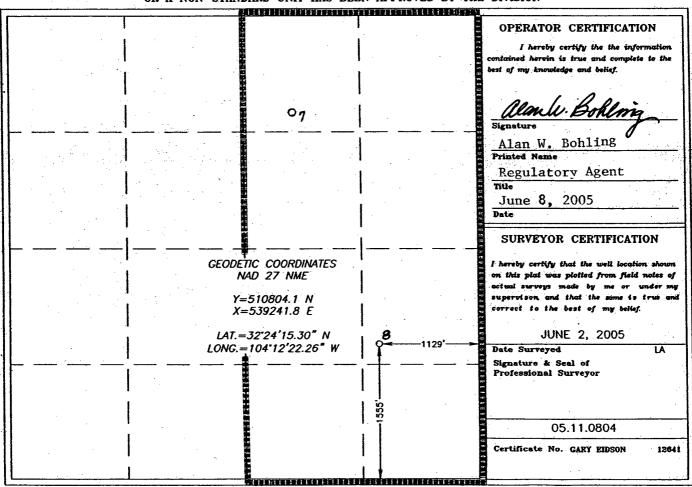
OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NIS 87505	WELL LOCATION AND	ACREAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code	Pool Na	me
	74120	Carlsbad; Strawn, Sout	h (Gas)
Property Code	Pro	perty Name	Well Number
32891		MEAD	8
оски No. 150628	PURE RI	Elevation 3086'	
	Surf	ace Location	
UL or lot No. Section Township	Range Lot Idn Feet	rom the North/South line Feet from	the Bast/West line County
8 22-	S 27-E 1	555 SOUTH 1129	EAST EDDY
	Bottom Hole Location	If Different From Surface	
UL or lot No. Section Township	Range Lot Idn Feet	from the North/South line Feet from	the Bast/West line County

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Order No.



DISTRICT I 1625 M. FRENCH DR., HOBBS, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003 Submit to Appropriate District Office

DISTRICT II 1301 W. CRAND AVENUE, ARTESIA, NN 86210

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

State Lease — 4 Copies Fee Lease — 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87505

DISTRICT IV	well location and	ACREAGE DEDICATION P	LAT
API Number	Pool Code	Poo	Name
	85900	Tansil Dam; Atoka (G	as)
Property Code	Pro	perty Name	Well Number
32891		MEAD	· 8
оскіо но. 150628		erator Name ESOURCES, LP	Elevation 3086'

Surface Location

ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	aalating siy	8	22-S	27-E	-	1555	SOUTH	1129	EAST	EDDY

Bottom Hole Location If Different From Surface

ſ	UL or lot No.	Section To	wnship	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County
					:			,		
ı	Dedicated Acres	Joint or In	filf Cor	solidation (Code Or	der No.				
					ł					
. 1	320				- 1					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

 UK A NUN-SIANDARD UNII HAS BEEN APPROVED BI I	HE DIVIDION
	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
07	Alanh Bohling
	Alan W. Bohling Printed Name Regulatory Agent Title June 8, 2005
 GEODETIC COORDINATES	Date SURVEYOR CERTIFICATION I hereby certify that the well location shown
NAD 27 NME Y=510804.1 N X=539241.8 E	on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief.
 LAT.=32°24'15.30" N LONG.=104'12'22.26" W	JUNE 2, 2005 Date Surveyed LA Signature & Seal of Professional Surveyor
1555,	05.11.0804
	Certificate No. GARY EIDSON 12641

DISTRICT I

DISTRICT II

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office State Lease - 4 Copies

OIL CONSERVATION DIVISION

Pee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

1301 W. CRAND AVENUE, ARTESIA, NW 88210 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT AMENDED REPORT 1230 S. ST. FRANCIS DR., SANTA FE, KM 87505 API Number Pool Code Pool Name Wildcat; Wolfcamp Property Code Property Name Well Number MEAD 8 32891 OGRID No. Operator Name Elevation PURE RESOURCES, LP 150628 3086

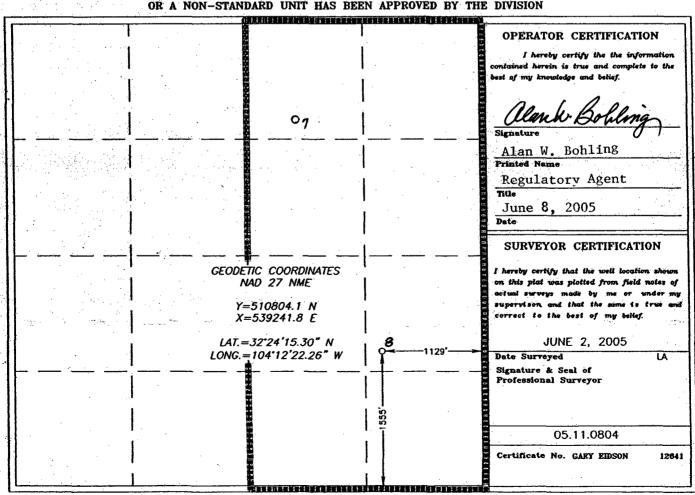
Surface Location

١	UL or let No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
1	a we also great	8	22-S	27-E		1555	SOUTH	1129	EAST	EDDY

Bottom Hole Location If Different From Surface

ſ	UL or lot No.	Section T	ownship :	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County
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1				<u> </u>	<u> </u>	<u> </u>	<u> </u>			<u> </u>
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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



Supplemental Information Operational Procedures 06/08/2005

Well:

MEAD #8

Section 8 - T22S - R27E 1,555' FSL & 1,129' FEL Eddy County, New Mexico

1. Drilling Contractor: Nabors Drilling USA, Rig #715

2. Well Control Equipment: (Attachment "B" – BOPE Schematic)

- 2.1. The equipment represented by the attached schematic, a 135/8" 10,000 psi WP BOP stack, will be installed prior to drilling out the 133/8" surface casing shoe and will be the BOPE utilized throughout the remainder of the drilling operations.
- 2.2. The accumulator system controlling BOPE functions will be capable of closing each ram type preventer and the annular preventer within 30 seconds.
- 2.3. Upon installation of the BOPE to the 133/8" casing set at 375', the casing and BOP will be pressure tested to 500 psi, using rig pumps, before drilling the casing shoe. Upper and lower kelly cocks and safety valves with subs to fit all drill string connections in use will be available on the rig floor and will also undergo pressure testing. A Rotating Head will be in-place but the rubber will not be installed until well conditions dictate its use.
- 2.4. Upon installation of the BOPE to the 95/8" intermediate casing set @ 1850', the BOP, HCR valve, choke manifold, upper and lower kelly cocks, and safety valves will be pressure tested by a third party contractor to 3000 psi (high) and 250 psi (low). The annular preventer will be tested to 1500 psi. The third party contractor will also test the accumulator system performance to assure that it is functioning within specifications. The 95/8" casing will be tested, using rig pumps, to 1500 psi prior to drilling the shoe.
- 2.5. The open-ended vent line from the choke manifold will be constructed of 4½" drill pipe and connections will be strap-welded to prevent separation. The mud-gas separator will be installed after setting the surface casing and will be fully operable prior to drilling below the 95/8" intermediate casing. The flare line from the separator will be constructed of 8" flanged pipe and the vent and flare lines will be secured in place with drilled anchors and steel cabling.
- 2.6. Upon installation of the BOPE to the 7" intermediate/production casing set at approximately 8900' md (±200' below the top of Wolfcamp), the BOP, HCR valve, choke manifold, upper and lower kelly cocks and safety valves will be pressure tested by a third party contractor to 5000 psi (high) and 250 psi (low). The annular preventer will be tested to 1500 psi. Prior to drilling the 7" shoe, the casing will be tested to 3000 psi. The third party contractor will also test the accumulator system performance to assure that it is functioning within specifications.

- 2.7. Subsequent pressure testing of the BOPE after setting the 7" casing will be done at two week intervals; test procedures will be the same as those listed in Paragraph 2.6 above.
- 2.8. In addition to the aforementioned testing, functional tests of all equipment will be performed as follows:
 - 2.8.1. Operator's supervisor will conduct daily BOP drills with rig crews; during these drills, the accumulator system, pipe rams, HCR valve and the remote adjustable and manual chokes will be operated to assure proper mechanical functioning. Any problems will be immediately resolved and drilling operations will not proceed until equipment is in proper working order.
 - 2.8.2. The annular preventer will be functionally tested on a weekly basis and the blind rams will be functionally tested after each trip out of the hole during drilling operations.
- 2.9. A wireline lubricator and/or "pack-off" system of sufficient length to pull all tools from the hole and allow the well to be safely shut-in will be utilized during open hole logging operations.

3. Well Monitoring:

- 3.1. The PVT, Flow Indicator, Pump Stroke Counter and H₂S sensor equipment will be installed and operational prior to spudding the well. The PVT will be utilized when circulation is maintained in the steel pits, which will be the case when prospective hydrocarbon bearing zones are penetrated below the 7" casing depth. Any malfunctioning equipment will be repaired or replaced ASAP.
- 3.2. A Mud Logging Unit will be operational prior to drilling the 95/8" casing shoe at 1800'. The Mud Logger will provide the Operator and Rig supervisors with data regarding formation tops and porosity / permeability of penetrated zones and cuttings analysis, which may forewarn of potential problems. The Mud Logger will record and report relative gas influx ("background gas") into the mud stream while drilling ahead and also "connection gas" and "trip gas". This data will aid supervisors in making decisions regarding mud weight increases.
- 3.3. Trip tanks shall be used each time that trips are made after setting surface casing. Displacement volumes shall be accurately recorded on a *Trip Sheet* and compared to theoretical volumes to timely warn of potential problems due to influx of formation fluids or gas into the wellbore.
- 3.4. When the drill string is out of the hole for open hole logging, a rig crew member will be assigned to visually monitor the mud pits and flow line for indications of influx of formations fluids / gas into the wellbore; the PVT will remain in service and this visual monitoring is an added precaution.

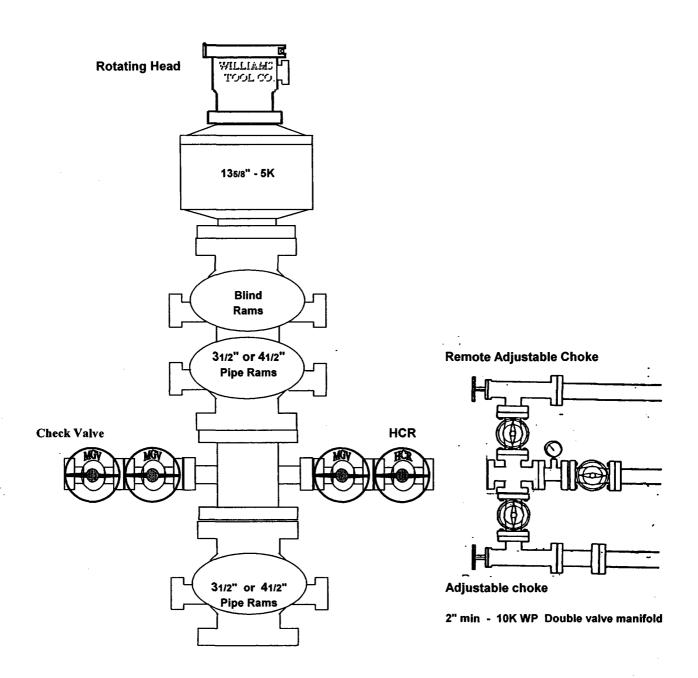
. Contingency Planning / Safety

- 4.1. An Emergency Response Plan (Attachment "C") and a H₂S Contingency Plan (Attachment "D") will be in place upon commencement of operations. All Operator and Rig personnel will be trained in the plans' objectives and their specific responsibilities should the plans be implemented.
- 4.2. Safety meetings will be held on a regular basis and prior to any non-routine activities or prior to a significant operation, such as running casing, nippling-up BOPE, open hole logging, etc.
- 4.3. Local law enforcement and emergency response personnel will be apprised of upcoming operations and will be involved in coordinating any emergency response involving the public.

5. Nearest Resident:

The distance from this well to the nearest residence is approximately 633'.

1,555' FSL and 1,129' FEL Section 8 - T22S - R27E Eddy County, New Mexico



Casing/Cement and Mud Program Sheet

MEAD #8 API No.

1,555' FSL & 1,129' FEL UL I, Sec. 8, T-22-S, R-27-E **Eddy County, New Mexico**

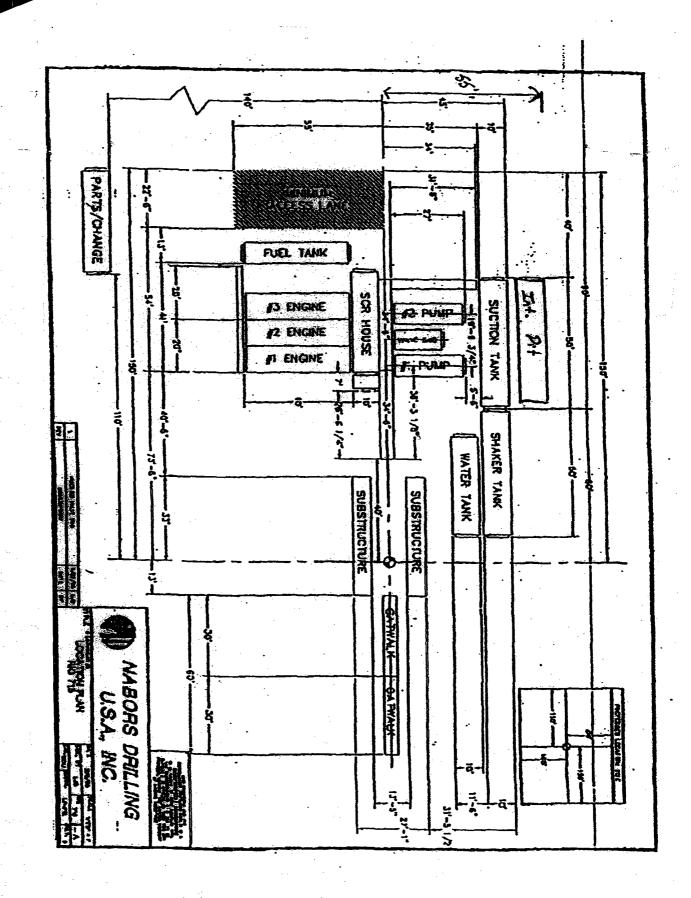
Proposed Casing and Cement Program:

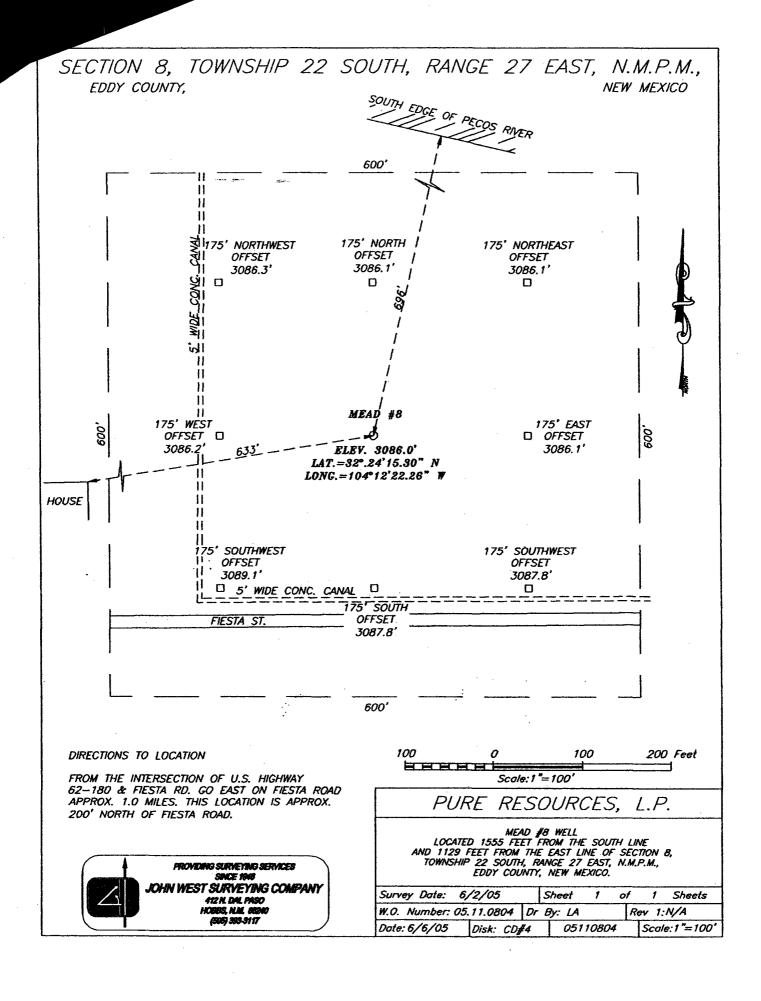
Hole Size	Casing Size	Wt #/ft	Grade	Connect	Setting Depth	Cement Volume	Estimated TOC
17-1/2"	13-3/8"	48	H-40	STC	375'	400 sx	Surface
12-1/4"	9-5/8"	36	J-55	STC	1,850'	580 sx	Surface
	7.00						
8-3//4"	7"	23	P110HC	LTC	8,900'	880 sx	1,700'
F 191							
6-1/8"	4-1/2" Liner	11.6	P110HC	LTC	8,700'-12,000'	315 sx	Linner will be fully cemented with cmt. across lap into 7" Csg.
10 mm (14)							

Note: 7" Intermediat Casing depth may be adjusted per drilling results-intent is to set at the top of the Wolfcamp zone, which will be determined by mud logging as drilling progresses.

Propose Mud Program

Interval	Туре	Weight
0' - 400'	FW / Spud Mud	8.4 - 9.0
400' - 1,800'	FW w/ LCM as needed	8.4 - 9.0
1,800' - 8,900'	FW w/ LCM as needed	8.4 - 9.2
8,900' - 12,000'	Brine	9.8 - 11.0
	35+ vis, FL 6-8 across zones of interest	





Pure Resources, L. P. Mead Well No. 8 1,555' FSL & 1,1129' FEL UL I, Sec. 8, T-22-S, R-27-E Eddy County, New Mexico

H2S and **Safety Statement**

Although Pure Resources, L. P. is not aware of any known presence of H2S in the area of this well and does not anticipate encountering any H2S during the drilling of this well, we are taking precautions to ensure the safety of all workers and personnel on this location and its immediately surrounding area.

Attached to this APD is a copy of Pure Resources, L. P. "Contingency Plan - Drilling Operations" and "Emergency Response Plan", both standard to our drilling operations and operating policies in SENM and relevant to this well.



CONTINGENCY PLAN DRILLING OPERATIONS

MEAD #8
SECTION 8, TRACT T22S, RANGE 27E
MEAD FIELD
EDDY COUNTY, NEW MEXICO
6/8/05

CONTINGENCY PLAN

INDEX

- 1. Scope & Objective
- 2. Location Information / Map
- 3. Emergency Notification / Evacuation Plan
- 4. Emergency Procedures and Responsibilities
- 5. Igniting Well Instructions
- 6. Training Procedures and Materials
- 7. Well Location Layout and Equipment

Date printed: June 8, 2005 2 of 32 MEAD #8

SCOPE & OBJECTIVE

SCOPE

This contingency plan establishes guidelines for the public, all company employees, and contract employees whose work activities may involve exposure to Hydrogen Sulfide gas (H2S).

OBJECTIVE

- 1. Prevent any and all accidents, and prevent the uncontrolled release of Hydrogen Sulfide into the atmosphere.
- 2. Provide proper evacuation procedures.
- 3. Provide immediate and adequate medical attention should an injury occur.

Date printed: June 8, 2005 3 of 32 MEAD #8

DIRECTIONS TO LOCATION

From the intersection of US Hwy 62/180 and Fiesta road, go East on Fiesta road approximately 1.0 miles. This location is approximately 200' north of Fiesta Road.

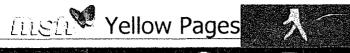
Date printed: June 8, 2005 4 of 32 MEAD #8

Page 1 of 1

ges: Map

MSN Home | My MSN | Hotmail | Shopping | Money | People & Chat

Web Search:



with **veri on** SUPERPAG

Home → Yellow Pages → Listings → Map

Maps

Carlsbad Medical Center
2430 W Pierce, Carlsbad, NM 88220
(505) 887-4100
(505) 887-4256 (fax)
business profile | map | driving directions

http://www.carlsbadmedicalcenter.verizonsupersite.com

Appears in the Categories:

Hospitals, Physicians & Surgeons, Rehabilitation Services, Surgical Centers, Health & Wellness Programs Map Size: Small <u>Medium</u> **Print-Friendly Version** Large Θ ONW Zoom Out National Callaway Dr Skyline Rd Region **Carlsbad Medical Center Living Desert** Zoo and Gardens State Park Carlsbad City Street \$2005 Microsoft Cop \$2004 NAVIEQ, and for GDT, Inc Zoom In **OSW** \oplus **W**s SE (3)

Click map to recenter.
Click compass directions to move map.

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Feedback | Help

It is the PURE RESOURCES policy in all operations to do everything possible to insure the safety of its employees and the contractor's employees on the job site; additionally, to provide for the safety and comfort of persons near the operations by protecting the environment to the fullest degree possible.

The primary purpose of the procedures outlined herein is to guide the personnel on location in the event that Hydrogen Sulfide (H2S) reaches the surface.

TO PROTECT THEIR OWN SAFETY AND THE SAFETY OF OTHERS, ALL PERSONNEL ON THE JOB SITE WILL RIGIDLY ADHERE TO THIS PLAN.

Initial Suspected Problem Zone: Abo Shale and Wolfcamp

Expected Concentration: ±5 ppm

ROE @ 100 ppm = 2 feetROE @ 500 ppm = 1 foot

The plan should be implemented before drilling into the Abo Shale.

The cementing, casing and mud program are contained in the PURE RESOURCES Drilling Program.

Date printed: June 8, 2005 6 of 32 MEAD #8

EVACUATION PLAN

The following general plan has been developed in the event that any public evacuation becomes necessary.

- 1. PURE RESOURCES has requested and has been assured the support of the various public safety entities in the area.
- 2. Any evacuation will be conducted by the Eddy county Sheriff's Department and supported by the State Police Department, Highway Patrol Division.
- 3. Assistance from other public safety entities may be requested if required.
- 4. The included maps detail the area of the well site including the inventory or the public within the radius of exposure of the well.
- 5. In the event that there is any suspected problem on the well, the well site supervisor will notify the Eddy County Sheriff's office 505-887-7551 for ALERT STATUS.
- 6. ALERT STATUS will require that available public support personnel will proceed to the Eddy County Sheriff's office in Carlsbad, NM and standby for instructions.
- 7. If isolation and evacuation are necessary, then units will be dispatched to points marked on the map with instructions to maintain road blocks.
- 8. Evacuation teams will then proceed to sectors to be evacuated. Evacuation procedure will follow appropriate consideration for wind conditions.
- 9. Personnel from on site will establish safe perimeters using H2S detectors.
- 10. The New Mexico Oil Conservation Division and other authorities will be notified as soon as possible.
- 11. Other supplemental contractors will be contacted and called in as needed.

PURE RESOURCES EMERGENCY COMMUNICATION LIST

satisfactory communication is accomplished. Please give a reasonable amount of time for response before the next contact is called. In the event of communication failure, personnel contacted for well control incidents may be called in order as listed below until

	Name	Title	Office Number	Home Number	Cell Phone	Pager
ij	1. Ray Matthew	Engineer	432-498-8672	432-697-0201	432-557-0623	
2	2. Jerry Omdorff	Superintendent	432-498-8664	432-550-5407	432-631-4295	432-620-2898
3.	3. Jim Harrison	Manager	432-620-5661	432-699-4476	432-553-7414	
4.	4. Chanin Faromkao	Engineer	432-620-5694		432-664-7601	
δ.	5. Steve Munsell	Engineer	432-620-5671	432-550-7437	432-557-2674	
9.	6. Jay Waldrop	HES	432-498-2654	432-523-9778	432-556-3547	

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MIDLAND WORKOVER/CONCENTRIC DEPARTMENT

Home/Cellular/Pager Numbers

<u>NAME</u>	<u>HOME</u>	<u>CELL</u>	<u>PAGER</u>
Donny Leek	432-399-4489	432-634-4862 or 634-4823	
Simon Barrera Doug Bulman Danny Green Larry Elvick Danny Kiser Joe Harris Jerry Morgan Roy Reeser	CONTRACT DRII 325-728-9024 432-520-5256 432- 432-336-2337 806-788-0960 432-333-2671 432-943-2860 505-396-7601	25-242-1369 432-664-0009 432-664-7651 432-631-9971 806-632-0759 432-664-8808 432-661-5061 505-631-9417	<u>580-515-0530</u>
Tony Vickery	432-367-6130	432-634-6077	

EMERGENCY CALL LIST

Medical Support

Agency <u>Location</u> <u>Telephone Number</u>

AXIOM Medical Houston 281-419-7063

Carlsbad Medical Center Carlsbad 505-887-4100

EMERGENCY CALL LIST

Public Support

Agency	<u>Location</u>	Telephone Number
Carlsbad Medical Center	Carlsbad	505-887-4100
Ambulance	Carlsbad	505-885-3124
Fire Department	Carlsbad	505-885-2111

EMERGENCY CALL LIST

Supplemental Equipment

MUD COMPANY

Buckeye 432-682-7422 Midland
Baroid 432-682-4305 Midland

SAFETY COMPANY

Safety International 432-580-3770 Odessa
Callaway Safety 505-392-2973 Hobbs

CEMENTING COMPANY

BJ Services 432-683-2781 Midland
BJ Services 505-392-6711 Hobbs
Halliburton 505-392-7062 Hobbs

PUMP TRUCKS / WATER HAULERS

Basic Energy 505-392-6498 Hobbs
Pool Carlsbad

Key 505-885-2053 Carlsbad

EMERGENCY CONDITIONS

Operating Conditions

- A. Emergency Procedures and Definition of Warning Flags.
 - 1. Condition:

YELLOW ---- NORMAL OPERATION

2. Condition:

ORANAGE -- POTENTIAL DANGER --- CAUTION

- a. Cause for condition:
 - Circulating up drilling breaks
 - Trip gas after trip
 - Circulating out gas on choke
 - Poisonous gas present, but below threshold concentrations
- b. Safety actions:
 - Check safety equipment and keep it with you
 - Be alert for a change in conditions
 - Follow instructions
- 3. Conditions RED----- EXTREME DANGER
 - a. Cause for conditions
 - Uncontrolled flow from the well with lethal concentrations of H2S
 - b. Safety Actions
 - Masks On. All personnel will have protective breathing equipment with them. All personnel will stay in safe briefing area unless instructed to do otherwise.
 - The decision to ignite the well is the responsibility of the company representative and should be made only as a last resort, when it is clear that:
 - i Human life is endangered
 - ii There is no hope of controlling the well under prevailing conditions.
 - Order evacuation of local people within the danger zone.

DRILLING CREW ACTIONS

- 1. All personnel will don their protective breathing apparatus. The drilling crew will take necessary precaution as indicated in OPERATING PROCEDURES.
- 2. The Buddy System will be implemented. All personnel will act upon direction from the Operator's Representative.
- 3. If there are nonessential personnel on location, they will move off location.
- 4. Entrance to the location will be patrolled, and the proper condition flag will be displayed at the entrance to the location.

IN THE EVENT OF AN ACCIDENTAL RELEASE OF PTENTIALLY HAZARDOUSS VOLUME OF H2S, THE FOLLOWING PROCEDURES WILL BE TAKEN.

- 1. All personnel on location will be accounted for and emergency search should begin for any missing.
- 2. All search missions will be conducted under fresh air masks in teams of two. Should the search team need to approach the well, safety harness and rope should be used.
- 3. All individual companies and agencies should be contacted according to the EMERGENCY CALL LIST.
- 4. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
- 5. The Operator's Representative will remain on location and attempt to regain control of the well
- 6. The Company's designated representatives will begin evacuation of those persons in immediate danger.

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NOTE

When Hydrogen Sulfide might be encountered, NO personnel on location will be permitted to sleep in vehicles.

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RESPONSIBILITY

In the event of a release of potentially hazardous amounts of H2S, all personnel will immediately proceed upwind to the nearest designated safe area and don their protective breathing equipment. The PURE RESOURCES representative will immediately, upon assessing the situation, set this plan into action by taking the proper procedures to contain the gas and notify the appropriate people and agencies.

If the PURE RESOURCES representative is incapacitated or not on location, this responsibility will fall to the drilling toolpusher.

PURE RESOURCES

- 1. In an emergency situation, the Drill Site Supervisor 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. Advise the Superintendent when procedures as specified herein have been met, will inform of emergencies and deviation from the plan, and see that procedures are observed at all times.
- 3. Advise each contractor, service company, and all others entering the site that Hydrogen Sulfide may be encountered and the potential hazards that may exist.
- 4. Authorize the evacuation of local residents if Hydrogen Sulfide threatens their safety.
- 5. Keep the number of persons on location to minimum during hazardous operations.
- 6. Assess the situation when alarm sounds, and issue work orders. When conditions warrant, order all personnel to "Safe Briefing Areas".
- 7. Direct corrective actions to control flow of gas.
- 8. Has full responsibility for the decision to ignite the well. The decision will be made only as a last resort.

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DRILLING COMPANY

- 1. The Toolpusher will assume all responsibilities of the Drill Site Supervisor in an emergency situation in the event that the Drill Site Supervisor becomes incapacitated.
- 2. The Toolpusher will order the Driller to secure the rig if time permits.

EQUIPMENT TO BE PROVIDED BY SAFETY COMPANY

- 1. One safety trailer containing an 8 bottle air cascade system
- 2. 750 feet of air line hose
- 3. Four breathing air manifolds
- 4. Four 30 minute rescue units
- 5. Five work/escape units
- 6. One filler hose for the work/escape and rescue units
- 7. One location sign with flags
- 8. Two briefing area signs
- 9. Two windsocks
- 10. One electronic monitor with three sensor heads, warning light and siren.

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TEMPORARY SERVICE PERSONNEL

All service personnel, such as cementing crews, logging crews, specialists, mechanics and welders will furnish their own safety equipment as required to comply with OSHA and PURE RESOURCES.

VISITORS

Visitors and nonessential personnel will be prohibited from remaining in, or entering a contaminated area where Hydrogen Sulfide concentration in the atmosphere exceeds 15 ppm.

IGNITING WELL INSTRUCTIONS

THE DECISION TO IGNITE THE WELL IS THE RESPONSIBILITY OF THE PURE RESOURCES REPRESENTATIVE. In the event he is incapacitated or unavailable, it becomes the responsibility of the drilling rig superintendent.

The decision to ignite the well should be made only as a last resort and in the situation where it is clear that:

- 1. Human life is in danger
- 2. There is no hope of controlling the well under current conditions.

The PURE RESOURCES Drilling Manager should be notified as soon as possible. The first phase of evacuation should be initiated immediately.

Once the decision has been made the following procedures should be followed:

- 1. Four people, wearing self-contained breathing apparatus will be needed for the actual lighting of the well. They must first establish the flammable parameter by using an explosion meter. This should be established at 30% to 40% of the lower flammable limits.
- 2. After the flammable perimeter has been established and everyone removed from the area, the ignition team should select a site upwind of the well, from which to ignite. The site should offer the maximum protection and have a clear path for retreat from the area.
- 3. The ignition team should have safety belts and lanyards attached and manned before attempting ignition. If the leak is not ignited on the first attempt, move in 20 to 30 feet and fire again. Continue to monitor with the explosion meter and never fire from an area with over 75% of the lower explosive limit (LEL). If having trouble igniting the well, try firing 40 degrees to 90 degrees on either side of the well.
- 4. After ignition or attempted ignition, the toxic perimeter must be established and evacuation continued until the well is contained.
- 5. All personnel will act only as directed by the person in charge of the operations.

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SAFETY TRAINING

- 1. Hydrogen Sulfide Safety Training will be provided to all personnel at 1,000 feet above the expected H2S formation. The training sessions will cover, but will not be limited to the following.
 - a. General information on H2S and SO2 gas
 - b. Hazards of H2S and SO2 gas
 - c. Safety equipment on location
 - d. Proper use and care of personal protective equipment
 - e. Operational procedures in dealing with H2S gas
 - f. Evacuation procedures
 - g. Chemicals to be used in mud to control H2S
 - h. First aid, reviving and H2S victim, toxicity, etc.
 - i. Designated Safe Briefing Areas (S.B.A.)
 - j. Metallurgical considerations

NOTE: Once H2S Safety Procedures are established on location, no beards or facial hair which will interfere with face seal or mask will be allowed on location

- 2. When H2S alarm is activated:
 - a. Mask up
 - b. Raise tool joints above the rotary table and shut down pump
 - c. Close in hydrill
 - d. Go to Safe Briefing Area

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PHYSICAL EFFECTS OF HYDROGEN SULFIDE POISONING

The Principal Hazard Is Death by Inhalation

When the amount of gas absorbed into the bloodstream exceeds that which is readily oxidized, systemic poisoning results, with a general action on the nervous system. Labored respiration occurs shortly and respiratory paralysis may follow immediately at concentrations of 700 ppm and above. This condition may be reached almost without warning as the originally detected odor of H2S may have disappeared due to olfactory paralysis. Death then occurs from asphyxiation unless the exposed person is removed immediately to fresh air and breathing is stimulated by artificial respiration. Other levels of exposure may cause the following symptoms individually or in combination:

- 1. Headache
- 2. Dizziness
- 3. Excitement
- 4. Nausea or gastro-intestinal disturbances
- 5. Dryness and sensation of pain in nose, throat, and chest
- 6. Coughing
- 7. Drowsiness

All personnel should be alerted to the fact that detection of H2S solely by sense of smell is highly dangerous, as the sense of smell is rapidly paralyzed by the gas. 10 ppm of H2S detected should be treated as if it were 700 ppm.

REMEMBER:

After the well is ignited, burning Hydrogen Sulfide (H2S) will convert to Sulfur Dioxide (SO2), which is also a highly toxic gas.

DO NOT ASSUME THE AREA IS SAFE AFTER THE WILL IS IGNITED.

THE USE OF SELF CONTAINED BREATHING EQUIPMENT

- 1. Respirators shall be inspected frequently at random, to insure that they are properly used, cleaned and maintained.
- 2. Anyone who may use the respirators shall be trained in how to insure proper face piece to face seal. They shall wear respirators in normal air and then wear it in a test atmosphere. (Note: such items as facial hair beard or sideburns and eyeglass temple pieces will not allow a proper seal.) Anyone who may be reasonably expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eye glasses. Contact lenses should not be allowed.
- 3. Maintenance and care of respirators:
 - a. A program for maintenance and care of respirators shall include the following:
 - Inspection for defects, including leaks checks
 - Cleaning and disinfecting
 - Repair
 - Storage
 - b. Inspection: Self contained breathing apparatus for emergency use shall be inspected monthly for the following and a permanent record kept of these inspections.
 - Fully charged cylinders
 - Regulator and warning devise operations
 - Condition of face piece and connections
 - Elastic or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.
 - c. Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.
- 4. A person assigned a task that requires use of self contained breathing equipment should be certified, physically fit for breathing equipment usage by the local physician at least annually.
- 5. Respirators should be worn:
 - a. When breaking out any line where H2S can reasonably be expected.
 - b. When sampling air in areas to determine if toxic concentrations of H2S exist.
 - c. When working in areas where over 15 ppm H2S has been detected.
 - d. At any time there is a doubt as to the H2S concentration in the zone to be entered.

TRAINING

Every person working in any capacity on the lease will be required to review the emergency procedures and will participate in the training program.

PURE RESOURCES will provide personnel to direct the training program and indoctrinate all authorized persons on the lease in the proper use of the safety equipment.

The training personnel will work individually with each member until they are satisfied that the crew member is familiar with the emergency procedures and the training program. This should be accomplished prior to an individual's work operation.

Training will include hands on use of all equipment in order to familiarize the trainees with the safety equipment.

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TREATMENT OF HYDROGEN SULFIDE POISONING

Inhalation

As Hydrogen Sulfide in the blood oxidizes rapidly, symptoms of acute poisoning pass off when inhalation of the gas ceases. It is important, therefore, to get the victim of poisoning to fresh air as quickly as possible. He should be kept at rest and chilling should be prevented. If respiration is slow, labored or impaired, artificial respiration may be necessary.

Most persons overcome by Hydrogen Sulfide may be revived if artificial respiration is applied before heart action ceases. Victims of poisoning should be under the care of a physician as soon as possible. Irritation due to sub acute poisoning may lead to serious complications such as pneumonia. Under those conditions, treatment by the physician necessarily would be symptomatic. The patient should be kept in fresh air.

Contact with Eyes

Eye contact with liquid and / or gas containing Hydrogen Sulfide will cause painful irritation (conjunctivitis). Keep patient in a darkened room, apply ice compresses to eyes, put ice on forehead, and send for a physician. The irritation caused by exposure to Hydrogen Sulfide requires treatment by a physician, preferably an eye specialist. The prognosis for recovery in these cases is usually good.

Contact with Skin

Skin absorption is very low. Skin discoloration is possible after contact with liquids containing Hydrogen Sulfide. If such skin contact is suspected, the area should be thoroughly washed.

EFFECTS OF HYDROGEN SULFIDE ON METAL

Hydrogen Sulfide dissolves in water to form a weak acid that can cause some pitting, particularly in the presence of oxygen and/or carbon dioxide. However, the most significant action of H2S is its contribution to a form of Hydrogen embrittlement known as Sulfide Stress Cracking. Sulfide Stress Cracking is a result of metals being subjected to high stress levels in a corrosive environment where H2S is present. The metal will often fail in a brittle manner. Sulfide Stress Cracking of steel is dependent upon and determined by:

- 1. Strength (hardness) of the steel the higher the strength, the greater the susceptibility to sulfide stress cracking. Steels having yield strengths up to 95,000 psi and hardness up to Rc22 are generally resistant to sulfide stress cracking. These limitations can be extended slightly higher for properly quenched and tempered materials.
- 2. Total member stress (load) higher the stress level (load) the greater the susceptibility to sulfide stress cracking.
- 3. Corrosive environment corrosive reactions, acids, bacterial action, thermal degradation of low Ph fluid environment.

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DRILLSITE LOCATION

- 1. The drilling rig should be situated on location such that the prevailing winds blow across the rig toward the reserve pit or at right angles to a line from the rig to the reserve pit.
- 2. The entrance to the location should be designed so that it can be barricaded if Hydrogen Sulfide emergency conditions arise. An auxiliary exit (or entrance) should be available in case of a catastrophe, a shift in the wind direction would not preclude escape from the location. Appropriate warning signs and flags should be placed at all location entrances.
- 3. Once H2S safety procedures are established on location, no beards or facial hair which will interfere with face seal or mask will be allowed on location.
- 4. A minimum of two Briefing Areas will be established, not less than 250 feet from the wellhead and in such location that at least one area will be up-wind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated briefing areas for instructions.
- 5. A safety equipment trailer will be stationed at one of the briefing areas.
- 6. Windsocks will be installed and wind streamers (6 to 8 feet above ground level) placed at the location entrance. Windsocks shall be illuminated for night time operations. Personnel should develop wind direction consciousness.
- 7. The mud logging trailer will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
- 8. Shale shaker mud tanks will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
- 9. Electric power plants will be located as far from the well bore as practical so that it may be used under condition where it otherwise would have to be shut down.
- 10. When approaching depth where Hydrogen Sulfide may be encountered, appropriate warning signs will be posted on all access roads to the location and at the floor of all stairways to the derrick floor.
- 11. Appropriate smoking areas will be designated and smoking will be prohibited elsewhere.

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WELL LOCATION LAYOUT AND EQUIPMENT

SPECIAL EQUIPMENT

- 1. Flare lines should be as long as practical, securely staked.
- 2. An electronic Hydrogen Sulfide monitor will be installed with a combination visual and audible alarm system located where it can be seen and/or heard throughout the drilling area.
- 3. The electronic Hydrogen Sulfide monitoring system will be calibrated to activate the low alarm (visual alarm) at a concentration of 10 ppm Hydrogen Sulfide in the atmosphere and the high alarm at a concentration of 15 ppm Hydrogen Sulfide in the atmosphere.
- 4. Extra equipment will be available if required to provide adequate respiratory protection for all personnel on location.

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WELL LOCATION LAYOUT AND EQUIPMENT

BLOWOUT PREVENTION EQUIPMENT

- 1. A kill line of ample strength and length will be laid to safe point to allow pumping into the well in an emergency situation.
- 2. The closing unit should be located a safe distance from the well bore and positioned for maximum utilization based on the prevailing wind direction.
- 3. BOP equipment will be tested in accordance with standard company practice.

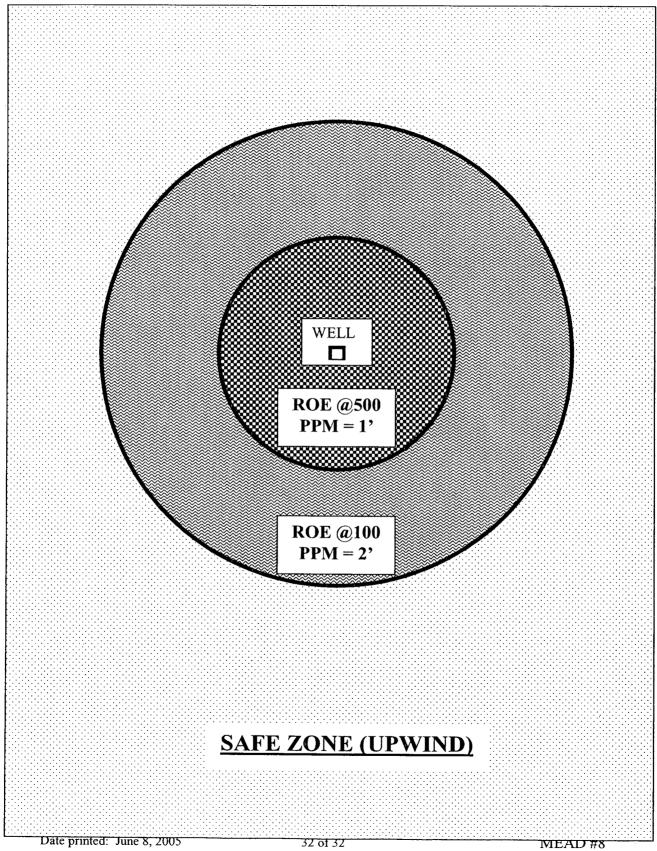
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WELL LOCATION LAYOUT AND EQUIPMENT

DRILL STEM TEST

- 1. A drill stem tests of Hydrogen Sulfide zones will be approved by the New Mexico Oil Conservation Division.
- 2. Drill stem testing of Hydrogen Sulfide zones will be permitted only during daylight hours.
- 3. All nonessential personnel will be moved to "Safe Briefing Areas".
- 4. Put on air masks before formation fluids are expected at the surface and continue "Masks On" until flare are ignited and work areas test no more than 10 ppm Hydrogen Sulfide and the area has been declared safe.

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PURE RESOURCES

EMERGENCY RESPONSE PLAN

SOUTHEAST NEW MEXICO

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Eunice Police Department	394-2112	Eunice Sheriff Office	394-2020	
Eunice Fire Department	394-2111	Eunice State Police	392-5588	
Environmental Plus	394-3481	Spill Response in Eunice		
Environmental Plus Pat	390-7864	Spill Response in Eunice		
HOBBS PHONE NUMBERS				
Hobbs Police/Fire/Ambulance	911	Hobbs City Manager	397-9206	
Hobbs Police Department	397-9265	Hobbs Hospital	492-5000	
Hobbs Fire Department	397-9308	NMOCD	393-6161	
Hobbs Sheriff Office	393-2515	State Police	392-5588	
Jal Police Department Jal Fire Department al Sheriff Office	395-2501 395-2221 395-2121	NMOCD State Police	393-6161 392-5588	
CARLSBAD PHONE NUMBERS Carlsbad Police/Fire/Ambulance	911	Carlsbad City Manager	887-3798	
Carlsbad Police Department	885-2111	Carlsbad Hospital	887-4100	
Carlsbad Fire Department	885-3125	NMOCD	393-6161	
Carlsbad Sheriff Office	887-7551	State Police	885-3137	
Bureau of Land Management	234-5972			
OSHA	800-321-6742			
UNOCAL COUNSEL Mark Jones	281-491-7600			
HUMAN RESOURCES Martha Cavitt	432-498-8608			

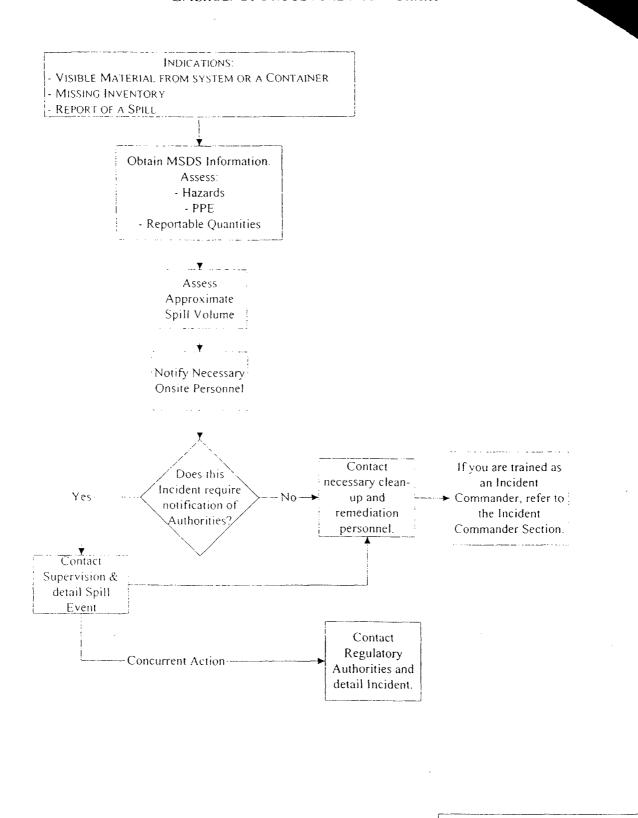
		Mobile No.	Home	Personal	
.e Northcutt	Area Foreman	390-1090		Cell Numbers	
Darryl Ruthardt	Asst. Foreman	390-8418	393-5856		
Larry Williams	Route 1	390-8432	806-592-2808	806-891-1282	
Bill Jarret	Route 2	390-8427	392-6860	631-3030	
Gregg Darr	Route 3	390-8425	806-592-2573	806-215-2034	
Dee Tate	Relief / Dyno	390-8431	392-1306	390-3341	
Kyle Rowland	Relief	390-8950		390-1701	
Sandy Jones	Carlsbad	390-8428	505-885-6148		
Clarence Fite	Eunice	390-9084	394-4707		
Spare/Relief Truck		390-8406		7 20 3	
CHAIN OF COMMANI	D				
Mike Northcutt	390-1090	Area Foreman			
Pete Wilkinson	432-498-8642	432-556-3881	432-682-0600		
Jay Ottoson	432-498-2690	432-425-5860	432-694-0861		
Ron Lechwar	432-498-8625	432-664-2920	432-697-1549		
Tony Best	432-498-8678	432-557-7979	979-690-1064		
Lovington Office	Main Line	396-7503	Eunice Office		394-0061
Lovington Office	Line 2	396-6259	Eunice Office Fax		394-9061
Lovington Office	Line 3	396-6344			
Lovington Office	Line 4	396-6814	Eunice Com	nbination	7541
Lovington Office	Fax	396-5950	Loving Combination		1953
Answering Service		396-9030	Lovington Combination		9156
LOVINGTON PHONE	NUMBERS				
Lovington Police/Fire/	Ambulance	911	Lovington City Manag	ger	396-2884
Lovington Police Depa	artment	396-2811	Lovington Water Farm Pumper		704-9170
Lovington Fire Departr	ment	396-2359	NMOCD		393-6161
Lovington Ambulance		396-2359	State Police		392-5588
Lovington Sheriff Offic	e	396-3611	Lovington Hospital		396-6611

AERO CARE - flight for life 800-627-2376

UNICE	PHONE	NUMBERS
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∠unice Police Department	394-2112	Eunice Sheriff Office	394-2020
Eunice Fire Department	394-2111	Eunice State Police	392-5588
Environmental Plus	394-3481	Spill Response in Eunice	
Environmental Plus Pat	390-7864	Spill Response in Eunice	
HOBBS PHONE NUMBERS			
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Hobbs Police Department	397-9265	Hobbs Hospital	492-5000
Hobbs Fire Department	397-9308	NMOCD	393-6161
Hobbs Sheriff Office	393-2515	State Police	392-5588
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Carlsbad Sheriff Office	887-7551	State Police	885-3137
Bureau of Land Management	234-5972		
OSHA	800-321-6742		
UNOCAL COUNSEL Mark Jones	281-491-7600		
HUMAN RESOURCES Martha Cavitt	432-498-8608		

OIL SPILL OR LEAK EMERGENCY PROCEDURE FLOW CHART

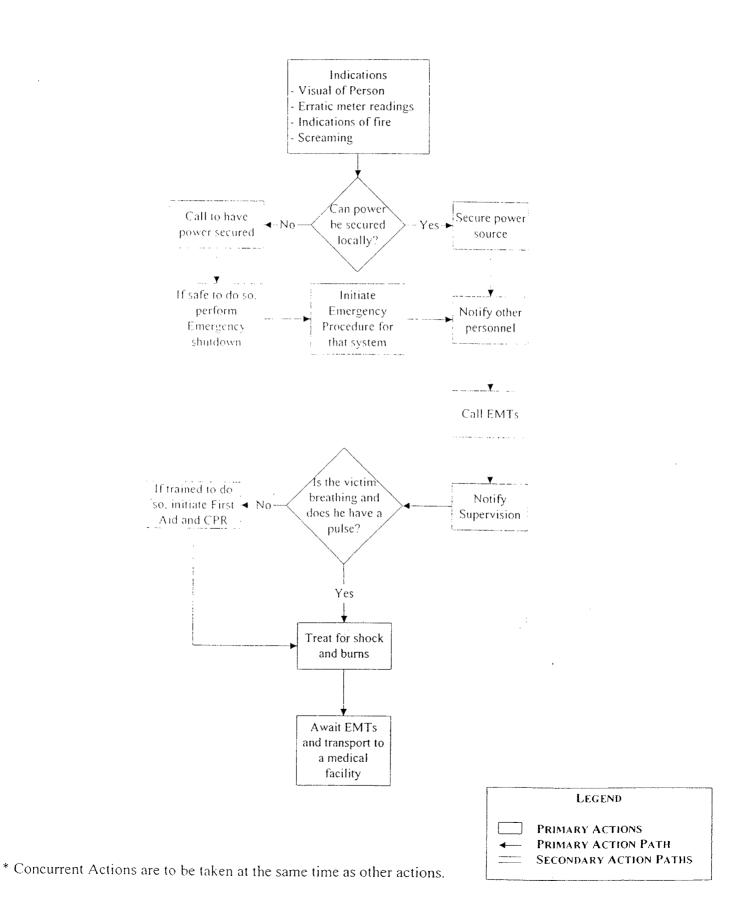


LEGEND

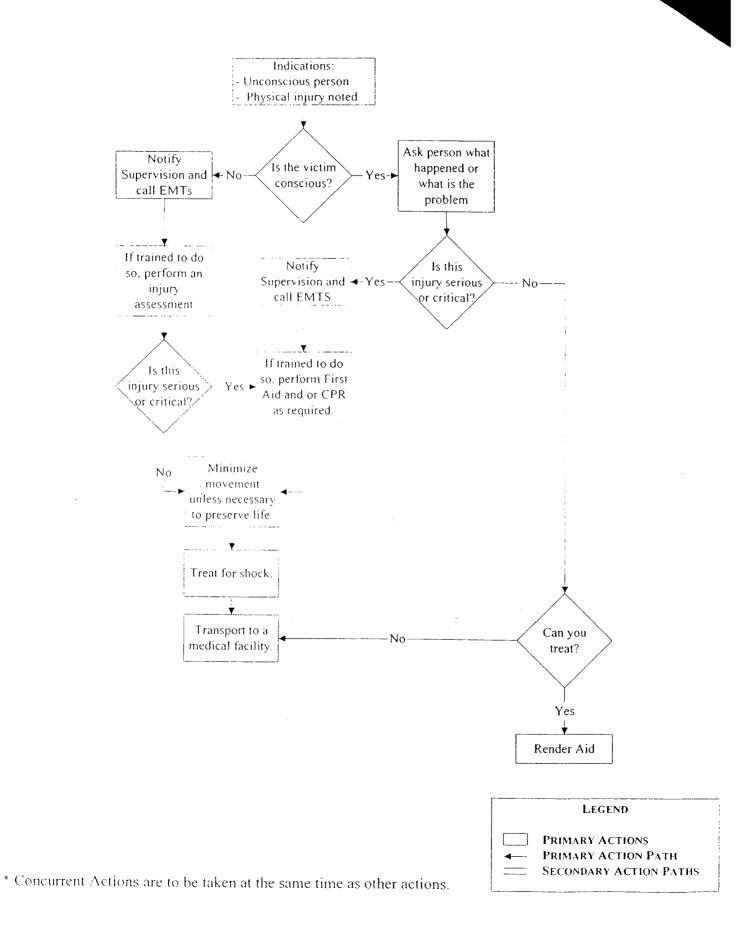
PRIMARY ACTIONS
PRIMARY ACTION PATH
SECONDARY ACTION PATHS

^{*} Concurrent Actions are to be taken at the same time as other actions.

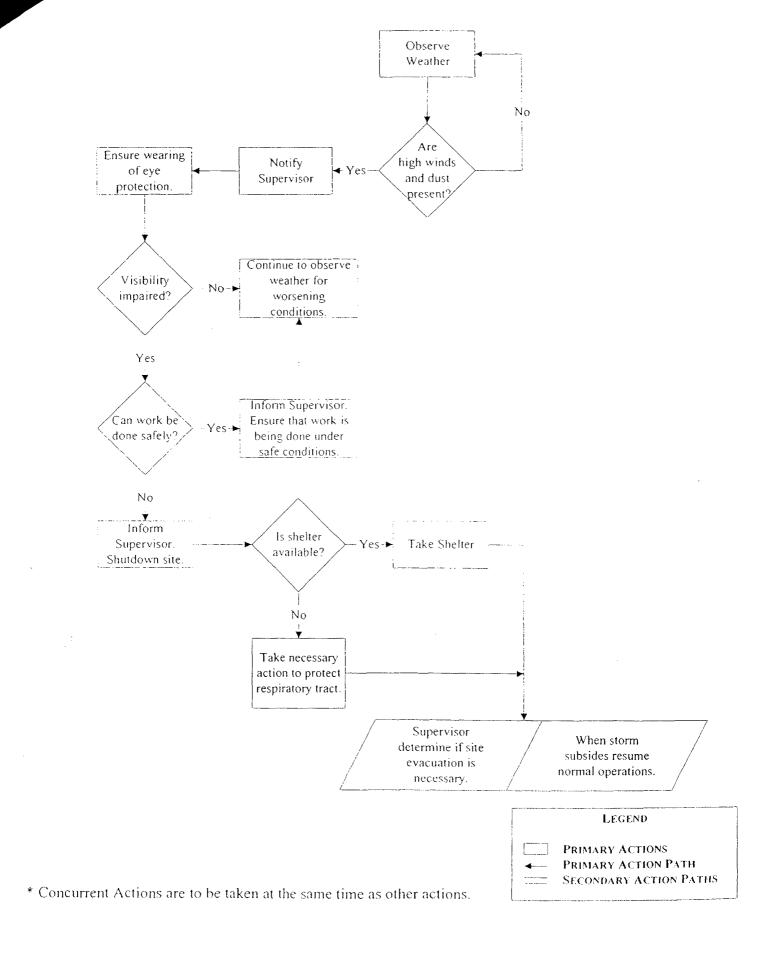
ELECTRICAL SHOCK EMERGENCY PROCEDURE FLOW CHART

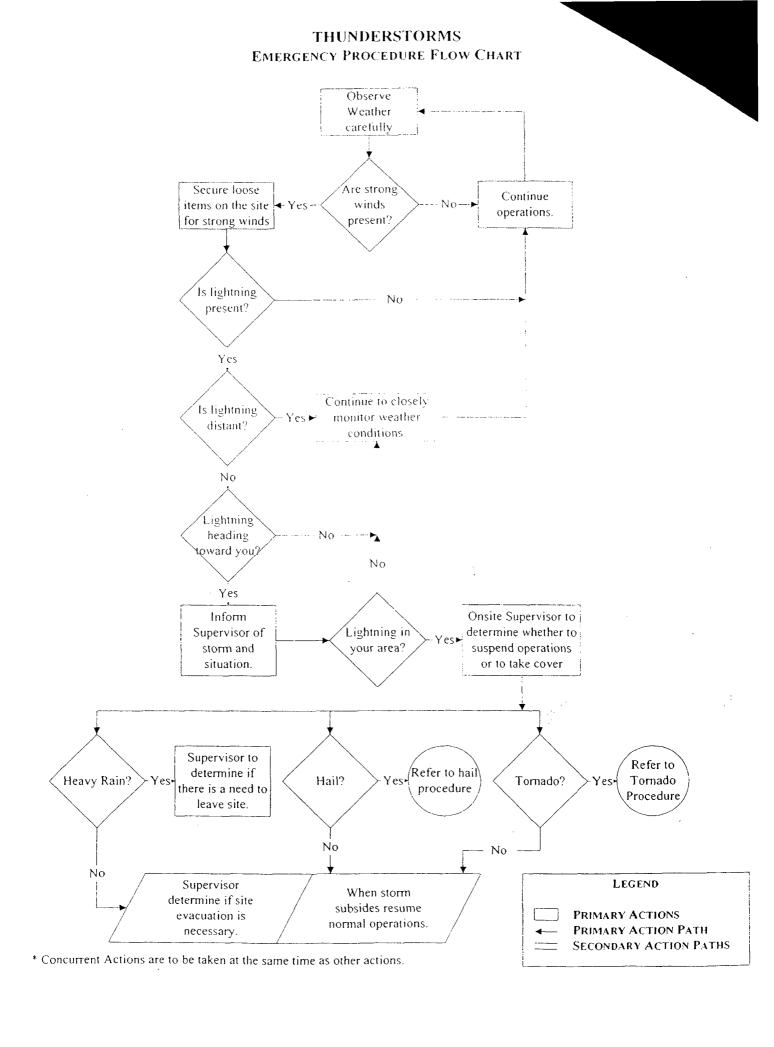


INJURED PERSON EMERGENCY PROCEDURE FLOW CHART

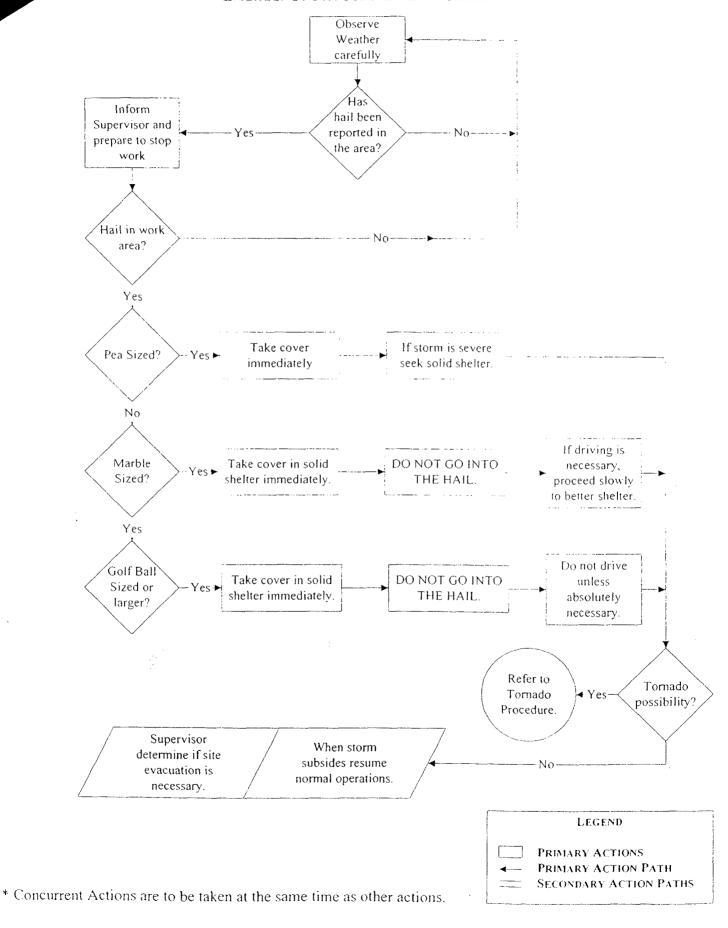


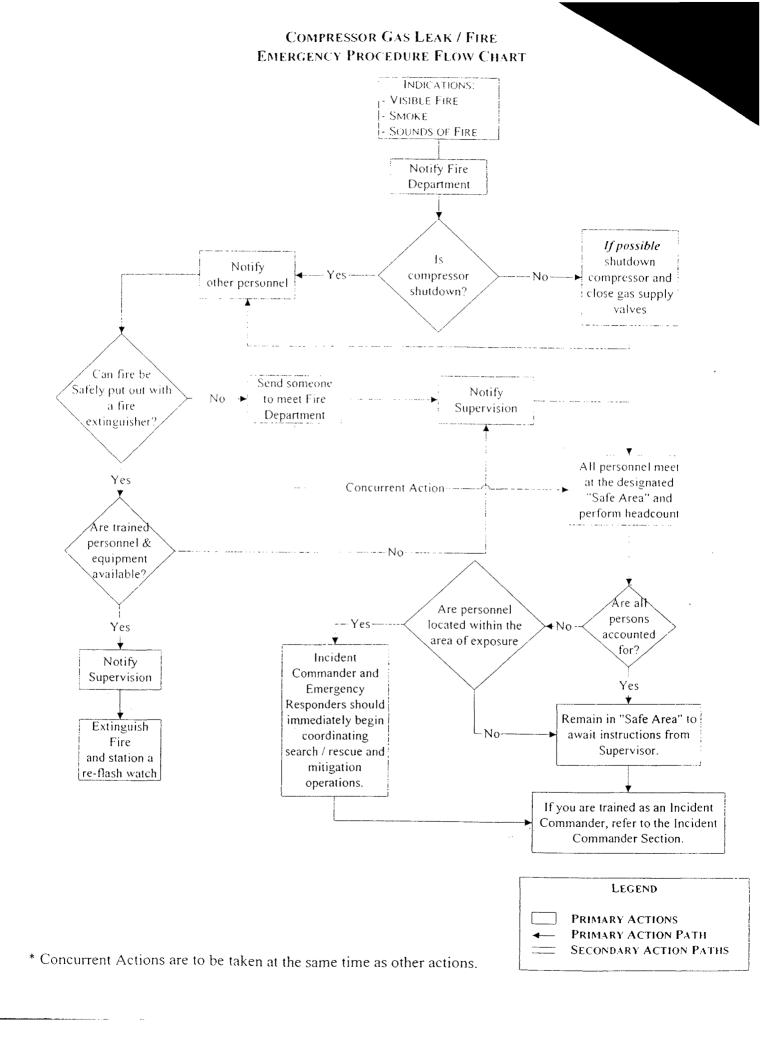
DUST STORMS EMERGENCY PROCEDURE FLOW CHART



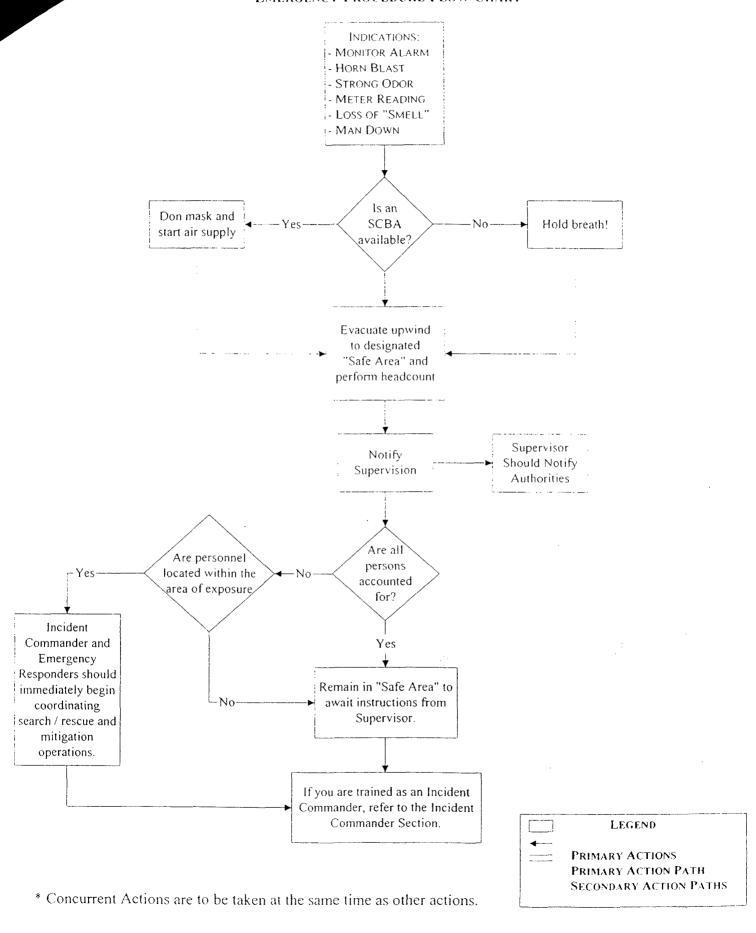


HAIL
EMERGENCY PROCEDURE FLOW CHART

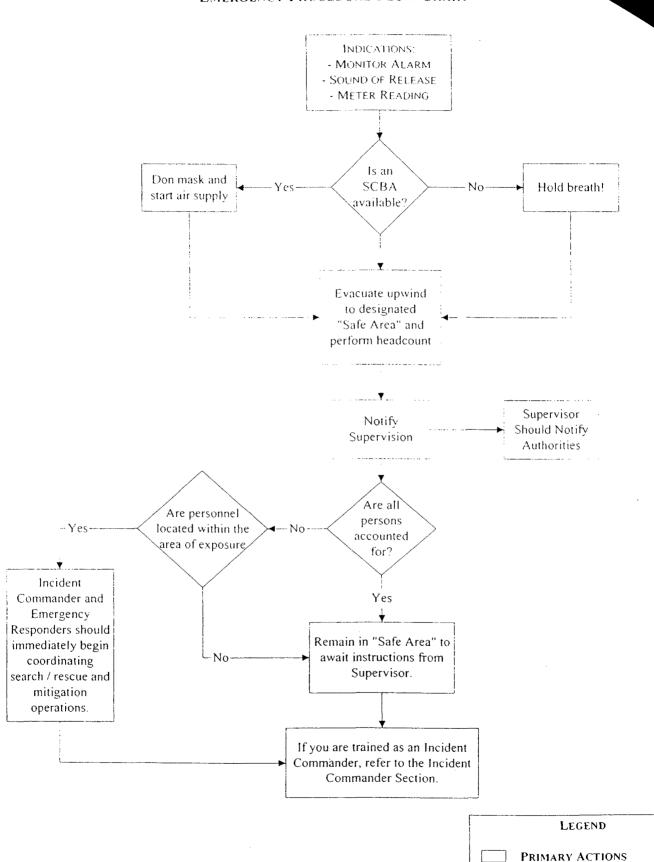




HYDROGEN SULFIDE RELEASE EMERGENCY PROCEDURE FLOW CHART



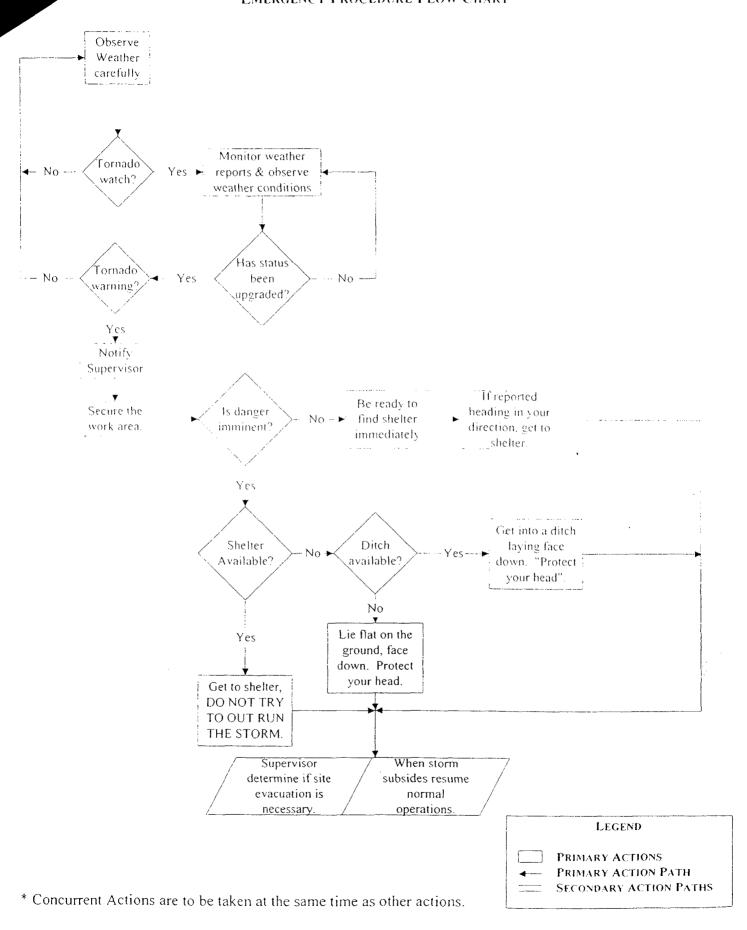
CO2 RELEASE EMERGENCY PROCEDURE FLOW CHART

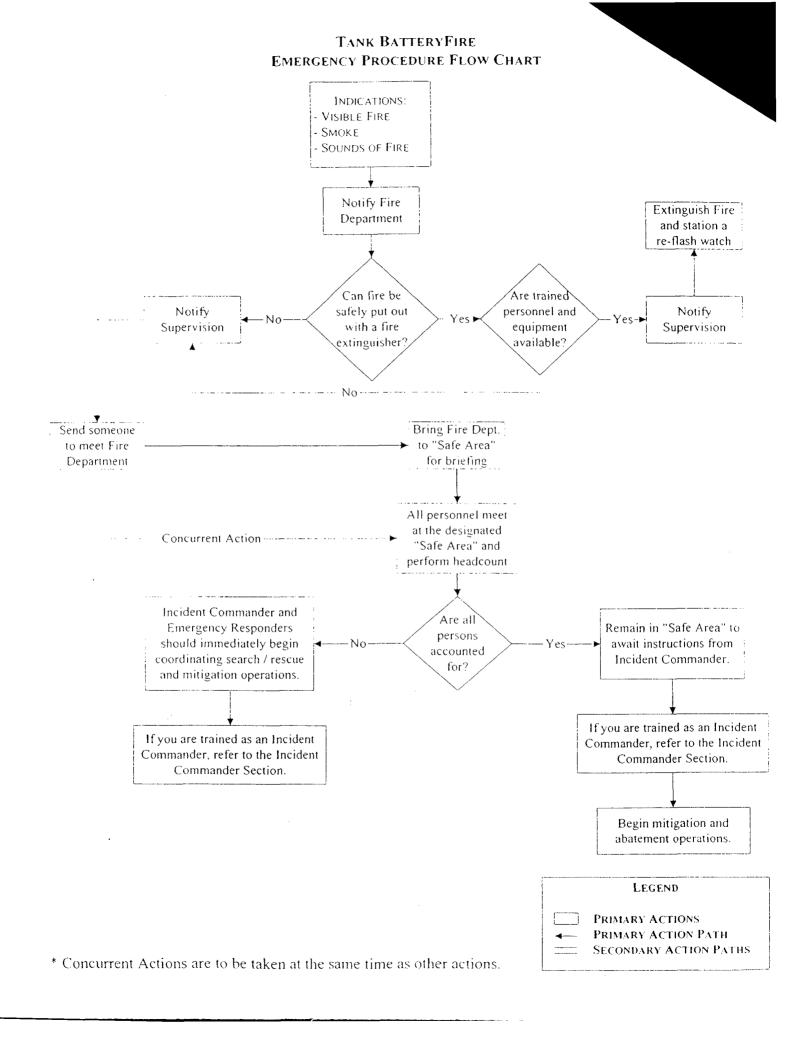


PRIMARY ACTION PATH SECONDARY ACTION PATHS

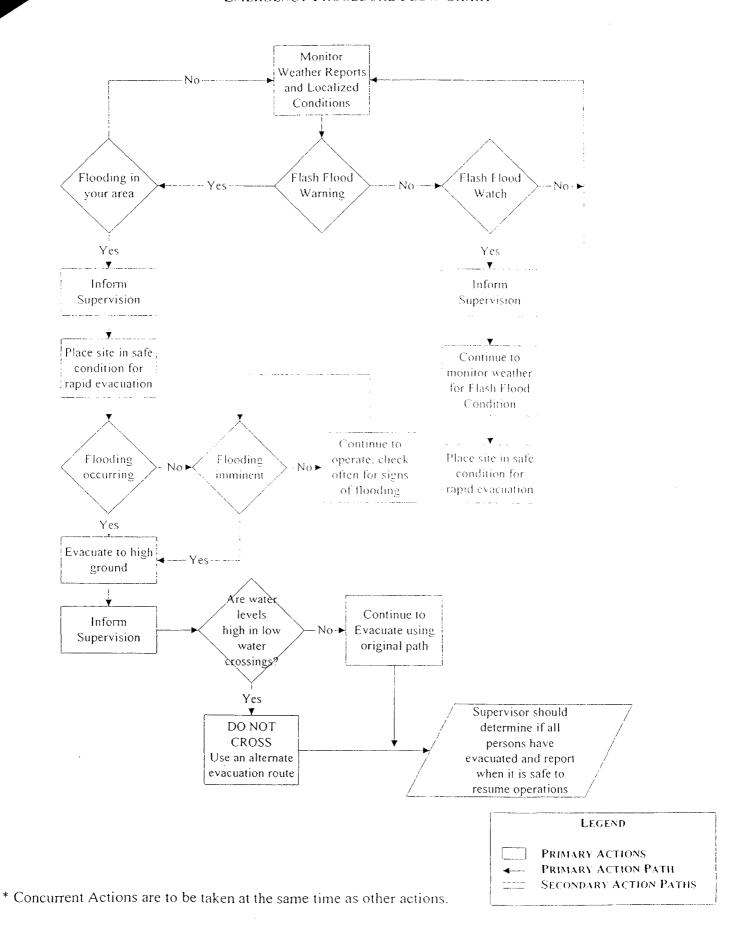
^{*} Concurrent Actions are to be taken at the same time as other actions.

TORNADOS EMERGENCY PROCEDURE FLOW CHART

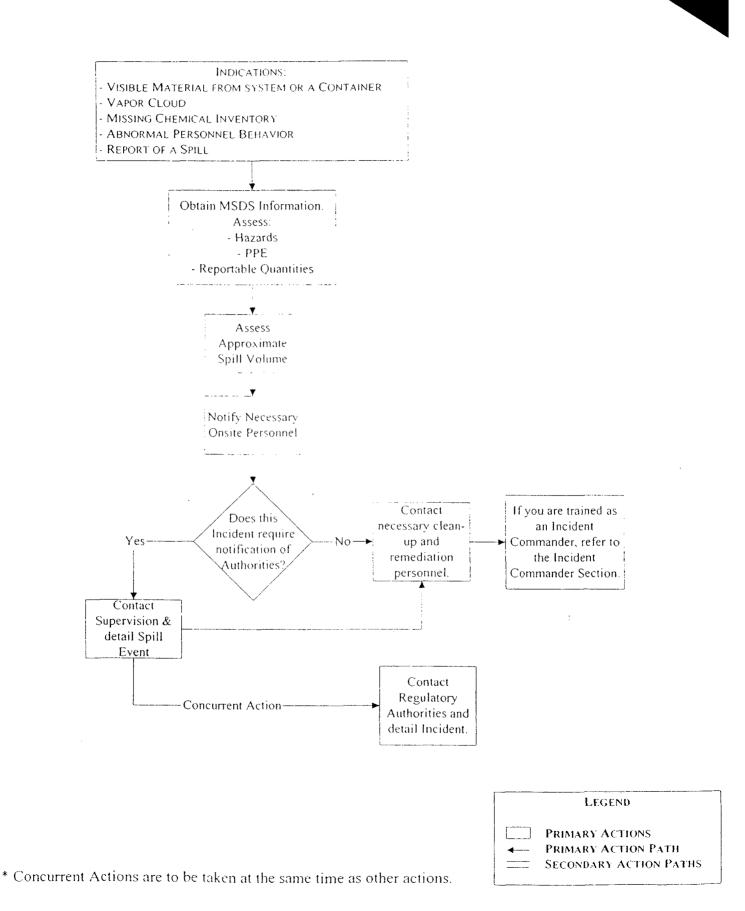


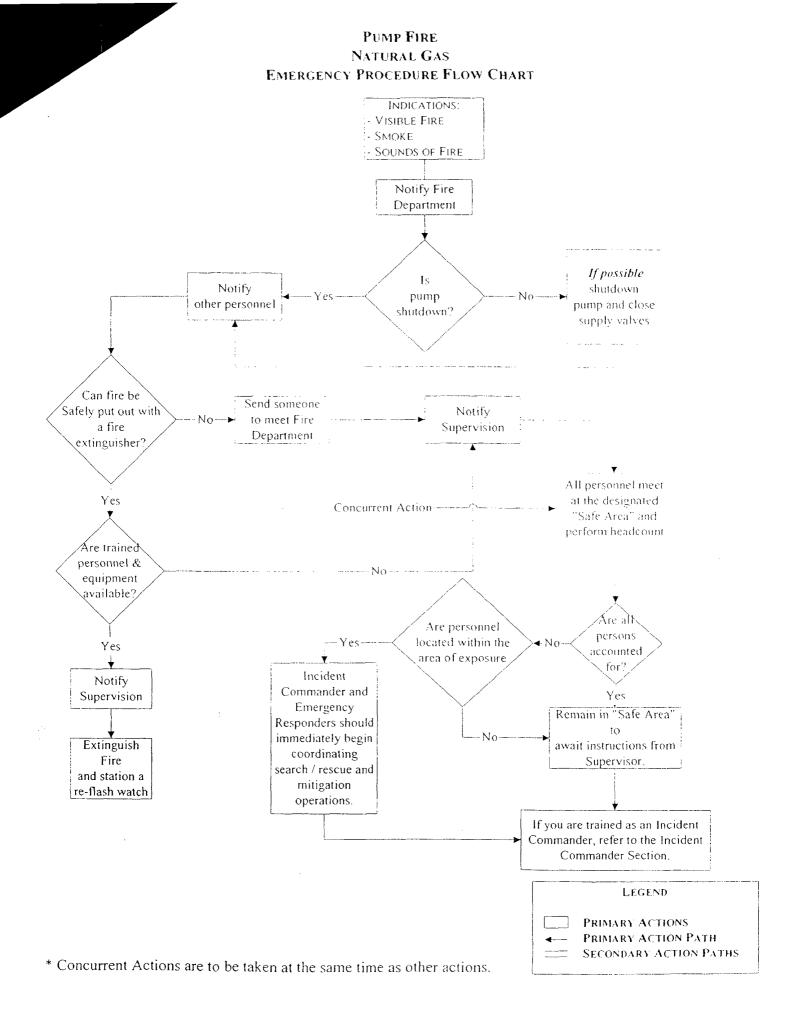


FLOODING EMERGENCY PROCEDURE FLOW CHART

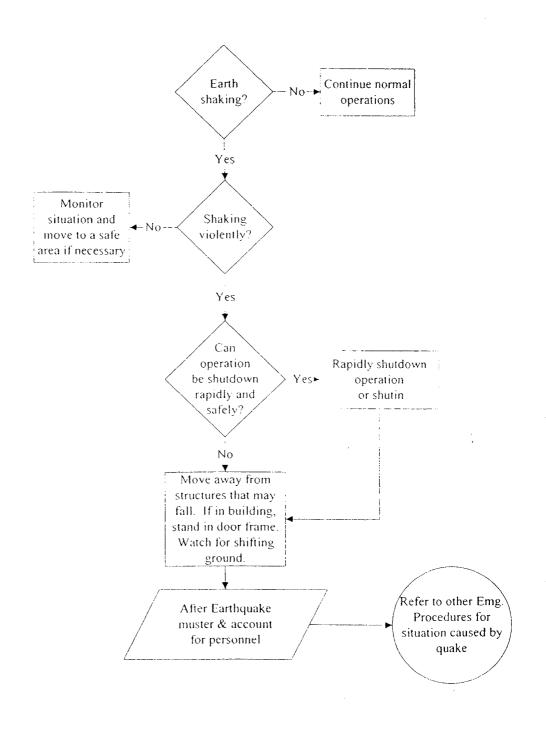


CHEMICAL SPILL OR LEAK EMERGENCY PROCEDURE FLOW CHART





EARTHQUAKE EMERGENCY PROCEDURE FLOW CHART

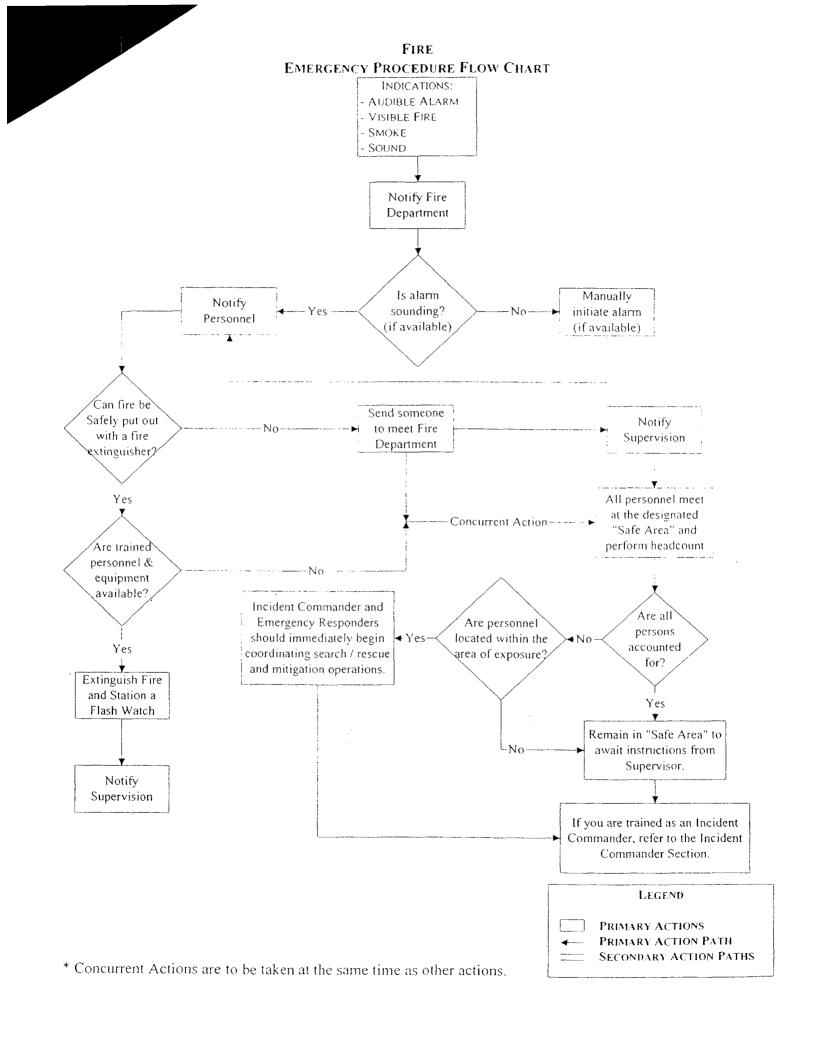


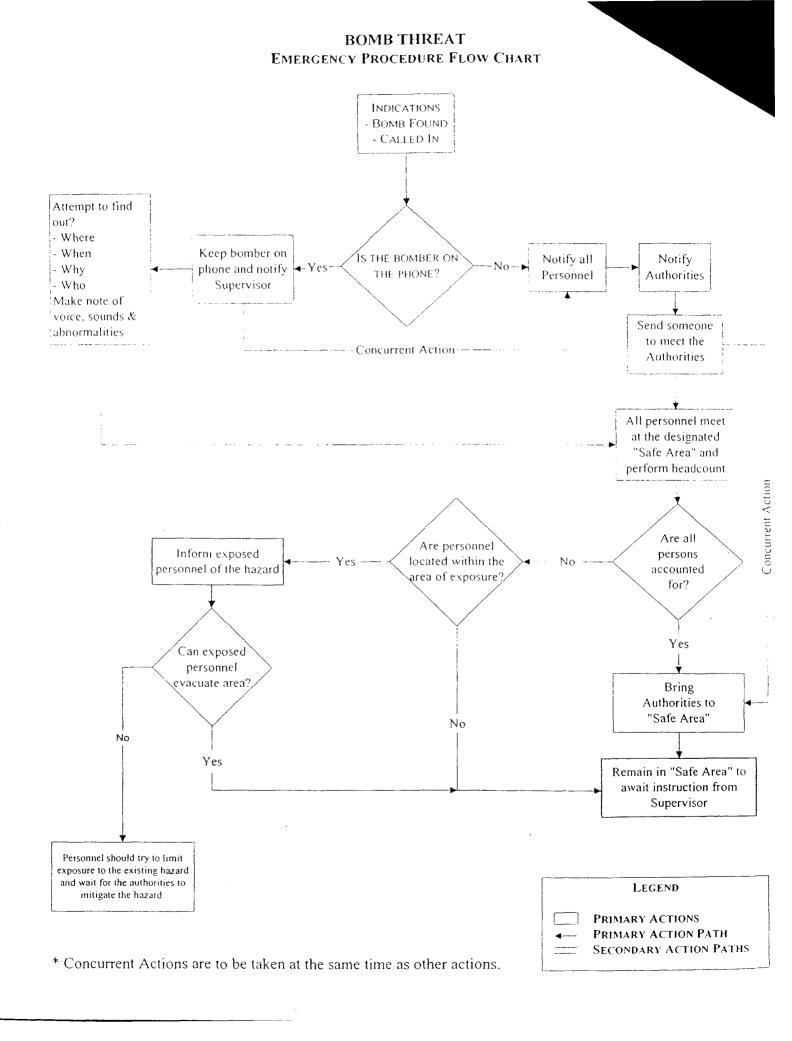
LEGEND

PRIMARY ACTIONS

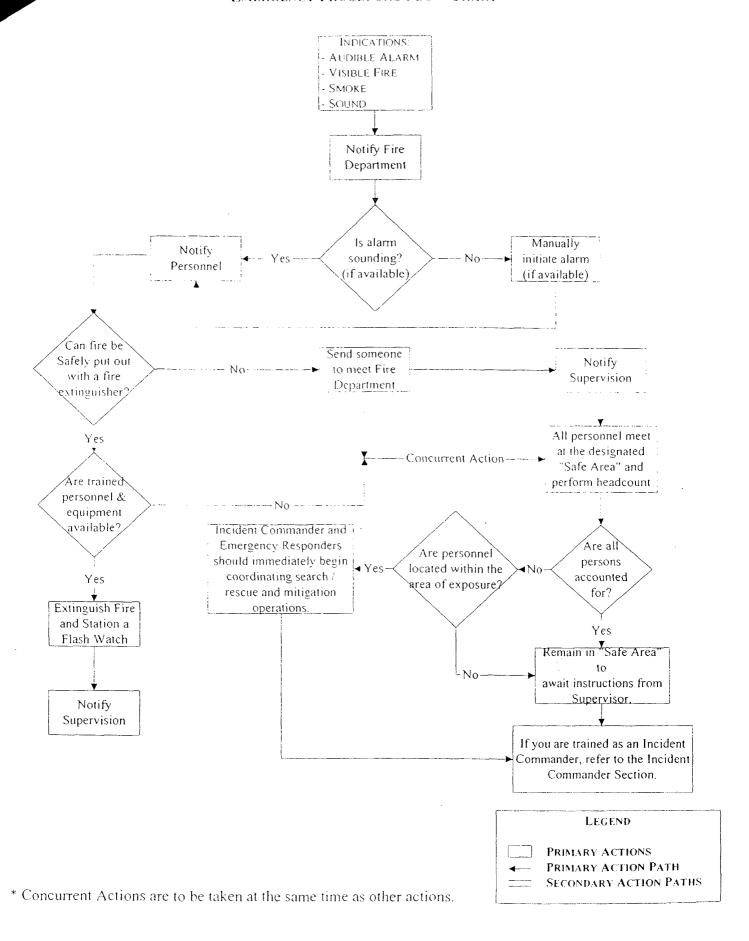
^{*} Concurrent Actions are to be taken at the same time as other actions.

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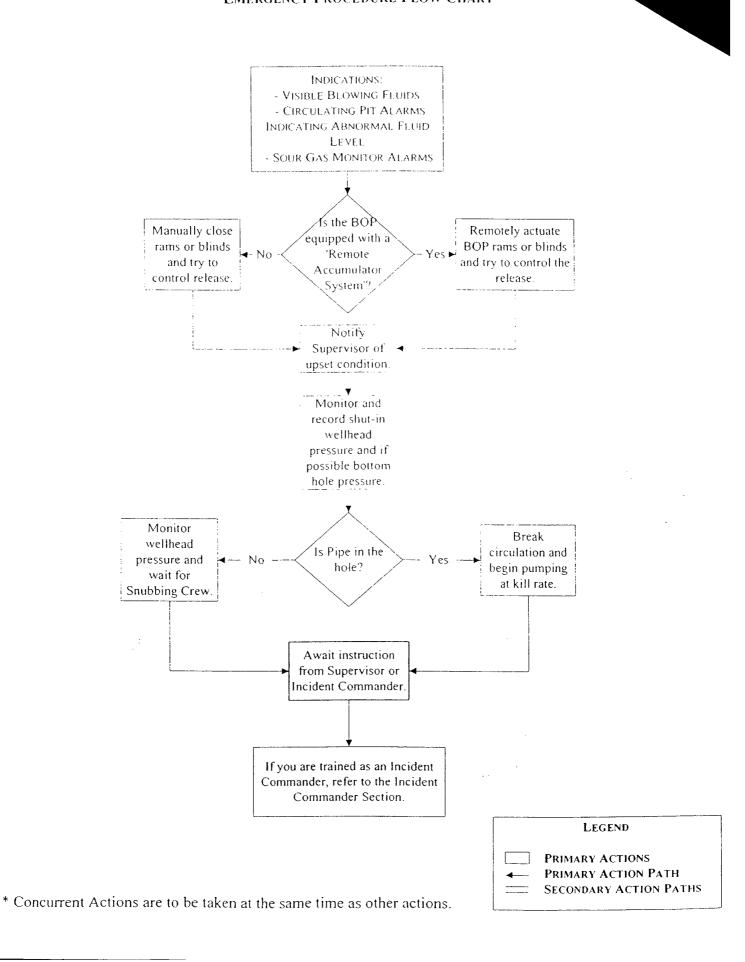




EXPLOSION EMERGENCY PROCEDURE FLOW CHART



WELL BLOWOUT EMERGENCY PROCEDURE FLOW CHART





REQUIREMENTS FOR REPORTING ACCIDENTS, INCIDENTS, AND NEAR MISSES



(Some Local, State, and Federal reporting requirements are not included.

Check additional requirements for your specific location.)

Check ac	lditional require	ments for your s	pecific location.		REV. 03/17/0	93
INCIDENT TYPE/DESCRIPTION Begin reading down this column until you find the descriptions that match your situation. Then read across the page to find the various types of reports you need to make.	Internal Pure/Unocal Notification	PHONE NRC (800) 424-8802 Immediate Verbal	DRUG & ALCOHOL TESTING	WORKMAN'S COMP.	FEDERAL STATE OR LOCAL SPILL REPORT Written/Verbal	DOT Pipeline Call NRC at (800) 424-880 Immediate Verbal
MAJOR Incidents - (Immediate Reporting)					
Fatality, 3 or more Hospitalized (Employee or Contractor)	1, 6, 7, 9, 10, 11, 13		5	Employees Only		8
Significant fire/explosion/spill/release, property loss, casualty, or fiability potentially greater than \$500,000	6, 7, 9, 10, 11, 13	4 - As Needed	5 - As Needed		As Needed	8
Sabotage/Terrorism/Kidnapping/Extortion or life endangering threats	6, 7, 9, 10, 11, 12, 13		5 - As Needed			8 - As Needed
Land Facility Spills/Releases 25 BBLS of oil is "major" if water may be impacted or if a chemical RQ is reached in spill	6, 7, 9, 10, 11, 13	4 - As Needed	5 - As Needed		As Needed	8 - 4s Needed
Significant news media coverage	3, 6, 7, 9, 10, 11, 13				As Needed	8 - As Needed
SERIOUS Incidents - (within 24 hours rep	orting)	<u> </u>				· · · · · · · · · · · · · · · · · · ·
Lost Workday Case (EWC) including employees and contractors.	6, 9, 10, 11, 13		5	Employees Only		8
Three or more injured in one incident including employees and contractors.	7, 9, 10, 11		5 - As Needed	Employees Only		8 • If 5 or more injured
Environmental Loss, Spill, or Fire/Explosion (\$50,000 - \$500,000)	7, 9, 11	4 - As Needed	5 - As Needed		As Needed	8 - As Needed
Land Facility Spills/Releases - Any spill where water is impacted, in sensitive area, or over 100 BBLS, oil.	7, 9, 11	4 - As Needed	5 - As Needed		As Needed	8 - As Needed
Citation/Notice of Violation with potential fines >\$25,000 (Federal, State, or Local)	7, 9, 11				As Needed	į
Theft. Vandalism or other crimes with loss potential >\$25,000	7, 9, 11, 12				As Needed	8 - As Needed
Non HES (equipment, property or process loss): >\$50,000	2, 7, 9, 11		5 - As Needed			8
Near-MIss for any "Major" item	9, 11		5 - As Needed			<u> </u>
MINOR Incidents – (working hours)						
Restricted Workday Case and Medical Treatment Case, employee or contractor	7, 9, 11		5	Employees Only		8
First Aid Case, employee or contractor.	9, 11		5 - As Needed	As Needed		
/ehicle accident (See "Serious" or "Major" loss if applicable)	7, 9, 11		5			
ire/explosion/spill/release/hospitalization or other events with asualty/property/liability loss potential under \$50,000	7, 9, 11	4 · As Needed	5 - As Needed		As Needed	
Land Facility Spills/Releases requiring regulatory reporting or causing third party damage claims.	9, 11	4 - As Needed	5 - As Needed		As Needed	8 - As Needed
Non HES (equipment, property or process loss) <\$50,000	2, 9, 11		5 - As Needed			8

1) All areas must phone OSHA (Area Office or 800-321-6742) within 8 hours.

Near Miss for any "Serious" item

2) "Non HES losses" - Losses or incidents that do not involve Health, Environmental, or Safety issues, i.e., loss of well due to rig or support equipment failure, loss of production due to civil unrest or weather.

5 - As Needed

[3] "Media event" - Any time the media responds to an incident, make an oral report to the group Manager and send him a Preliminary Information Fax.

9, 11

- 4) CALL NRC (National Response Center) if there is any possible impact to water or dry wash.
- 5) Post incident alcohol and drug testing is required for all vehicle accidents and any company or contract employee who is sent from the work place for medical evaluation due to any type of injury or illness. DOT Drug testing for: Spills resulting in a fire or 50 barrels or more of a flammable liquid, or medical treatment or greater injury, or property loss exceeding \$50,000, or an event that is significant in the judgment of the supervisor. (See D.O.T. Drug Testing Handbook, Section 2, page 3)
- 6) Each level of Pure/Unocal management will report to the next level of management through the Executive Manager (Tim Ling). The Executive Manager will report immediately to the CEO. If you cannot contact the next level, you must skip management levels as necessary to insure that <u>immediate</u> notification is achieved.
- 7) Each level of Pure Resources management will report to the next level of management through the President of Pure Resources, LP. .
- 8) DOT Pipeline Report Spills resulting in a fire or 50 barrels or more of a flammable liquid, or medical treatment or greater injury, or property loss exceeding \$50,000, or an event that is significant in the judgment of the supervisor.
- 9) Notify Midland HES Office at 915 498-8600, Ext. 2654 or 8625
- 10) FAX a copy of the Preliminary Incident Information Form within 24 Hours to your reporting office.
- [11] Fill out the Incident Investigation Form when all of the information is gathered and the investigation has been completed. Forward to Midland HES Office.
- 12) Notify Corporate Security Director at (281) 287-7627
- [13] Notify Unocal Associate Counsel or Deputy General Counsel at (281) 491-7600, (Mark Jones)

NOTE: Additional emergency numbers can be found on the back of this form,

incident Contact List

Pure Resources' 24 Hr. L.	argency Number - (432) 498-8	
Gary Dupriest Permian Oil Asset Manager	(432) 498-2627 Office (432) 664-7600 Cell (432) 694-1318 Home	FAX (432) 498-2607
Jim Mason Permian Oil Production Superintendent	(432) 498-8617 Office (432) 661-4936 Cell (432) 524-2201 Home	FAX (432) 498-2610
Mike Oestmann Permian Gas Asset Manager	(432) 498-8666 Office (432) 557-0103 Cell (432) 683-1188 Home	FAX (432) 498-2622
Tom Morrow Permian Gas Operations Superintendent	(432) 498-2653 Office (432) 664-7670 Cell (432) 679-7523 Home	FAX (432) 498-2622
Jay Ottoson New Mexico Asset Manager	(432) 498-2690 Office (432) 425-5860 Cell (432) 694-0861 Home	FAX (432) 498-2610
Pete Wilkinson New Mexico Operations Superintendent	(432) 498-8642 Office (432) 556-3881 Cell (432) 682-0600 Home	FAX (432) 498-2610
Don Rankin HES Manager	(432) 620-5684 Office (432) 238-2467 Cell	FAX (432) 620-5610
Jay Waldrop Permian Gas and Drilling HES Coordinator	(432) 498-2654 Office (432) 556-3547 Cell (432) 523-9778 Home	FAX (432) 620-5610
Ron Lechwar New Mexico HES Coordinator	(432) 498-8625 Office (432) 634-2239 Cell 1 (432) 664-2920 Cell 2	FAX (432) 620-5610
	(432) 697-1549 Home	FAX (432) 697-1549
Mark Garner Permian Oil HES Coordinator	(432) 620-5614 Office (432) 238-0198 Cell (432) 524-6124 Home	FAX (432) 620-5610
Steve Guidry Southeast Onshore Asset Manager	(713) 951-7878 Office (281) 216-4344 Cell (281) 376-8767 Home	FAX (713) 951-7880
Sid Wall Southeast Onshore HES Coordinator - Houston	(713) 951-7844 Office (713) 204-9419 Cell (713) 975-7098 Home	FAX (713) 951-7840
Jim Harrison Permian Oil Drilling Manager	(432) 620-5661 Office (432) 553-7414 Cell (432) 699-4476 Home	FAX (432) 498-8656
Jerry Orndorff	(432) 498-8664 Office	FAX (432) 498-8656
Permian Oil Drilling Superintendent	(432) 631-4295 Cell (432) 570-8657 Home	FAX (432) 687-0351
Martha Cavitt HR Advisor	(432) 498-8608 Office (432) 664-7682 Cell (432) 689-3144 Home	FAX (432) 498-8697
Tony Best	(432) 498-8678 Office	FAX (432) 498-2607
President	(432) 557-7979 Cell (979) 690-1064 Home	FAX (979) 690-6065
	UNOCAL NUMBERS	
Deborah Thompson HR Dept.	(281) 287-5549 Office (832) 656-0282 Cell (281) 360-2977 Home	FAX (281) 287-7339
Christine LeLaurin Media Relations	(281) 287-5793 Office (281) 414-3609 Cell	(If Christine does not answer office phone, have her paged before calling her cell phone number)
Mark Jones Corporate Legal - Sugar Land	(281) 287-7693 Office (713) 823-5716 Cell (281) 265-3821 Home	· · · · · · · · · · · · · · · · · · ·
Ron Morin Corporate HES Manager – Sugar Land	(281) 287-5092 Office (713) 882-8389 Cell	FAX (281) 287-5150
Chuck Williamson, CEO	(310) 726-7693	FAX (310) 726-7609
George Walker, VP HES	(310) 726-7661	FAX (310) 726-7820
Chuck Strathman Chief Legal Officer	(310) 726-7763	FAX (310) 726-7815
Tony Stewart, Corp. GM HES	(281) 287-5092	FAX (281) 278-5150
Tim Ling, COO	(310) 726-7625 (281) 287-5495	FAX (310) 726-7808 FAX (281) 287-5321