District I
1625 N. French Dr., Hobbs, NM 88240
District II
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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
FEB 23 2005
OCD-ARTESIA

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
Pure Resources, L. P. 500 W. Illinois Midland, Texas 79701	150628
	[3] API Number 30 - 015 - 33968

[5] Property Code	[5] Property Name	[6] Well No.
	ESPERANZA "13"	2

[9] Proposed Pool 1	[10] Proposed Pool 2
Carlsbad; Morrow, South (Pro Gas) (73960)	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	13	22S	26E		621	South	2,287	East	EDDY

[8] Proposed 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	East/West line	County
I	13	22S	26E		1,980	South	660	East	EDDY

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	P	3,151'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	12,031' MD 11,700' TVD	Morrow	Nabors	When Approved

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
Avg. Depth per State Engineer's Site is 58'	Per the State Engineer's Site it is 1,099'.	Dark Canyon Draw is approx. 950'.

Pit: Liner: Synthetic ☒ _12__mils thick Clay ☐ Pit Volume:_2,000 bbls

Drilling Method:

Closed-Loop System ☐

Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

[21] 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	400'	440sx	Surface
12-1/4"	9-5/8"	36# J-55	1,800'	580sx	Surface
8-3/4"	7"	23# P-110 HC	9,300' MD 9,011' TVD	880sx	1,700'
6-1/8"	4-1/2" Liner	11.6# P-110 HC	9,100' MD-12,031' MD	315sx	Liner fully cmt'd.

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.

Pure Resources, L. P. respectfully submits this application to Directionally Drill & Complete this 12,031' MD well in the Carlsbad; Morrow, South (Pro Gas) Pool (73960). The 7" intermediate casing depth may vary -intent is to set at the top of Wolfcamp zone as determined by mud logging. The pit contents will be handled according to NMOCD guidelines.. Please see the attached—Casing/Cement and Mud Program sheet, BOP Schematic (13-5/8" 10K Stack), site layout plat, C-102 Plats, Directional Planning Report, Contingency Plan(s) and additional maps and plats.

As a condition of approval a detailed closure plan must be filed before closure may commence.

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Alan W. Bohling

Title: Regulatory Agent

E-mail Address: abohling@pureresources.com

Date: 02/18/2005 Phone: (432) 498-8662

OIL CONSERVATION DIVISION

Approved by: TIM W. GUM

Title: DISTRICT II SUPERVISOR

Approval Date: FEB 27 2005 Expiration Date: FEB 27 2006

Conditions: NOTIFY OCD OF SPUD & TIME TO WITNESS CEMENTING OF SURFACE & INTERMEDIATE CASING

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

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

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	73960	Carlsbad; Morrow, South (Pro Gas)

Property Code	Property Name	Well Number
34231	ESPARANZA 13	2

OGRID No.	Operator Name	Elevation
150628	PURE RESOURCES	3151'

Surface Location

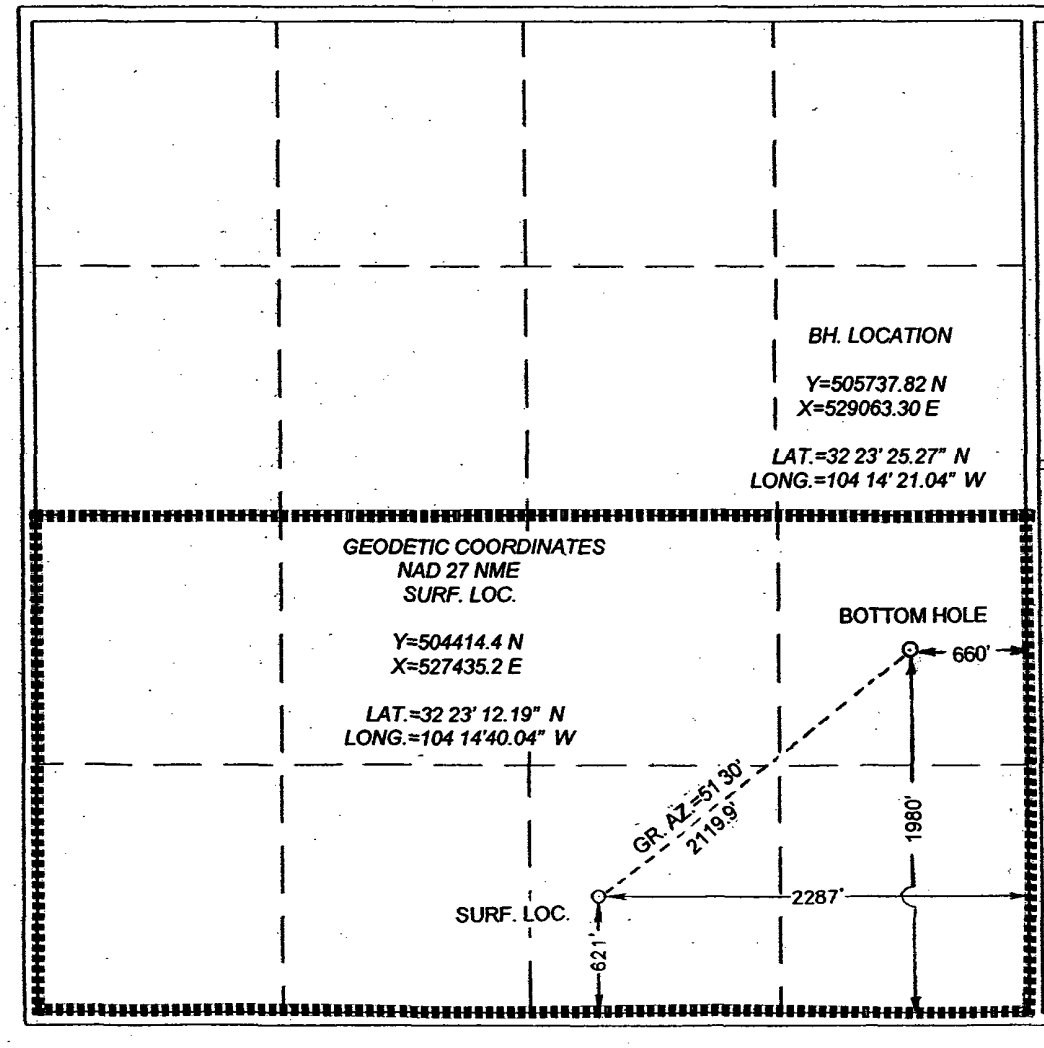
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	13	22-S	26-E		621	SOUTH	2287	EAST	EDDY

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	East/West line	County
I	13	22-S	26-E		1980	South	660	East	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Alan W. Bohling
Signature

Alan W. Bohling
Printed Name

Regulatory Agent
Title

02/18/2005
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown 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.

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

FEBRUARY 3, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

2/3/05

Certificate No. GARY EIDSON 12641

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

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

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	73960	Carlsbad; Morrow, South (Pro Gas)

Property Code	Property Name	Well Number
34231	ESPARANZA 13	2

OGRID No.	Operator Name	Elevation
150628	PURE RESOURCES	3151'

Surface Location

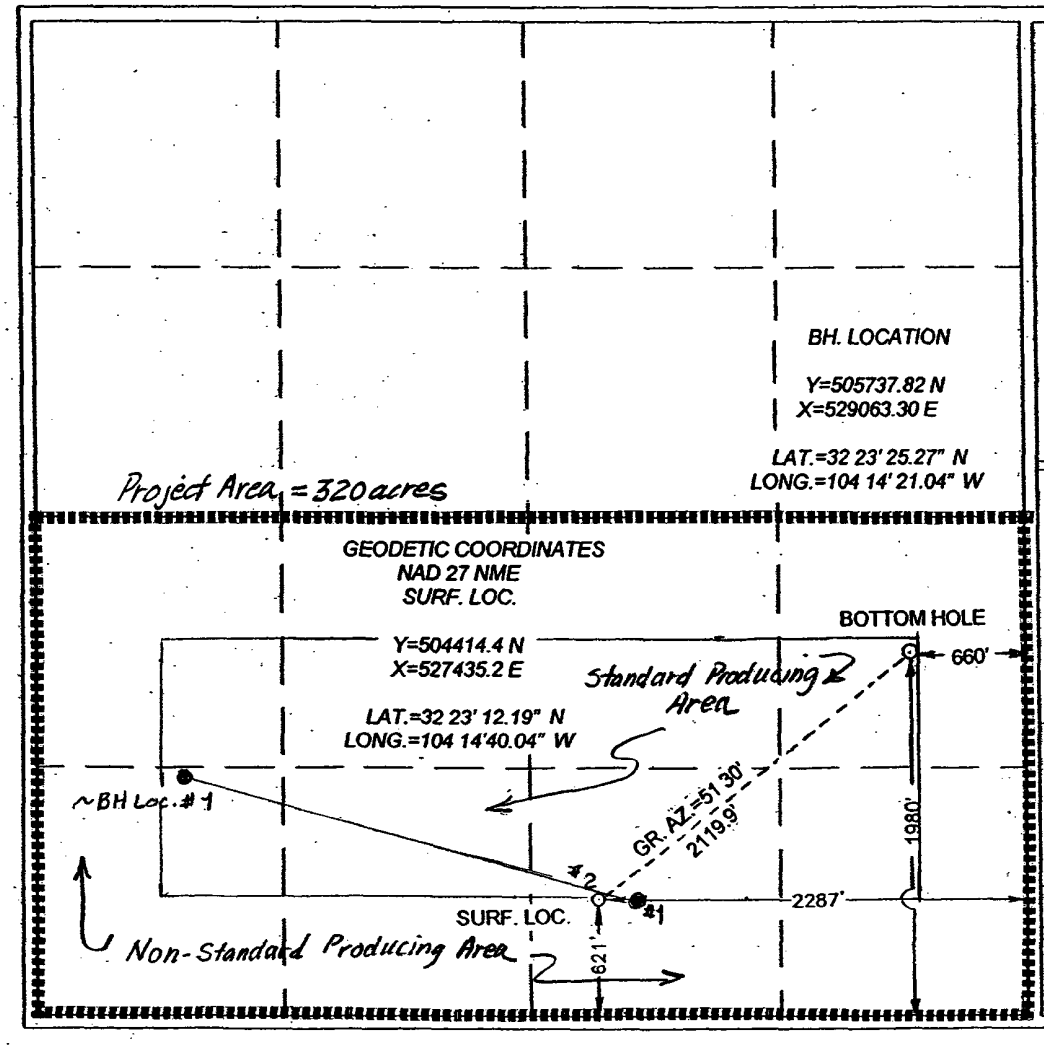
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	13	22-S	26-E		621	SOUTH	2287	EAST	EDDY

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	East/West line	County
I	13	22-S	26-E		1980	South	660	East	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Alan W. Bohling
Printed Name

Regulatory Agent
Title

02/18/2005
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown 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.

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Date Surveyed: FEBRUARY 3, 2005 LA

Signature & Seal of Professional Surveyor

2/18/05

Certificate No. GARY EIDSON 12641

Casing/Cement and Mud Program Sheet

Esperanza "13" #2
API No. _____
621' FSL & 2,287' FEL
UL O, Sec. 13, T-22-S, R-26-E
Eddy County, New Mexico

Proposed Casing and Cement Program:

Hole Size	Casing Size	Wt #/ft	Grade	Connect	Setting Depth	Cement Volume	Estimated TOC
25"	20"	N/A	N/A	N/A	40'	Redi-mix	Surface
17-1/2"	13-3/8"	48	H40	STC	400'	440 sx	Surface
12-1/4"	9-5/8"	36	J55	STC	1,800'	580 sx	Surface
8-3//4"	7"	23	P110HC	LTC	9,300' MD 9,011' TVD	880 sx	1,700'
6-1/8"	4-1/2" Liner	11.6	P110HC	LTC	9,100' MD 12,031' MD	315 sx	Linner will be fully cemented with cmt. across lap into 7" Csg.

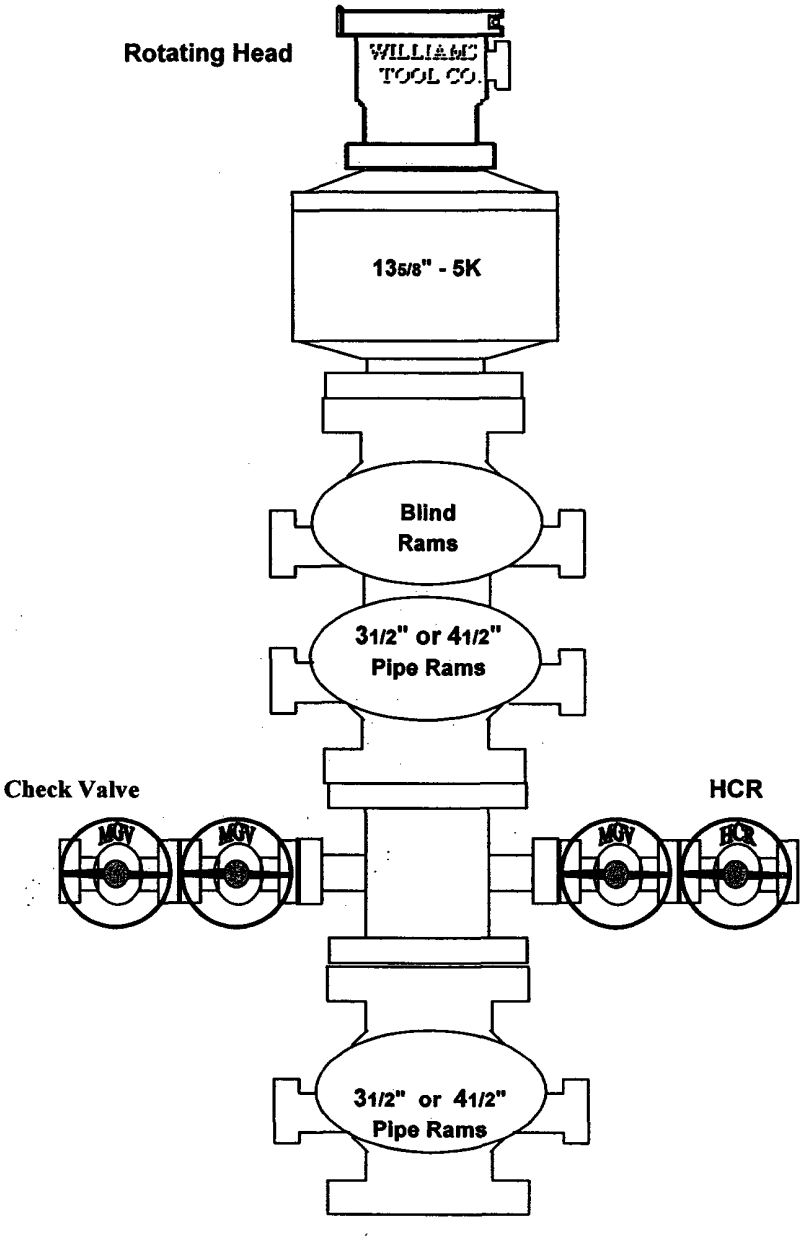
Note: 7" Intermediat Casing depth may be adjusted per drilling results-intent is to set at the top of the Wolfcamp zone, which will be determined by mud logging as drilling progresses.

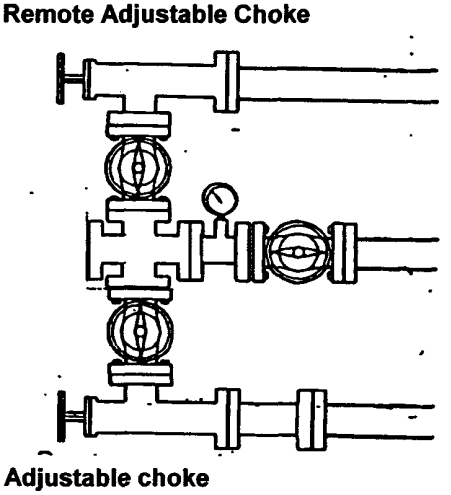
Propose Mud Program

Interval	Type	Weight
0' - 400'	FW / Spud Mud	8.4 - 9.0
400' - 1,800'	FW w/ LCM as needed	8.4 - 9.0
1,800' - 9,300' MD	FW w/ LCM as needed	8.4 - 9.2
9,300' MD - 12,031' MD	Brine 35+ vis, FL 6-8 across zones of interest	9.8 - 11.0

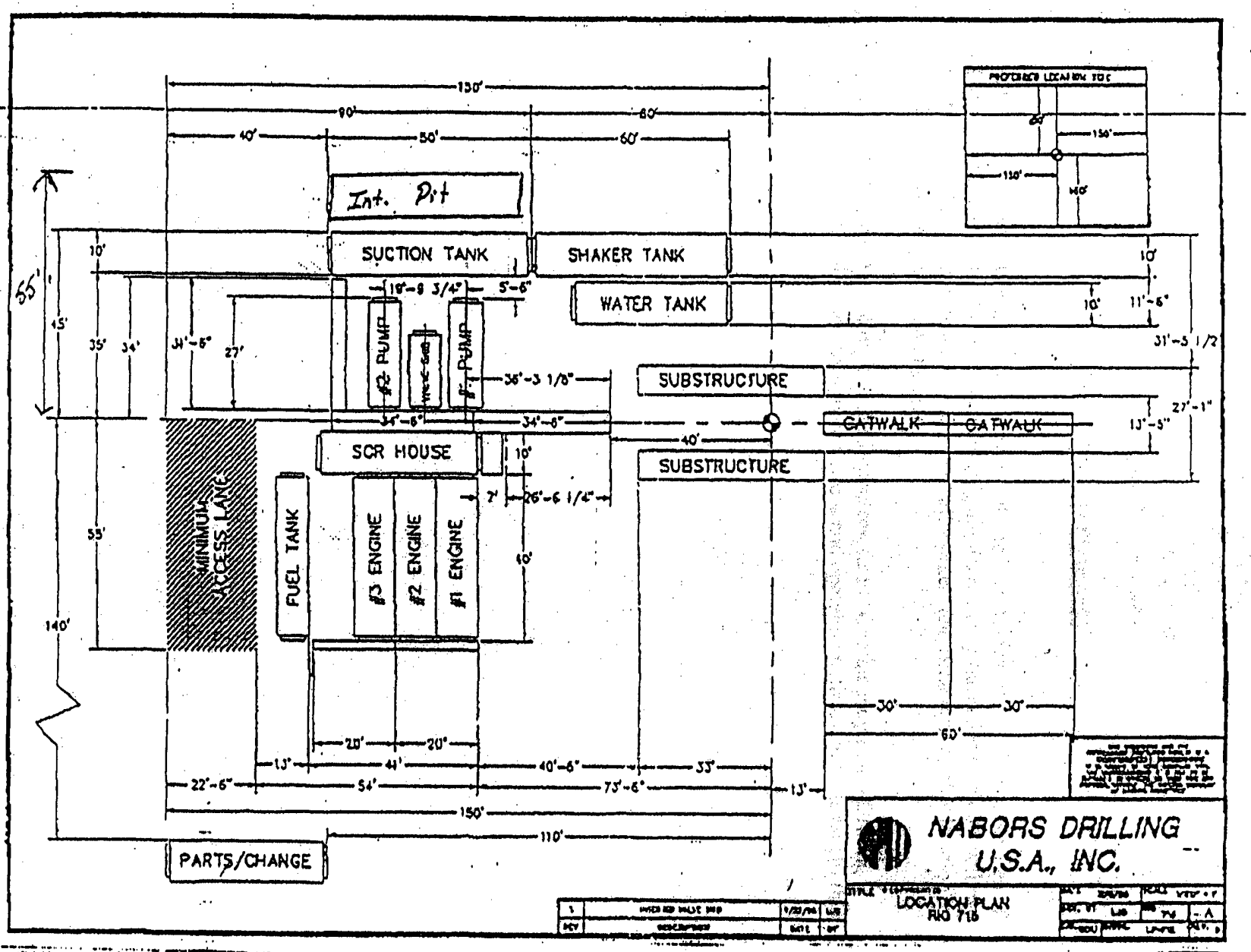
BOPE Schematic **Esperanza "13" #2** **13 5/8" - 10K PSI**

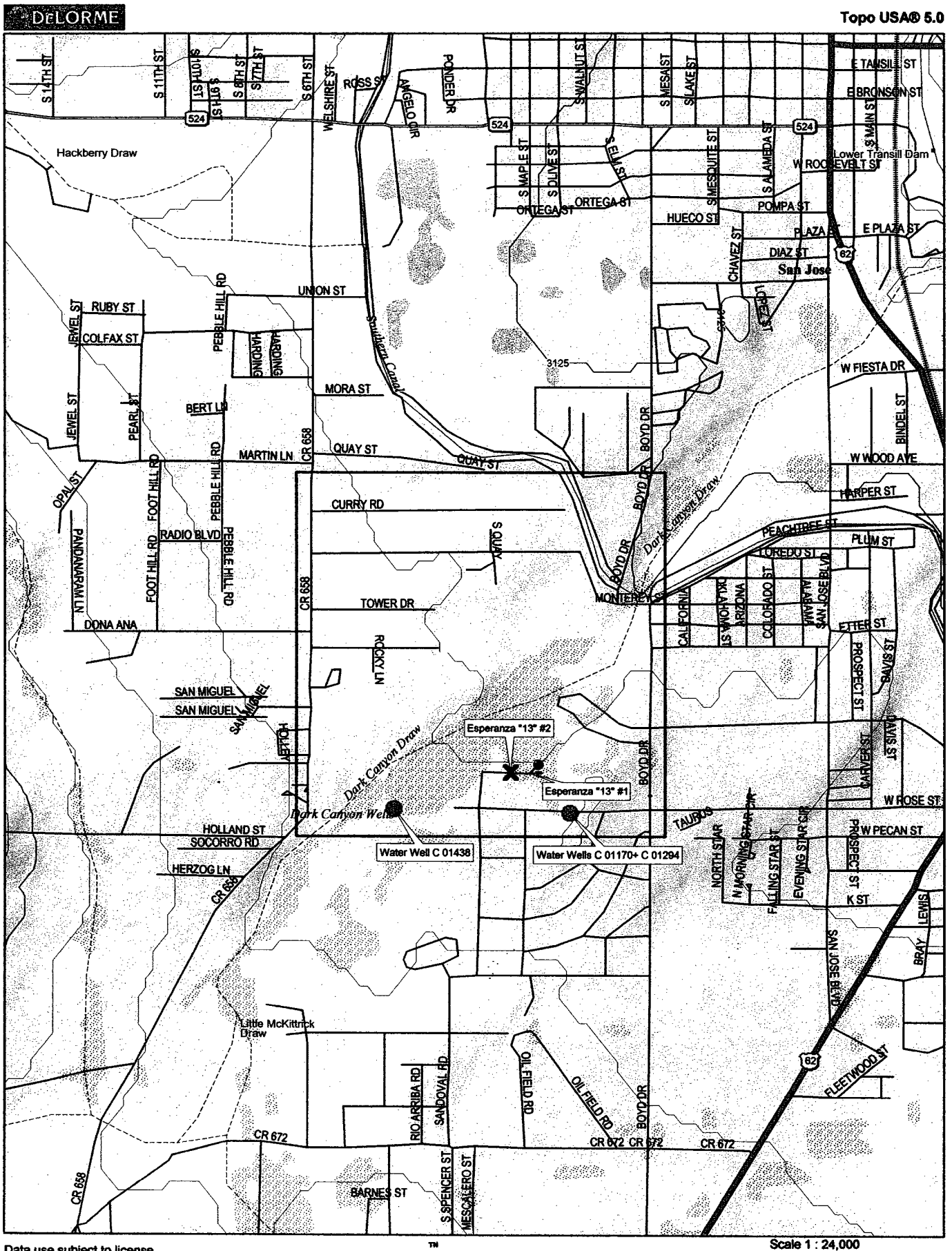
621' FSL and 2,287' FEL
Section 13 - T22S - R26E
Eddy County, New Mexico

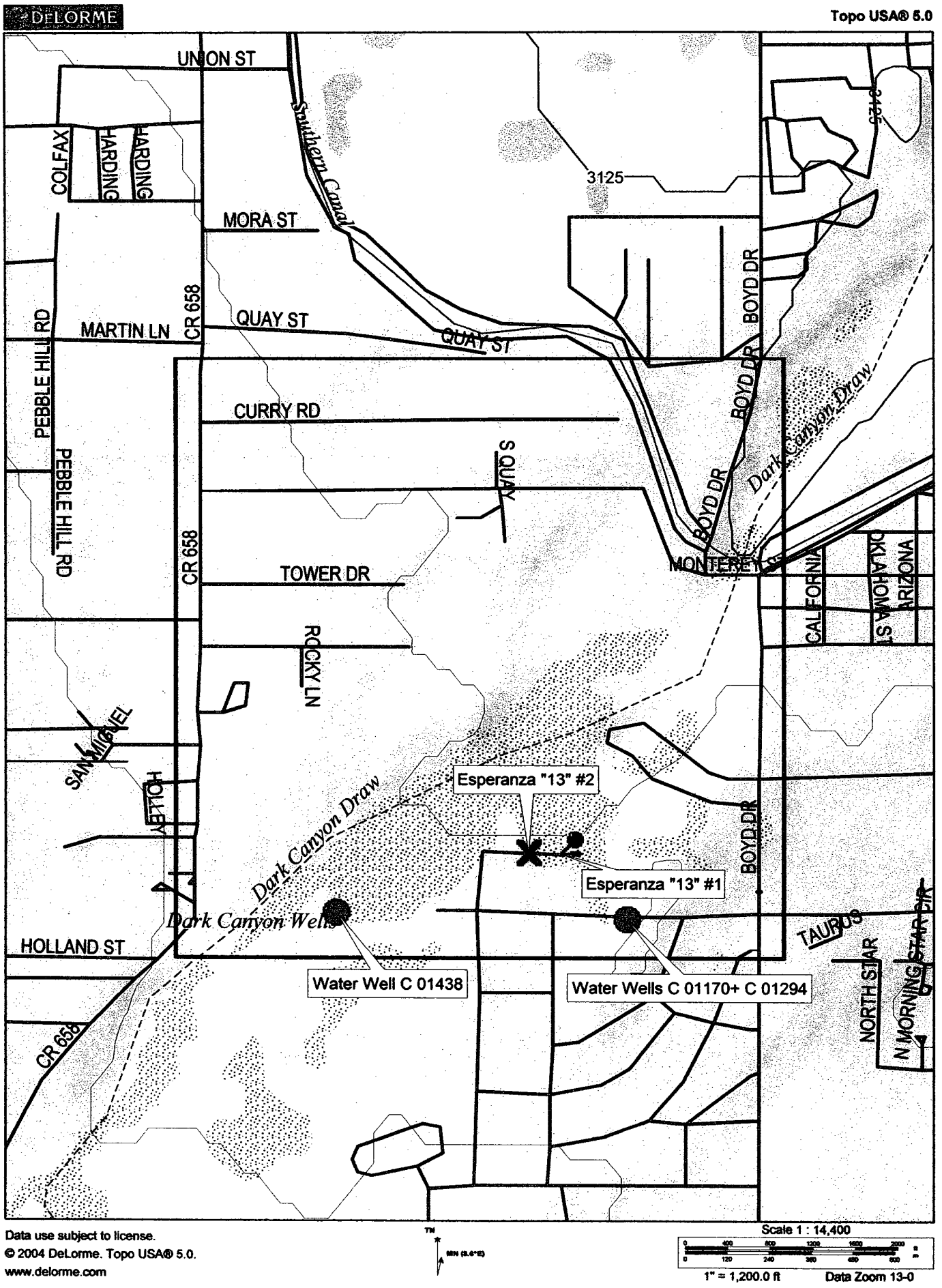




2" min - 10K WP Double valve manifold

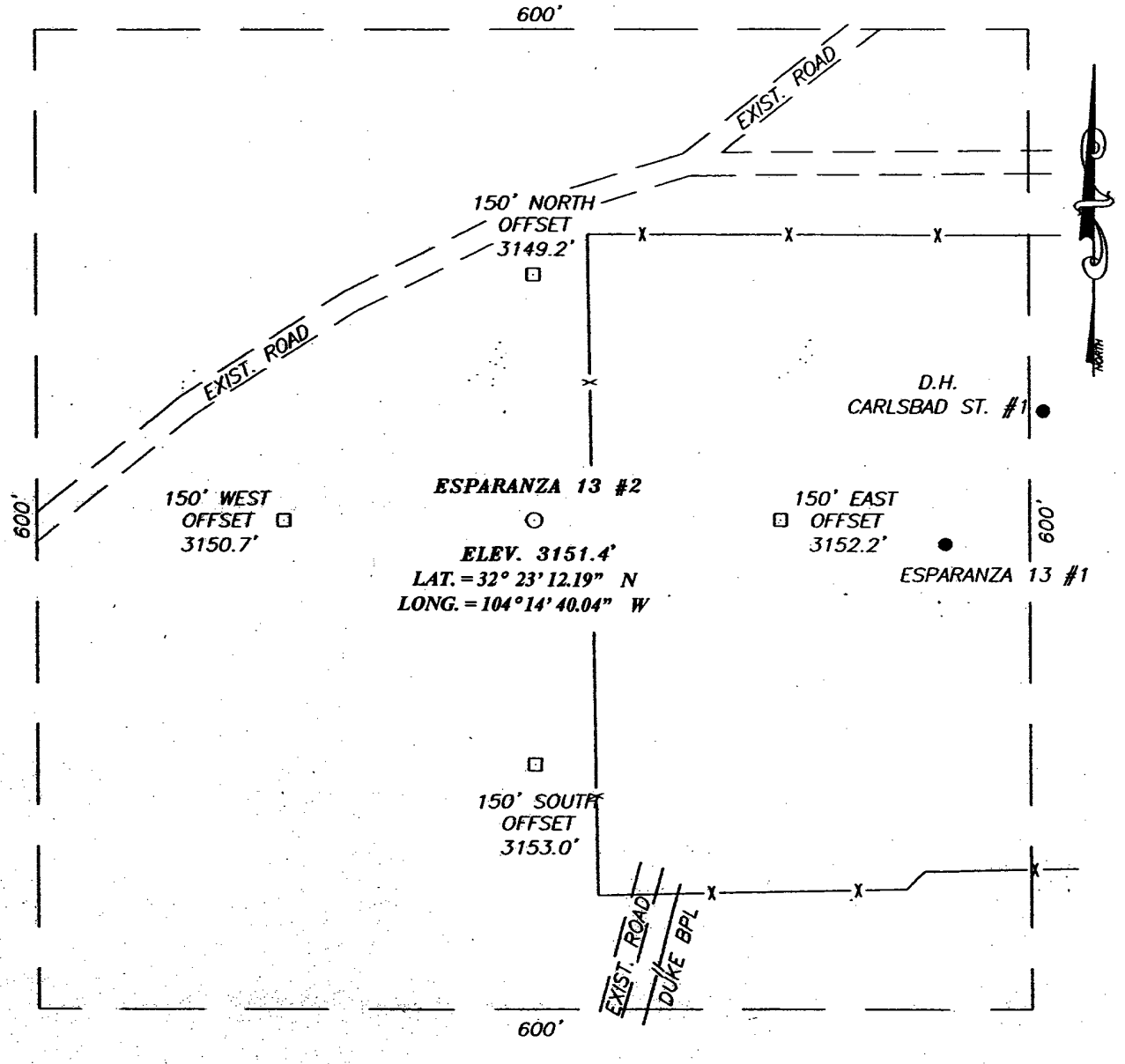

130'
90'
80'
40'
50'
60'
Int. Pit
SUCTION TANK
SHAKER TANK
WATER TANK
10'
55'
45'
35'
34'
34'-6"
27'
18'-8 3/4"
5'-6"
#2 PUMP
#1 PUMP
36'-3 1/8"
34'-6"
34'-6"
SUBSTRUCTURE
CATWALK
CATWALK
40'
SUBSTRUCTURE
SCR HOUSE
10'
7'
26'-6 1/4"
55'
40'
MINIMUM ACCESS LANE
FUEL TANK
#3 ENGINE
#2 ENGINE
#1 ENGINE
140'
10'
11'-6"
31'-5 1/2"
27'-1"
13'-5"
30'
30'
60'
20'
20'
13'
41'
40'-6"
33'
22'-6"
54'
73'-6"
13'
150'
110'
PARTS/CHANGE
NABORS DRILLING
U.S.A., INC.
LOCATION PLAN
RIG 715


DeLORME
Topo USA® 5.0
S 14TH ST
S 11TH ST
S 10TH ST
S 9TH ST
S 8TH ST
S 7TH ST
S 6TH ST
WELSHIRE ST
ROSS ST
ANGELO DR
PONDER DR
524
SWALNUT ST
S MESA ST
SLAKE ST
E TANSILL ST
E BRONSON ST
S MAIN ST
Hackberry Draw
S MAPLE ST
S OLIVE ST
S ELM ST
S MESQUITE ST
S ALAMEDA ST
Lower Transill Dam
W ROOSEVELT ST
ORTEGA ST
HUECO ST
POMPA ST
PLAZA ST
E PLAZA ST
DIAZ ST
62
San Jose
CHAVEZ ST
UNION ST
PEBBLE HILL RD
JEWEL ST
RUBY ST
COLFAX ST
HARDING
Southern Canal
3125
W FIESTA DR
BINDEL ST
MORA ST
BERT LN
PEARL ST
MARTIN LN
CR 658
QUAY ST
BOYD DR
W WOOD AVE
HARPER ST
OPAL ST
FOOT HILL RD
RADIO BLVD
PEBBLE HILL RD
CURRY RD
Dark Canyon Draw
PEACHTREE PL
PLUM ST
LOREDO ST
PAWNEE RAWAY LN
DONA ANA
TOWER DR
MONTEREY ST
CALIFORNIA
OKLAHOMA ST
ARIZONA
COLORADO ST
NEW MEXICO
SAN JOSE BLVD
ETTER ST
ROCKY LN
PROSPECT ST
DAVIS ST
SAN MIGUEL
SAN MIGUEL
ABBOTT
Esperanza "13" #2
Esperanza "13" #1
Dark Canyon Draw
Dark Canyon Well
HARVEY ST
W ROSE ST
TAURUS
HOLLAND ST
SOCORRO RD
Water Well C 01438
Water Wells C 01170+ C 01294
NORTH STAR
N MORNING STAR DR
FALLING STAR ST
EVENING STAR DR
W PECAN ST
PROSPECT ST
HERZOG LN
CR 658
K ST
LEWIS
BRAY
SAN JOSE BLVD
Little McKittrick Draw
OIL FIELD RD
RIO ARRIBA RD
SANDOVAL RD
62
FLEETWOOD ST
CR 672
CR 672
CR 672
CR 672
CR 658
BARNES ST
S SPENCER ST
MESCALERO ST
Data use subject to license.
© 2004 DeLorme. Topo USA® 5.0.
www.delorme.com
TN
MN (8.6°E)
Scale 1 : 24,000
1" = 2,000.0 ft
Data Zoom 13-0


DeLORME
Topo USA® 5.0
UNION ST
COLFAX
HARDING
HARDING
Southern Canal
3125
MORA ST
CR 658
MARTIN LN
QUAY ST
QUAY ST
BOYD DR
BOYD DR
BOYD DR
Dark Canyon Draw
PEBBLE HILL RD
PEBBLE HILL RD
CURRY RD
S QUAY
CR 658
TOWER DR
MONTEREY ST
CALIFORNIA
OKLAHOMA ST
ARIZONA
ROCKY LN
SAN MIGUEL
HOLLY
Esperanza "13" #2
Dark Canyon Draw
Esperanza "13" #1
BOYD DR
Dark Canyon Wells
TAURUS
NORTH STAR DR
N MORNING STAR DR
HOLLAND ST
Water Well C 01438
Water Wells C 01170+ C 01294
CR 658
Data use subject to license.
© 2004 DeLorme. Topo USA® 5.0.
www.delorme.com
Scale 1 : 14,400
1" = 1,200.0 ft
Data Zoom 13-0

SECTION 13, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF BOYD ST. & ROSE ST. ON THE SOUTHWEST SIDE OF CARLSBAD. GO WEST ON LEASE ROAD 0.4 MILES. TURN RIGHT AND GO 0.2 MILES NORTHEAST TO THE ESPARANZA 13 #1 WELL. THIS LOCATION IS ON THE WEST SIDE OF WELL PAD.

100 0 100 200 Feet

Scale: 1" = 100'

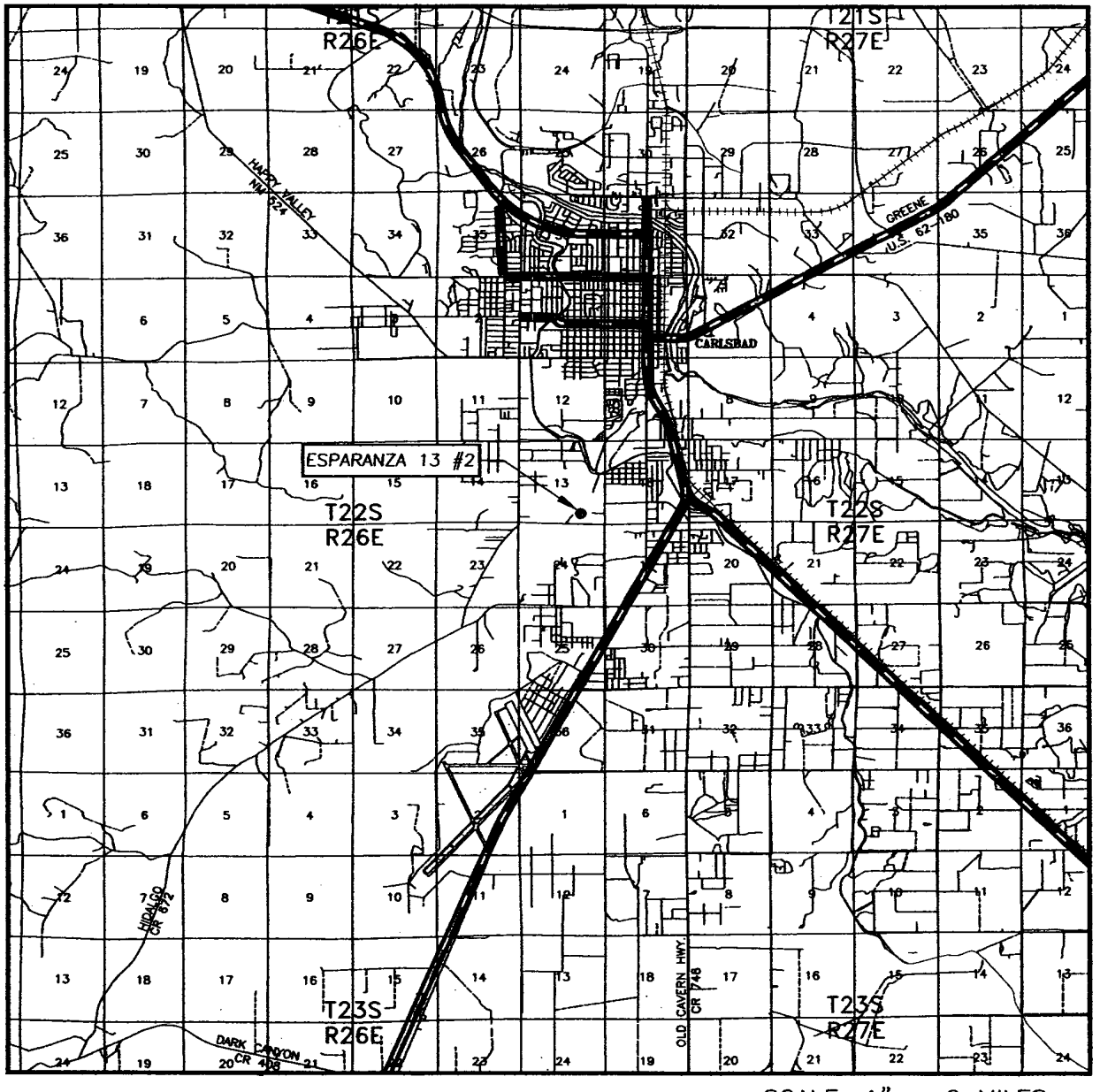
PURE RESOURCES

ESPARANZA 13 #2 WELL
LOCATED 621 FEET FROM THE SOUTH LINE
AND 2287 FEET FROM THE EAST LINE OF SECTION 13,
TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 2/03/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0144	Dr By: LA		Rev 1:N/A
Date: 2/07/05	Disk: CD#4	05110144	Scale: 1" = 100'

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 22-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 621' FSL & 2287' FEL

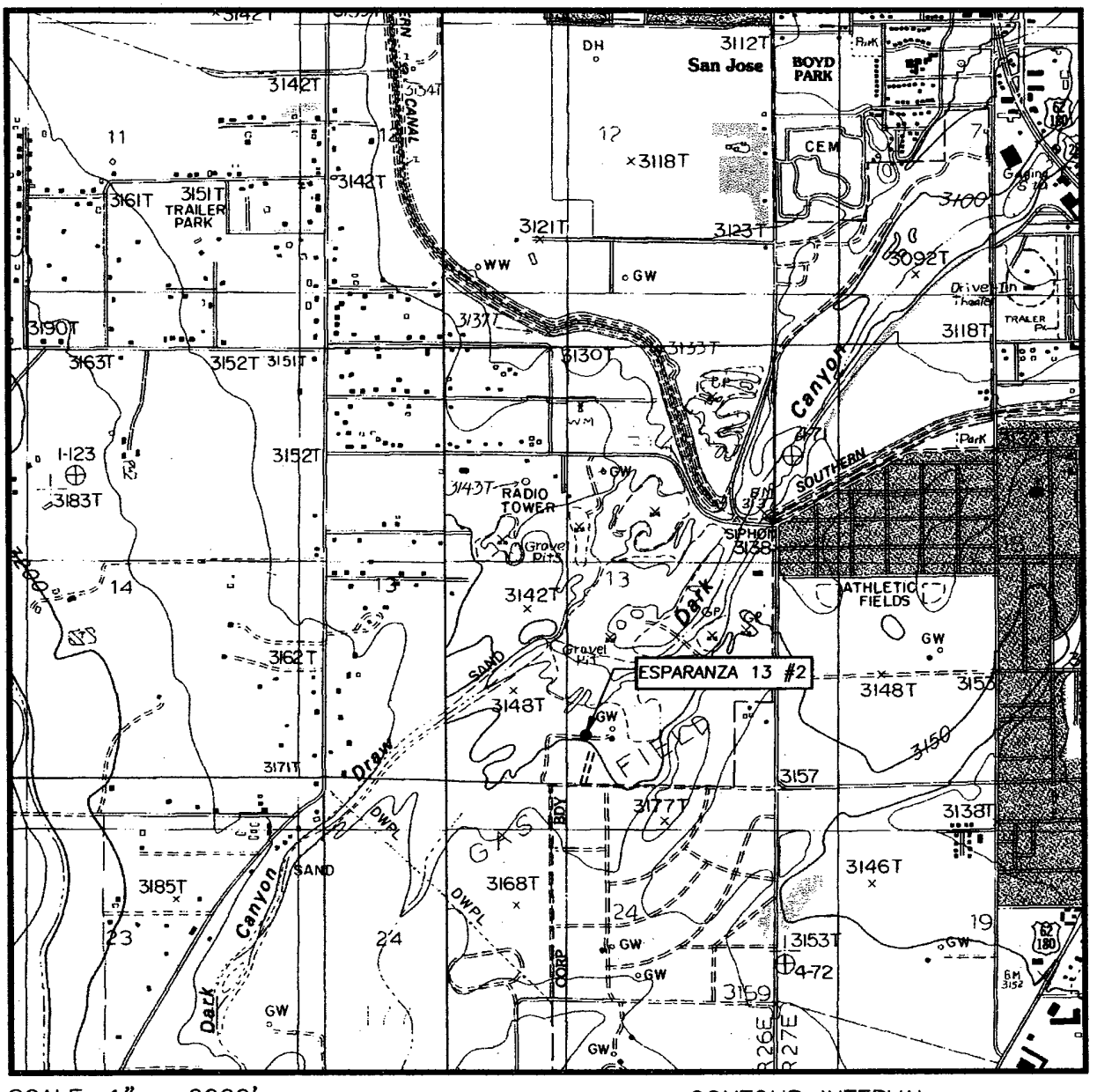
ELEVATION 3151'

OPERATOR PURE RESOURCES

LEASE ESPARANZA 13 #2

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CARLSBAD WEST, N.M. – 20'
CARLSBAD EAST, N.M. – 10'

SEC. 13 TWP. 22-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 621' FSL & 2287' FEL

ELEVATION 3151'

OPERATOR PURE RESOURCES

LEASE ESPARANZA 13

U.S.G.S. TOPOGRAPHIC MAP
CARLSBAD WEST, CARLSBAD EAST, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	PURE Resources	**Date:**	2/22/2005	**Time:** 11:03:35	**Page:** 1
Field:	Esperanza	**Co-ordinate(NE) Reference:**	Well: Esperanza 13 #2, Grid North		
Site:	Esperanza 13 #2	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Esperanza 13 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,50.89Azi)		
Wellpath:	Orginal Hole	**Plan:**	Plan #1 022105		

Field: Esperanza
Eddy County, New Mexico

Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2005

Site: Esperanza 13 #2

Site Position:		**Northing:**	504414.40 ft	**Latitude:**	32 23 12.187 N
From:	Map	**Easting:**	527435.20 ft	**Longitude:**	104 14 40.042 W
Position Uncertainty:	0.00 ft			**North Reference:**	Grid
Ground Level:	3151.00 ft			**Grid Convergence:**	-0.02 deg

Well: Esperanza 13 #2 **Slot Name:**

Well Position:	+N/-S	0.00 ft	**Northing:**	504414.40 ft	**Latitude:**	32 23 12.187 N
	+E/-W	0.00 ft	**Easting:**	527435.20 ft	**Longitude:**	104 14 40.042 W
Position Uncertainty:		0.00 ft				

Wellpath: Orginal Hole

				Drilled From:	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	0.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	2/22/2005			**Declination:**	8.70 deg
Field Strength:	49287 nT			**Mag Dip Angle:**	60.34 deg

Vertical Section:	Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
	0.00	0.00	0.00	50.89

Plan: Plan #1 022105 **Date Composed:** 2/21/2005
Version: 1
Principal: No **Tied-to:** From Surface

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	50.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	50.89	3400.00	0.00	0.00	0.00	0.00	0.00	50.89	
4352.10	19.04	50.89	4334.67	98.88	121.65	2.00	2.00	0.00	50.89	
9661.75	19.04	50.89	9353.77	1191.56	1465.91	0.00	0.00	0.00	0.00	
10931.22	0.00	50.89	10600.00	1323.40	1628.10	1.50	-1.50	0.00	180.00	Esperanza 13-2 Vertical 1
11423.22	0.00	50.89	11092.00	1323.40	1628.10	0.00	0.00	0.00	0.00	Top of Morrow Sand
12031.22	0.00	50.89	11700.00	1323.40	1628.10	0.00	0.00	0.00	0.00	Esperanza 13 #2 PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	50.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	50.89	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	50.89	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	50.89	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	50.89	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	50.89	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	50.89	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	50.89	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	50.89	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	50.89	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	50.89	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	50.89	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	50.89	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	50.89	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	50.89	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	PURE Resources	**Date:**	2/22/2005	**Time:** 11:03:35	**Page:** 2
Field:	Esperanza	**Co-ordinate(NE) Reference:**	Well: Esperanza 13 #2, Grid North		
Site:	Esperanza 13 #2	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Esperanza 13 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,50.89Azi)		
Wellpath:	Orginal Hole	**Plan:**	Plan #1 022105		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1500.00	0.00	50.89	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	50.89	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	50.89	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	50.89	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	50.89	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	50.89	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	50.89	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	50.89	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	50.89	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	50.89	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	50.89	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	50.89	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	50.89	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	50.89	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	50.89	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	50.89	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	50.89	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	50.89	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	50.89	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	50.89	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP w/2° Build Rates
3500.00	2.00	50.89	3499.98	1.10	1.35	1.75	2.00	2.00	0.00	
3600.00	4.00	50.89	3599.84	4.40	5.42	6.98	2.00	2.00	0.00	
3700.00	6.00	50.89	3699.45	9.90	12.18	15.69	2.00	2.00	0.00	
3800.00	8.00	50.89	3798.70	17.59	21.63	27.88	2.00	2.00	0.00	
3900.00	10.00	50.89	3897.47	27.45	33.77	43.52	2.00	2.00	0.00	
4000.00	12.00	50.89	3995.62	39.49	48.58	62.60	2.00	2.00	0.00	
4100.00	14.00	50.89	4093.06	53.68	66.03	85.10	2.00	2.00	0.00	
4200.00	16.00	50.89	4189.64	70.00	86.12	110.98	2.00	2.00	0.00	
4300.00	18.00	50.89	4285.27	88.44	108.80	140.21	2.00	2.00	0.00	
4352.10	19.04	50.89	4334.67	98.88	121.65	156.76	2.00	2.00	0.00	End of Build @ 19° Inclin
4400.00	19.04	50.89	4379.95	108.74	133.77	172.39	0.00	0.00	0.00	
4500.00	19.04	50.89	4474.48	129.32	159.09	205.02	0.00	0.00	0.00	
4600.00	19.04	50.89	4569.00	149.89	184.41	237.64	0.00	0.00	0.00	
4700.00	19.04	50.89	4663.53	170.47	209.72	270.27	0.00	0.00	0.00	
4800.00	19.04	50.89	4758.06	191.05	235.04	302.90	0.00	0.00	0.00	
4900.00	19.04	50.89	4852.59	211.63	260.36	335.52	0.00	0.00	0.00	
5000.00	19.04	50.89	4947.12	232.21	285.68	368.15	0.00	0.00	0.00	
5100.00	19.04	50.89	5041.64	252.79	310.99	400.77	0.00	0.00	0.00	
5200.00	19.04	50.89	5136.17	273.37	336.31	433.40	0.00	0.00	0.00	
5300.00	19.04	50.89	5230.70	293.95	361.63	466.03	0.00	0.00	0.00	
5400.00	19.04	50.89	5325.23	314.53	386.94	498.65	0.00	0.00	0.00	
5500.00	19.04	50.89	5419.76	335.11	412.26	531.28	0.00	0.00	0.00	
5600.00	19.04	50.89	5514.28	355.69	437.58	563.90	0.00	0.00	0.00	
5700.00	19.04	50.89	5608.81	376.27	462.90	596.53	0.00	0.00	0.00	
5800.00	19.04	50.89	5703.34	396.84	488.21	629.16	0.00	0.00	0.00	
5900.00	19.04	50.89	5797.87	417.42	513.53	661.78	0.00	0.00	0.00	
6000.00	19.04	50.89	5892.40	438.00	538.85	694.41	0.00	0.00	0.00	
6100.00	19.04	50.89	5986.92	458.58	564.17	727.04	0.00	0.00	0.00	
6200.00	19.04	50.89	6081.45	479.16	589.48	759.66	0.00	0.00	0.00	
6300.00	19.04	50.89	6175.98	499.74	614.80	792.29	0.00	0.00	0.00	
6400.00	19.04	50.89	6270.51	520.32	640.12	824.91	0.00	0.00	0.00	
6500.00	19.04	50.89	6365.03	540.90	665.44	857.54	0.00	0.00	0.00	
6600.00	19.04	50.89	6459.56	561.48	690.75	890.17	0.00	0.00	0.00	

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	PURE Resources	**Date:**	2/22/2005	**Time:** 11:03:35	**Page:** 3
Field:	Esperanza	**Co-ordinate(NE) Reference:**	Well: Esperanza 13 #2, Grid North		
Site:	Esperanza 13 #2	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Esperanza 13 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,50.89Azi)		
Wellpath:	Orginal Hole	**Plan:**	Plan #1 022105		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6700.00	19.04	50.89	6554.09	582.06	716.07	922.79	0.00	0.00	0.00	
6800.00	19.04	50.89	6648.62	602.64	741.39	955.42	0.00	0.00	0.00	
6900.00	19.04	50.89	6743.15	623.22	766.71	988.05	0.00	0.00	0.00	
7000.00	19.04	50.89	6837.67	643.79	792.02	1020.67	0.00	0.00	0.00	
7100.00	19.04	50.89	6932.20	664.37	817.34	1053.30	0.00	0.00	0.00	
7200.00	19.04	50.89	7026.73	684.95	842.66	1085.92	0.00	0.00	0.00	
7300.00	19.04	50.89	7121.26	705.53	867.97	1118.55	0.00	0.00	0.00	
7400.00	19.04	50.89	7215.79	726.11	893.29	1151.18	0.00	0.00	0.00	
7500.00	19.04	50.89	7310.31	746.69	918.61	1183.80	0.00	0.00	0.00	
7600.00	19.04	50.89	7404.84	767.27	943.93	1216.43	0.00	0.00	0.00	
7700.00	19.04	50.89	7499.37	787.85	969.24	1249.06	0.00	0.00	0.00	
7800.00	19.04	50.89	7593.90	808.43	994.56	1281.68	0.00	0.00	0.00	
7900.00	19.04	50.89	7688.43	829.01	1019.88	1314.31	0.00	0.00	0.00	
8000.00	19.04	50.89	7782.95	849.59	1045.20	1346.93	0.00	0.00	0.00	
8100.00	19.04	50.89	7877.48	870.17	1070.51	1379.56	0.00	0.00	0.00	
8200.00	19.04	50.89	7972.01	890.75	1095.83	1412.19	0.00	0.00	0.00	
8300.00	19.04	50.89	8066.54	911.32	1121.15	1444.81	0.00	0.00	0.00	
8400.00	19.04	50.89	8161.07	931.90	1146.47	1477.44	0.00	0.00	0.00	
8500.00	19.04	50.89	8255.59	952.48	1171.78	1510.07	0.00	0.00	0.00	
8600.00	19.04	50.89	8350.12	973.06	1197.10	1542.69	0.00	0.00	0.00	
8700.00	19.04	50.89	8444.65	993.64	1222.42	1575.32	0.00	0.00	0.00	
8800.00	19.04	50.89	8539.18	1014.22	1247.73	1607.94	0.00	0.00	0.00	
8900.00	19.04	50.89	8633.71	1034.80	1273.05	1640.57	0.00	0.00	0.00	
9000.00	19.04	50.89	8728.23	1055.38	1298.37	1673.20	0.00	0.00	0.00	
9100.00	19.04	50.89	8822.76	1075.96	1323.69	1705.82	0.00	0.00	0.00	
9200.00	19.04	50.89	8917.29	1096.54	1349.00	1738.45	0.00	0.00	0.00	
9300.00	19.04	50.89	9011.82	1117.12	1374.32	1771.08	0.00	0.00	0.00	
9400.00	19.04	50.89	9106.34	1137.70	1399.64	1803.70	0.00	0.00	0.00	
9500.00	19.04	50.89	9200.87	1158.27	1424.96	1836.33	0.00	0.00	0.00	
9600.00	19.04	50.89	9295.40	1178.85	1450.27	1868.95	0.00	0.00	0.00	
9661.75	19.04	50.89	9353.77	1191.56	1465.91	1889.10	0.00	0.00	0.00	End of Hold/Begin Drop to
9700.00	18.47	50.89	9389.99	1199.32	1475.45	1901.40	1.50	-1.50	0.00	
9800.00	16.97	50.89	9485.24	1218.51	1499.07	1931.83	1.50	-1.50	0.00	
9900.00	15.47	50.89	9581.26	1236.13	1520.74	1959.76	1.50	-1.50	0.00	
10000.00	13.97	50.89	9677.98	1252.16	1540.45	1985.17	1.50	-1.50	0.00	
10100.00	12.47	50.89	9775.33	1266.58	1558.20	2008.03	1.50	-1.50	0.00	
10200.00	10.97	50.89	9873.24	1279.39	1573.95	2028.34	1.50	-1.50	0.00	
10300.00	9.47	50.89	9971.65	1290.58	1587.72	2046.08	1.50	-1.50	0.00	
10400.00	7.97	50.89	10070.49	1300.14	1599.48	2061.24	1.50	-1.50	0.00	
10500.00	6.47	50.89	10169.70	1308.06	1609.23	2073.80	1.50	-1.50	0.00	
10600.00	4.97	50.89	10269.20	1314.35	1616.96	2083.77	1.50	-1.50	0.00	
10700.00	3.47	50.89	10368.92	1318.99	1622.67	2091.12	1.50	-1.50	0.00	
10800.00	1.97	50.89	10468.81	1321.98	1626.35	2095.86	1.50	-1.50	0.00	
10900.00	0.47	50.89	10568.78	1323.32	1628.00	2097.99	1.50	-1.50	0.00	
10931.22	0.00	50.89	10600.00	1323.40	1628.10	2098.12	1.50	-1.50	0.00	Esperanza 13-2 Vertical 1
11000.00	0.00	50.89	10668.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11100.00	0.00	50.89	10768.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11200.00	0.00	50.89	10868.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11300.00	0.00	50.89	10968.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11400.00	0.00	50.89	11068.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11423.22	0.00	50.89	11092.00	1323.40	1628.10	2098.12	0.00	0.00	0.00	Top of Morrow Sand
11500.00	0.00	50.89	11168.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11600.00	0.00	50.89	11268.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	

PATHFINDER ENERGY SERVICES

PathFinder
Planning Report

Company:	PURE Resources	**Date:**	2/22/2005	**Time:** 11:03:35	**Page:** 4
Field:	Esperanza	**Co-ordinate(NE) Reference:**	Well: Esperanza 13 #2, Grid North		
Site:	Esperanza 13 #2	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	Esperanza 13 #2	**Section (VS) Reference:**	Well (0.00N,0.00E,50.89Azi)		
Wellpath:	Orginal Hole	**Plan:**	Plan #1 022105		

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
11700.00	0.00	50.89	11368.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11800.00	0.00	50.89	11468.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
11900.00	0.00	50.89	11568.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
12000.00	0.00	50.89	11668.78	1323.40	1628.10	2098.12	0.00	0.00	0.00	
12031.22	0.00	50.89	11700.00	1323.40	1628.10	2098.12	0.00	0.00	0.00	Esperanza 13 #2 PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<— Latitude —> Deg	Min	Sec		<— Longitude —> Deg	Min	Sec	
Carlsbad 13 Com #1 -Circle (Radius: 210)			0.00	1050.40	239.40	505464.71	527674.58	32	23	22.579	N	104	14	37.240	W
Carlsbad State #1 -Circle (Radius: 100)			0.00	66.50	308.10	504480.89	527743.27	32	23	12.842	N	104	14	36.449	W
Esperanza 13-2 Vertical 10600' -Plan hit target			10600.00	1323.40	1628.10	505737.68	529063.15	32	23	25.268	N	104	14	21.043	W
Top of Morrow Sand -Plan hit target			11092.00	1323.40	1628.10	505737.68	529063.15	32	23	25.268	N	104	14	21.043	W
Esperanza 13 #2 PBHL -Plan hit target			11700.00	1323.40	1628.10	505737.68	529063.15	32	23	25.268	N	104	14	21.043	W

Annotation

MD ft	TVD ft	
3400.00	3400.00	KOP w/2° Build Rates
4352.10	4334.67	End of Build @ 19° Inclination
9661.75	9353.77	End of Hold/Begin Drop to Vertical

PURE Resources

Esperanza 13-2
Section 13, T22-S, R26-E
Eddy County, New Mexico

COMPANY DETAILS

PURE Resources
500 W. Illinois Avenue
Midland, TX 79701

Calculation Method: Minimum Curvature
Error System: Systematic Ellipse
Scan Method: Closest Approach 3D
Error Surface: Elliptical Conic
Warning Method: Error Ratio

PATHFINDER ENERGY SERVICES

SECTION DETAILS

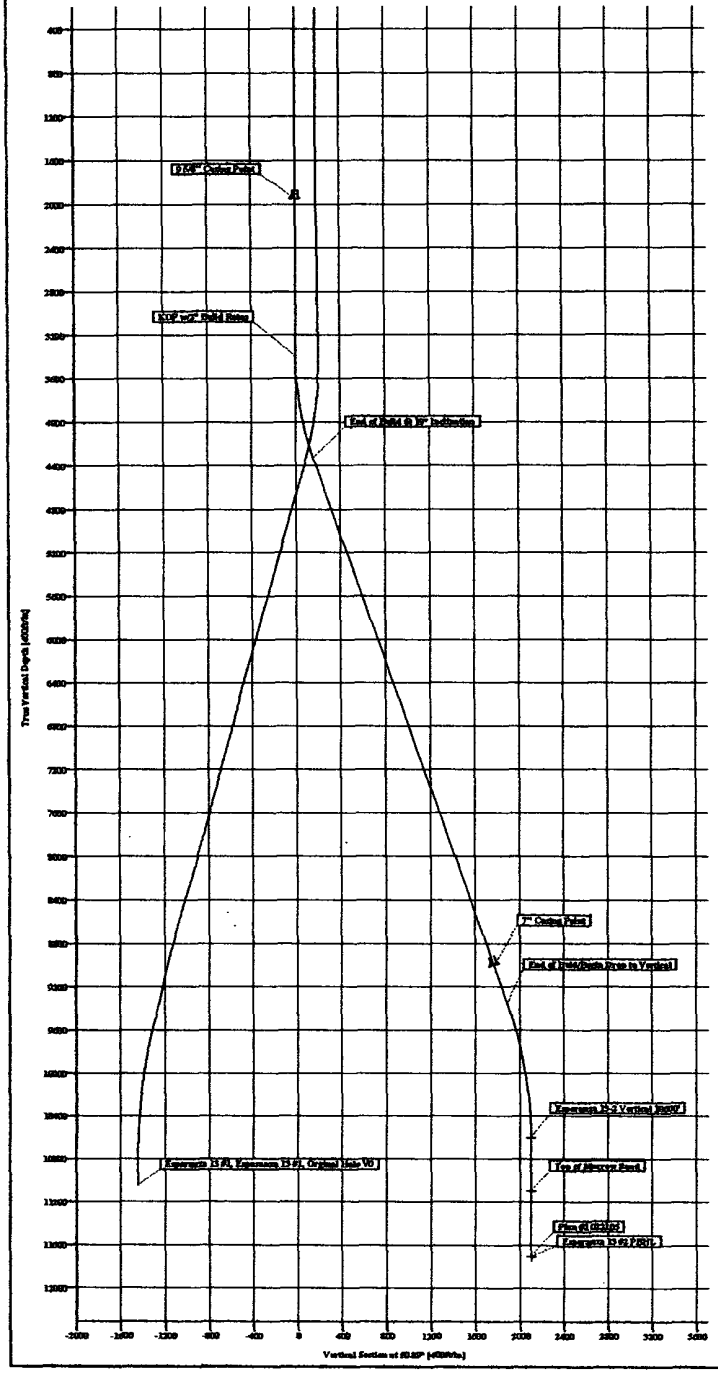
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	50.89	0.00	0.00	0.00	0.00	0.00	0.00	
2	3400.00	0.00	50.89	3400.00	0.00	0.00	0.00	50.89	0.00	
3	4352.10	19.04	50.89	4334.67	98.88	121.65	2.00	50.89	156.76	
4	9661.75	19.04	50.89	9353.77	1191.56	1465.91	0.00	0.00	1889.10	
5	10931.22	0.00	50.89	10600.00	1323.40	1628.10	1.50	180.00	2098.12	Esperanza 13-2 Vertical 10600'
6	11423.22	0.00	50.89	11092.00	1323.40	1628.10	0.00	0.00	2098.12	Top of Morrow Sand
7	12031.22	0.00	50.89	11700.00	1323.40	1628.10	0.00	0.00	2098.12	Esperanza 13 #2 PBHL

FIELD DETAILS

Esperanza
Eddy County, New Mexico

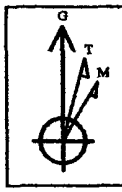
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: igrf2005

System Datum: Mean Sea Level
Local North: Grid North



WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Esperanza 13 #2	0.00	0.00	504414.40	527435.20	32°23'12.895N	104°22'42.349W	N/A



Azimuths to Grid North
True North: 0.02°
Magnetic North: 8.72°

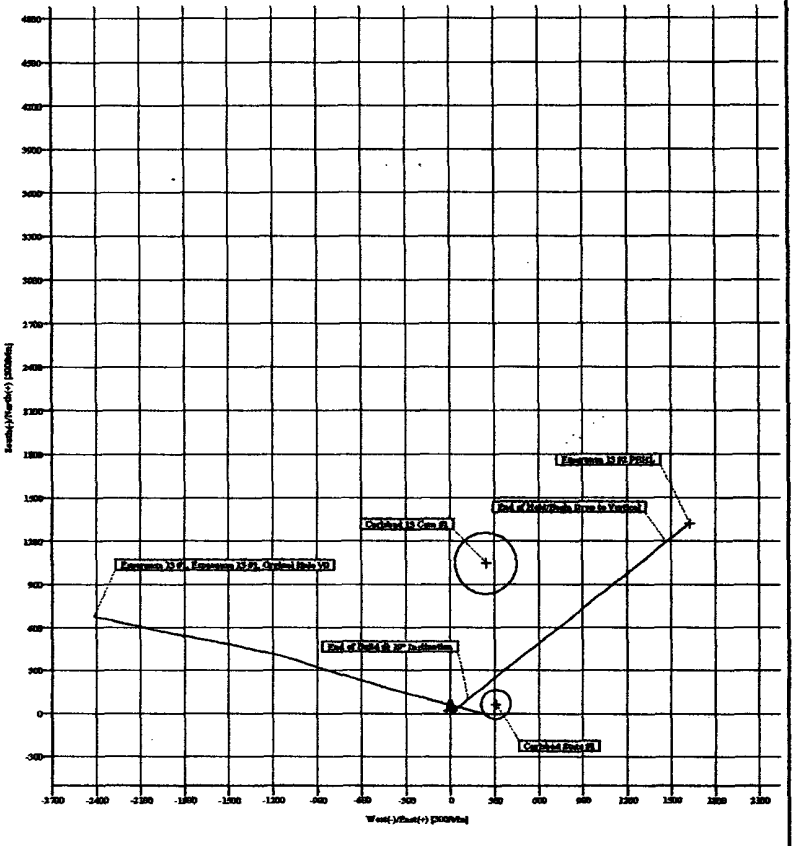
Magnetic Field
Strength: 49288nT
Dip Angle: 60.34°
Date: 2/21/2005
Model: igrf2005

SITE DETAILS

Esperanza 13 #2

Site Centre Northing: 504414.40
Easting: 527435.20

Water Depth: 0.00
Positional Uncertainty: 0.00
Convergence: -0.02



Pure Resources, L. P.
Esperanza "13" Well No. 2
621' FSL & 2,287' FEL
UL O, Sec. 13, T-22-S, R-26-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 it's 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.

PURE RESOURCES
A Unocal Company

CONTINGENCY PLAN
DRILLING OPERATIONS

ESPERANZA 13 #2
SECTION 13, TRACT T22S, RANGE 26E
CARLSBAD MORROW SOUTH FIELD
EDDY COUNTY, NEW MEXICO
2/17/05

CONTINGENCY PLAN

INDEX

SCOPE & OBJECTIVE

SCOPE

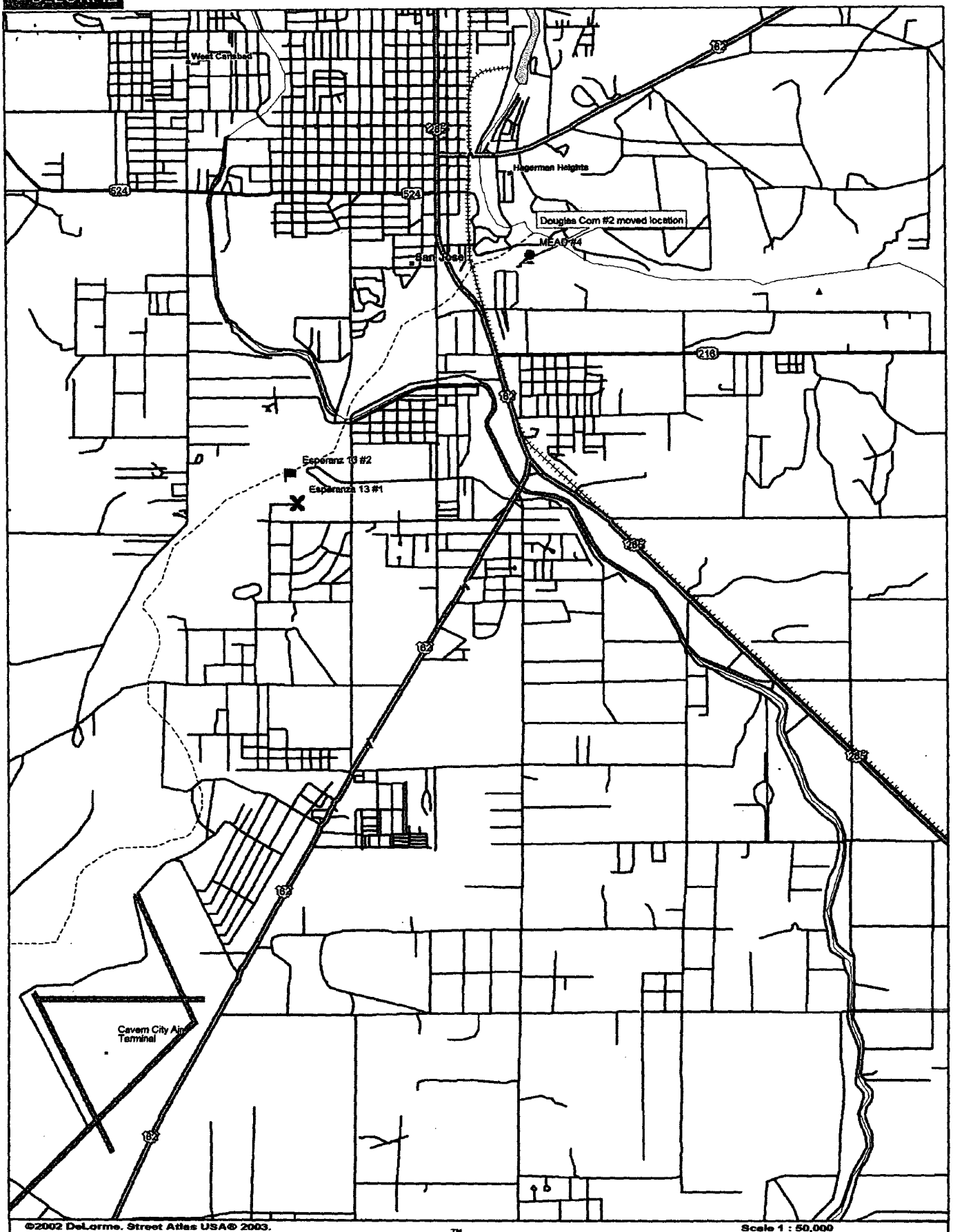
This contingency plan establishes guidelines for the public, all company employees, and contract employees whose work activities may involve exposure to Hydrogen Sulfide gas (H2S).

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.

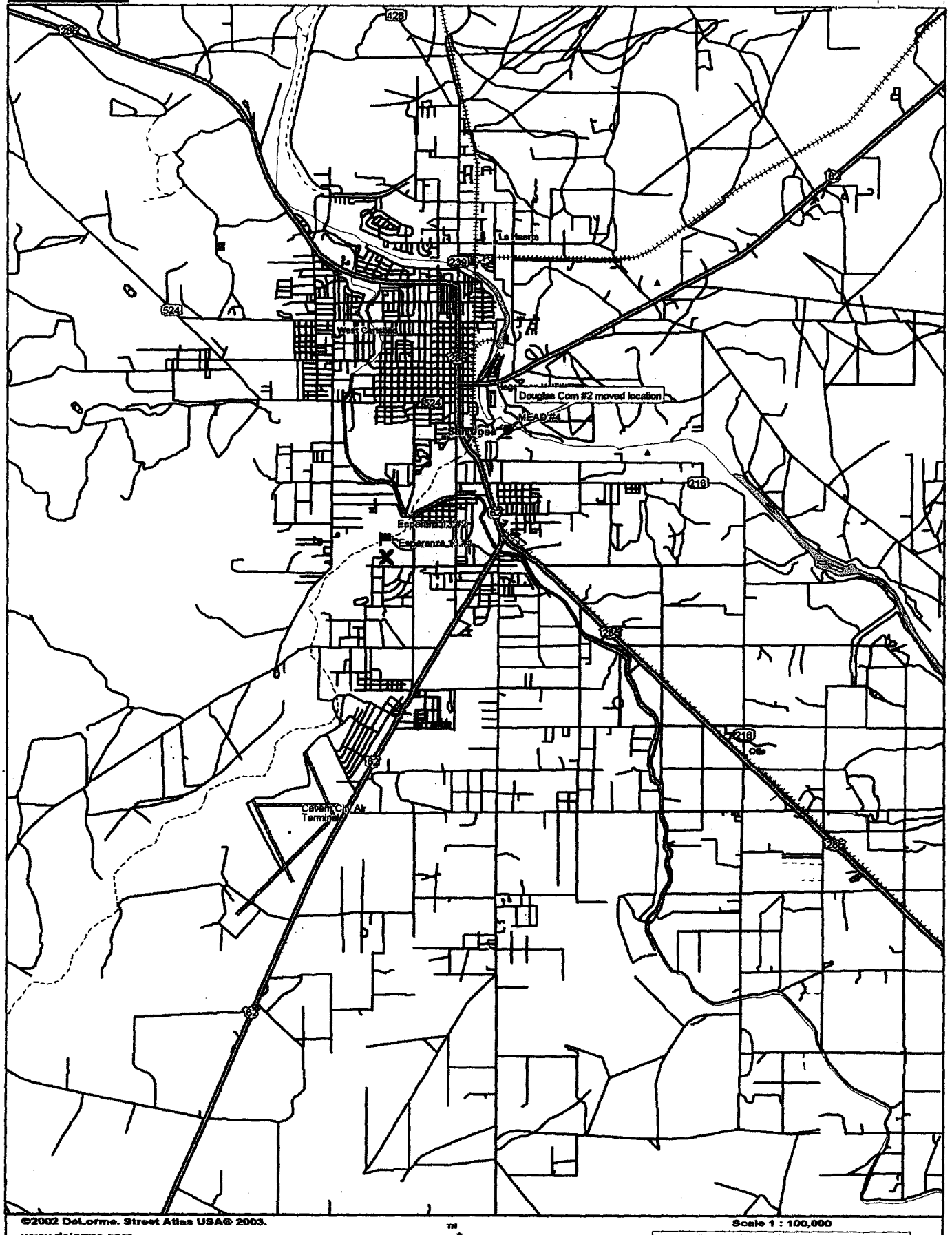
DIRECTIONS TO LOCATION

From Carlsbad, NM at the intersection of Rose and Boyd Street (Approximately 2 miles South and 0.5 miles West of Carlsbad). Go West 0.4 miles on calich road (West side of Boyd Street). Turn right go 0.2 miles to the 13 #1 location. This location is on the west side of the pad.



Scale 1 : 50,000

1" = 4170 ft



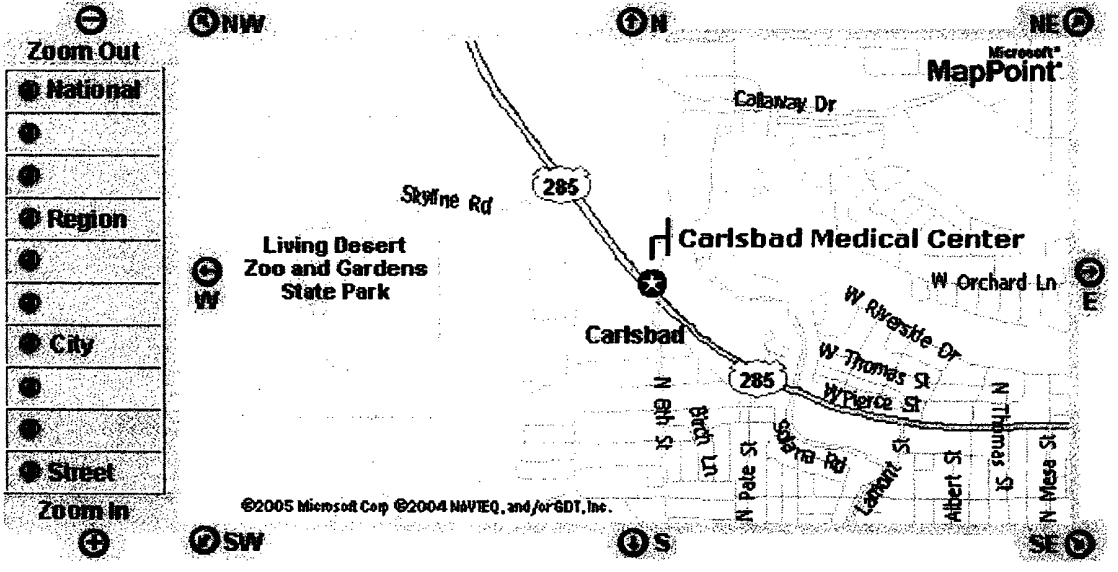
MSN Yellow Pages with verizon SUPERPAGES.com

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:
Health & Wellness Programs, Hospitals, Physicians & Surgeons, Rehabilitation Services, Surgical Centers

Map Size: Small Medium Large Print-Friendly Version



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

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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 feet
ROE @ 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.

EMERGENCY NOTIFICATION / EVACUATION PLAN

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.

EMERGENCY NOTIFICATION / EVACUATION PLAN

PURE RESOURCES EMERGENCY COMMUNICATION LIST

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

	Name	Title	Office Number	Home Number	Cell Phone	Pager
1.	Ray Matthew	Engineer	432-498-8672	432-697-0201	432-557-0623	
2.	Jerry Orndorff	Superintendent	432-498-8664	432-550-5407	432-631-4295	432-620-2898
3.	Jim Harrison	Manager	432-620-5661	432-699-4476	432-553-7414	
4.	Les Sinclair	Engineer	432-620-5603	432-685-3254	432-664-7650	
5.	Jay Waldrop	HES	432-498-2654	432-523-9778	432-556-3547	
6.	Steve Munsell	Engineer	432-620-5671	432-550-7437	432-5572674	
7.						

EMERGENCY NOTIFICATION / EVACUATION PLAN

MIDLAND WORKOVER/CONCENTRIC DEPARTMENT

Home/Cellular/Pager Numbers

NAME	HOME	CELL	PAGER
Donny Leek	432-399-4489	432-634-4862 or 634-4823	
		CONTRACT DRILLING FOREMEN	
Simon Barrera	325-728-9024	325-242-1369	
Doug Bulman	432-520-5256	432-664-0009	
Larry Elvick	432-336-2337	432-631-9971	580-515-0530
Danny Kiser	806-788-0960	806-632-0759	
David Law		832-752-7259	
Jerry Morgan	432-943-2860	432-661-5061	
Mike Pellessier		580-513-4858	
Kenneth Poole		432-634-9431	432-499-4947
Roy Reeser	505-396-7601	505-631-9417	
Tony Vickery	432-367-6130	432-634-6077	

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Medical Support

Agency	Location	Telephone Number
AXIOM Medical	Houston	281-419-7063
Carlsbad Medical Center	Carlsbad	505-887-4100

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Public Support

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

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Supplemental Equipment

MUD COMPANY

Buckeye	432-682-7422	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 NOTIFICATION / EVACUATION PLAN

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.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

NOTE

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

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

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.

TRAINING PROCEDURES AND MATERIALS

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

TRAINING PROCEDURES AND MATERIALS

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.

TRAINING PROCEDURES AND MATERIALS

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.

TRAINING PROCEDURES AND MATERIALS

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 PROCEDURES AND MATERIALS

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.

TRAINING PROCEDURES AND MATERIALS

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.

TRAINING PROCEDURES AND MATERIALS

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.

TRAINING PROCEDURES AND MATERIALS

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.

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.

WELL LOCATION LAYOUT AND EQUIPMENT

BLOWOUT PREVENTION EQUIPMENT

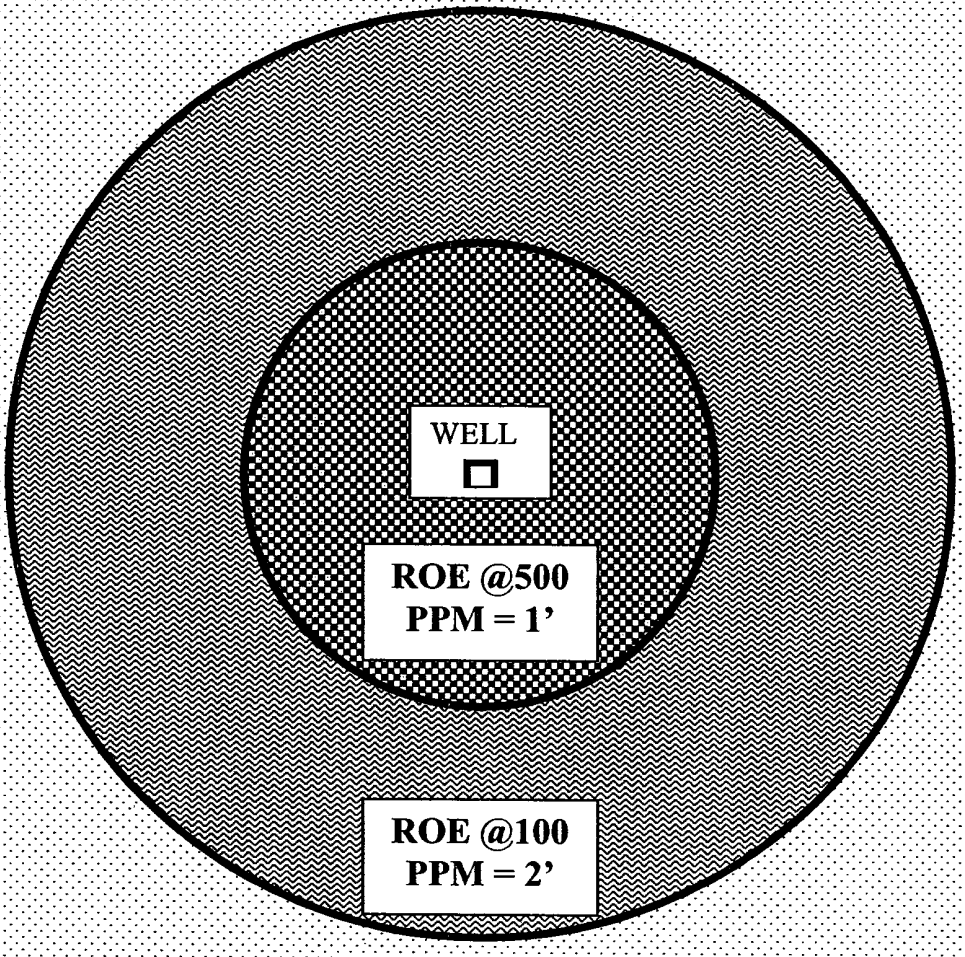
1. A kill line of ample strength and length will be laid to safe point to allow pumping into the well in an emergency situation.
2. The closing unit should be located a safe distance from the well bore and positioned for maximum utilization based on the prevailing wind direction.
3. BOP equipment will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

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.

ESPERANZA 13 #2



SAFE ZONE (UPWIND)

PURE RESOURCES

EMERGENCY RESPONSE PLAN

SOUTHEAST NEW MEXICO

September 2, 2003

		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		

CHAIN OF COMMAND

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
Lovington Office	Line 2	396-6259
Lovington Office	Line 3	396-6344
Lovington Office	Line 4	396-6814
Lovington Office	Fax	396-5950
Answering Service		396-9030

Eunice Office		394-0061
Eunice Office	Fax	394-9061

Eunice Combination	**7541**
Loving Combination	**1953**
Lovington Combination	**9156**

LOVINGTON PHONE NUMBERS

Lovington Police/Fire/Ambulance	911	Lovington City Manager	396-2884
Lovington Police Department	396-2811	Lovington Water Farm Pumper	704-9170
Lovington Fire Department	396-2359	NMOCD	393-6161
Lovington Ambulance	396-2359	State Police	392-5588
Lovington Sheriff Office	396-3611	Lovington Hospital	396-6611

AERO CARE - flight for life 800-627-2376

EUNICE PHONE NUMBERS

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 PHONE NUMBERS

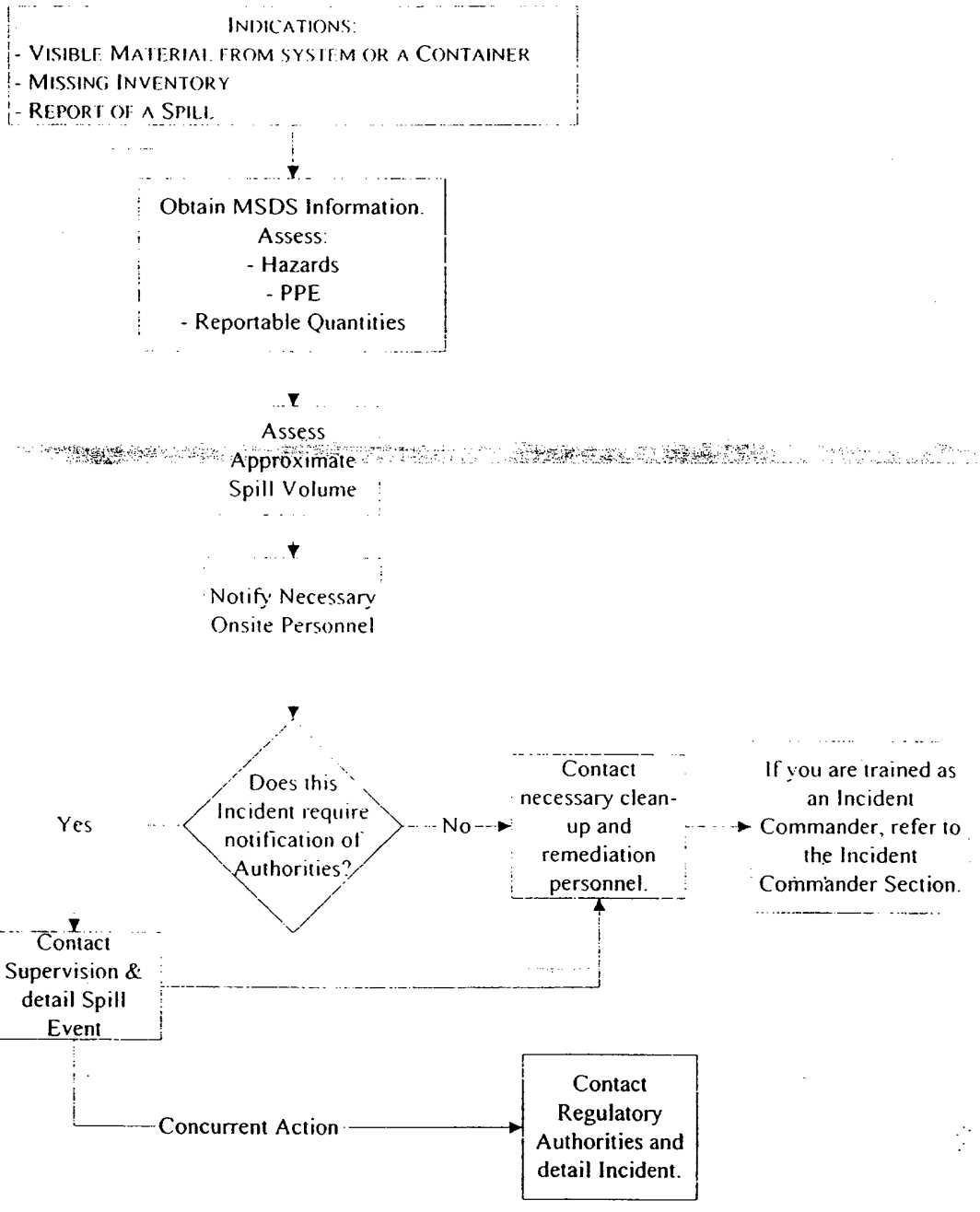
Jal Police/Fire/Ambulance	911		
Jal Police Department	395-2501		
Jal Fire Department	395-2221	NMOCD	393-6161
al Sheriff Office	395-2121	State Police	392-5588

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

Oil Spill or Leak
Emergency Procedure Flow Chart

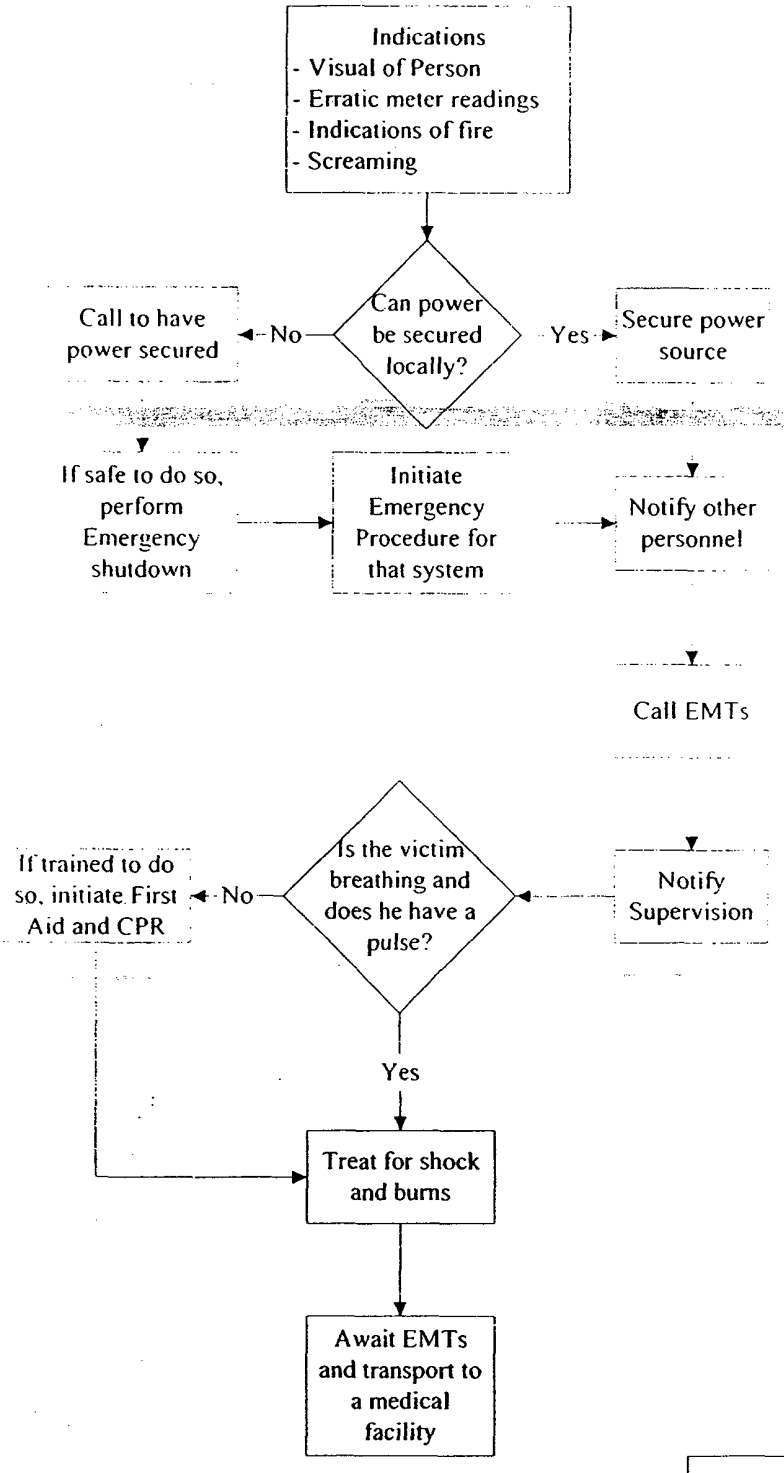


Legend

- 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

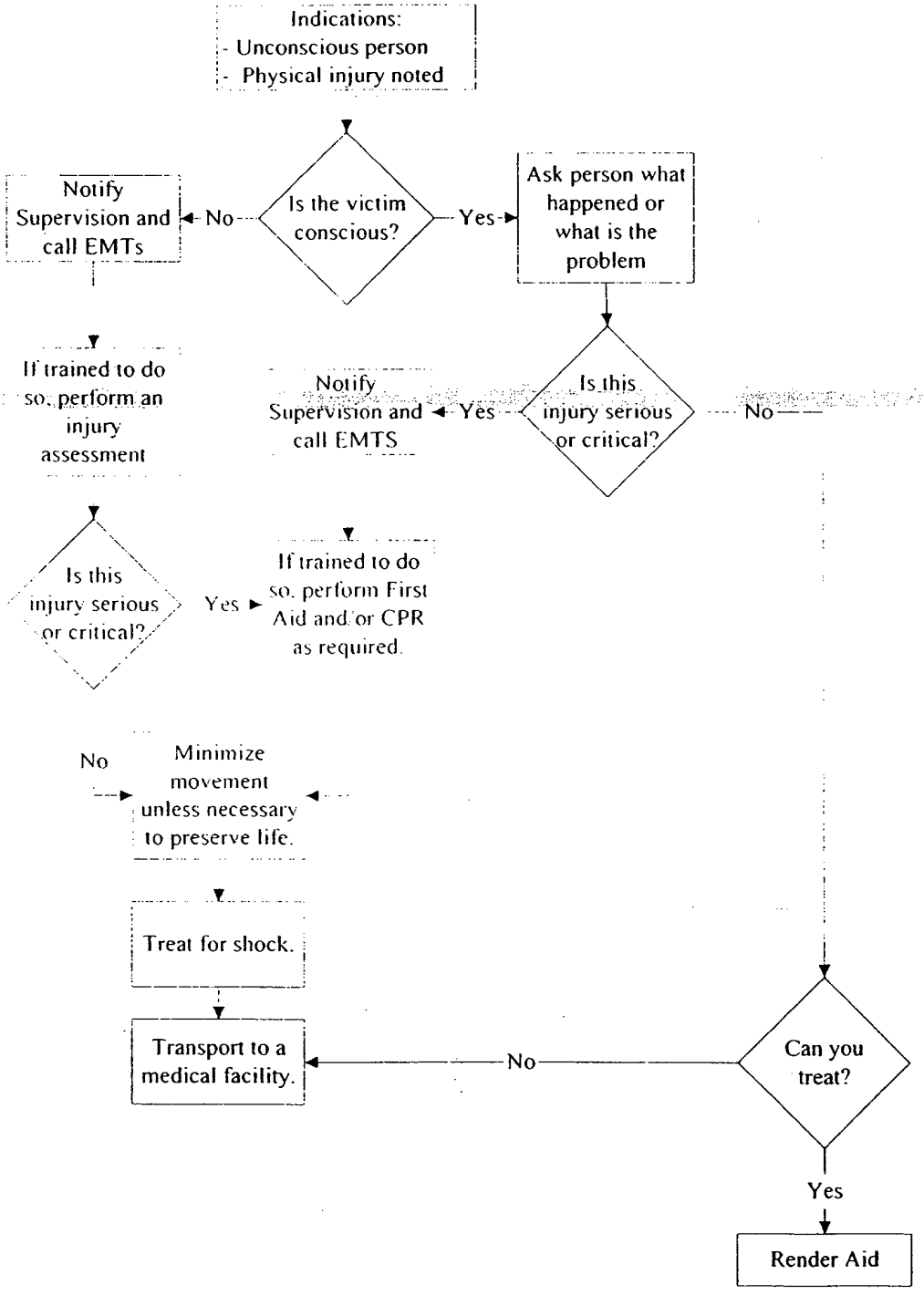


LEGEND

- PRIMARY ACTIONS
- PRIMARY ACTION PATH
- SECONDARY ACTION PATHS

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

INJURED PERSON
EMERGENCY PROCEDURE FLOW CHART

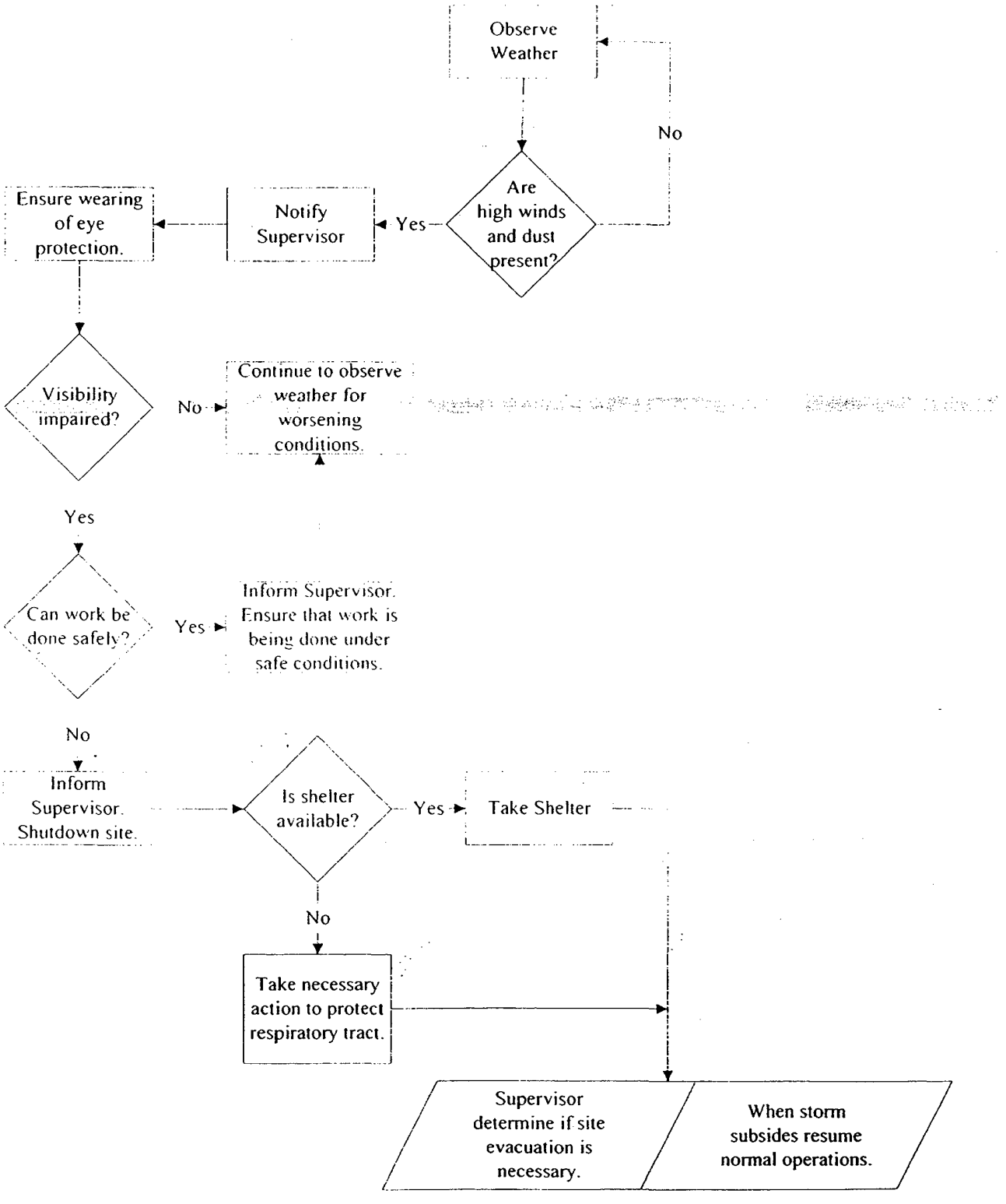


LEGEND

- PRIMARY ACTIONS
- PRIMARY ACTION PATH
- SECONDARY ACTION PATHS

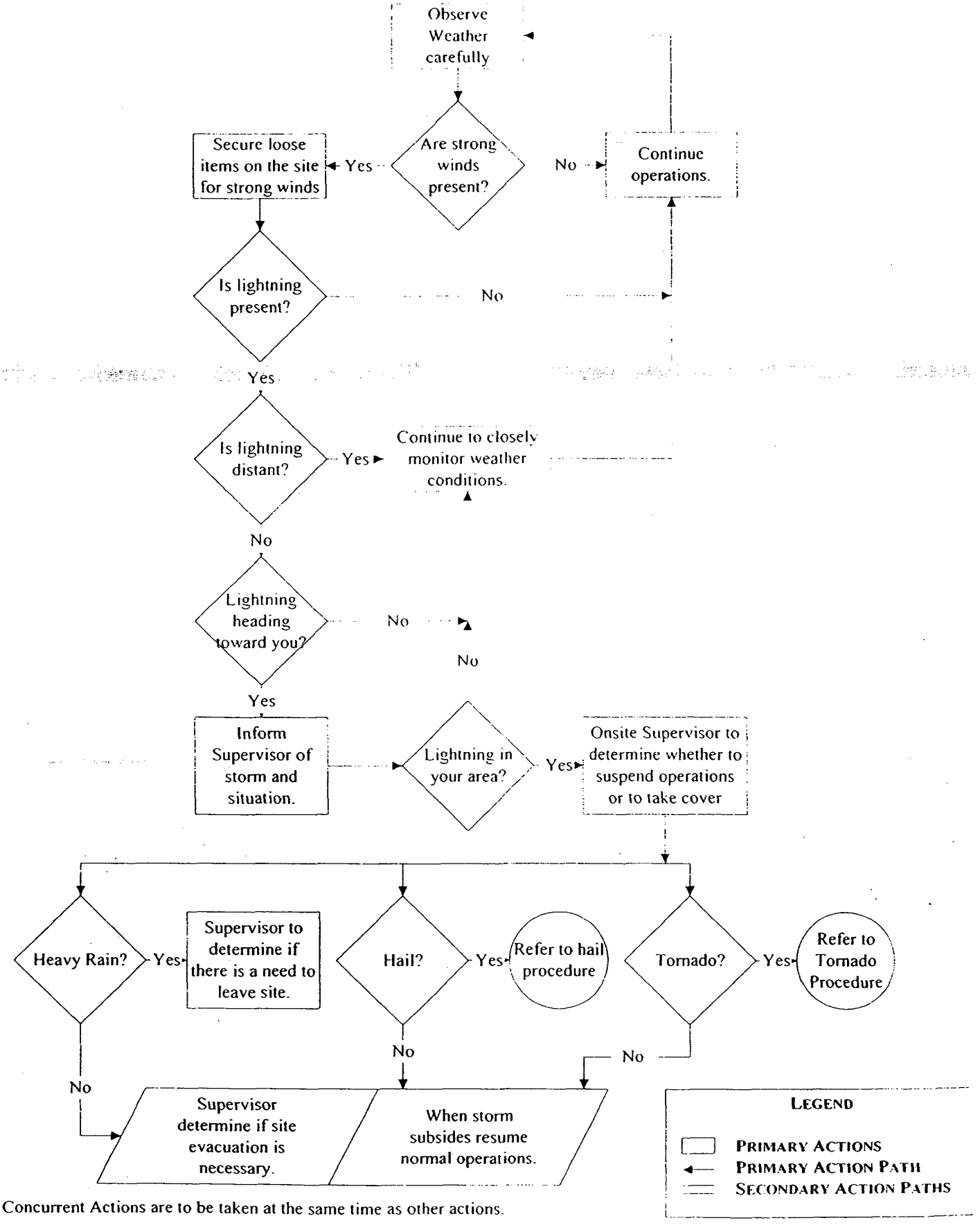
* Concurrent Actions are to be taken at the same time as other actions.

DUST STORMS
EMERGENCY PROCEDURE FLOW CHART



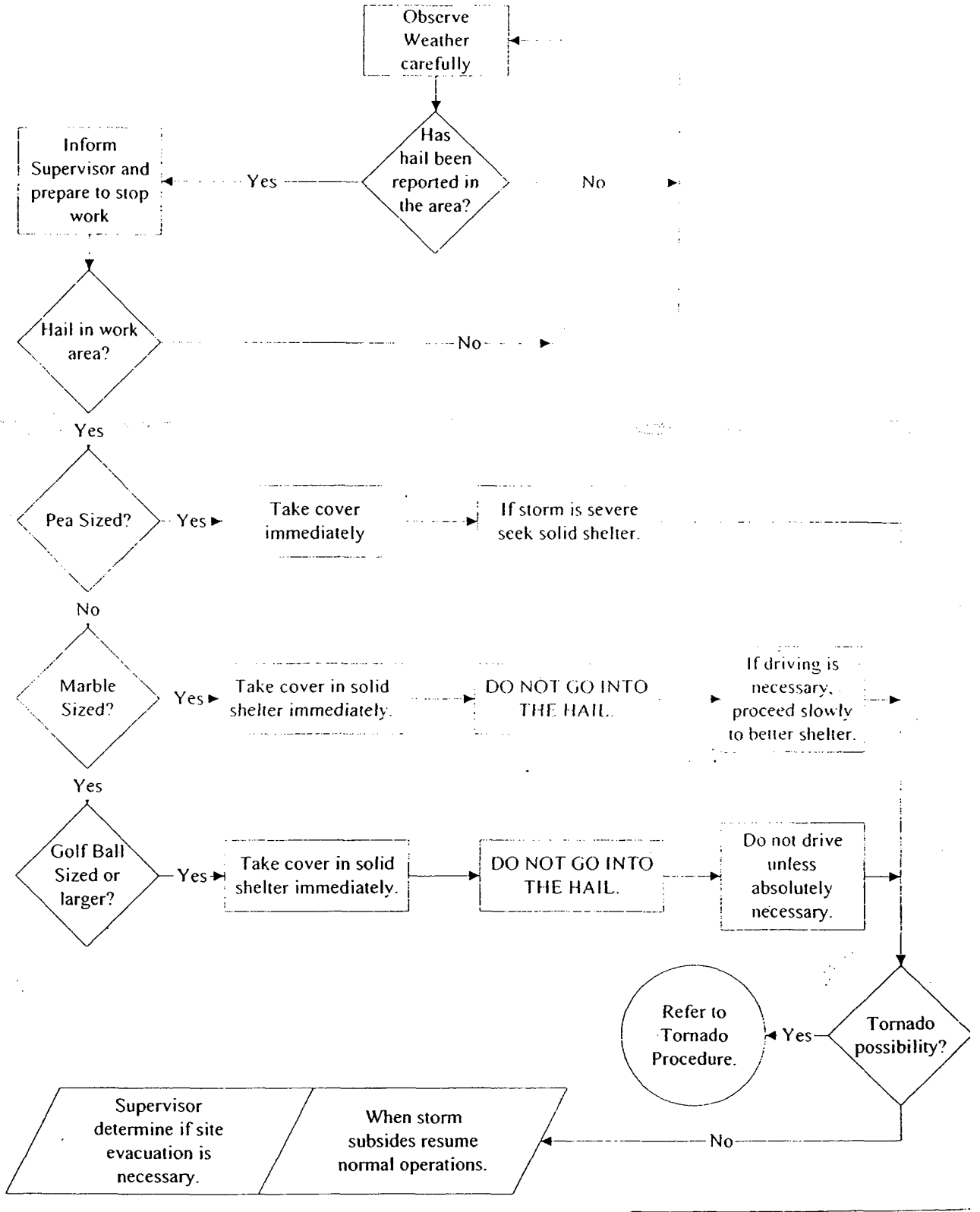
* Concurrent Actions are to be taken at the same time as other actions.

THUNDERSTORMS
EMERGENCY PROCEDURE FLOW CHART



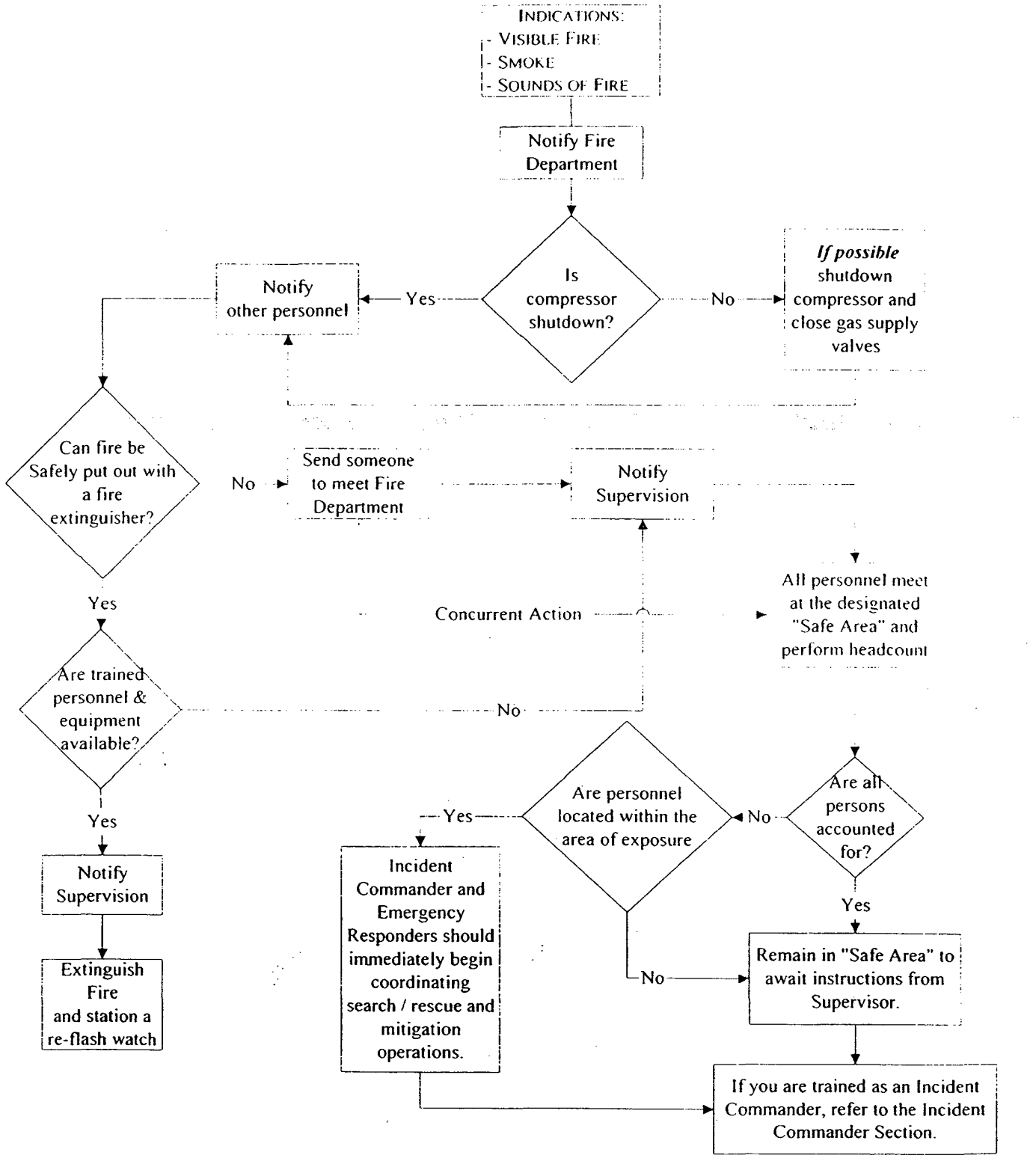
* Concurrent Actions are to be taken at the same time as other actions.

HAIL
EMERGENCY PROCEDURE FLOW CHART



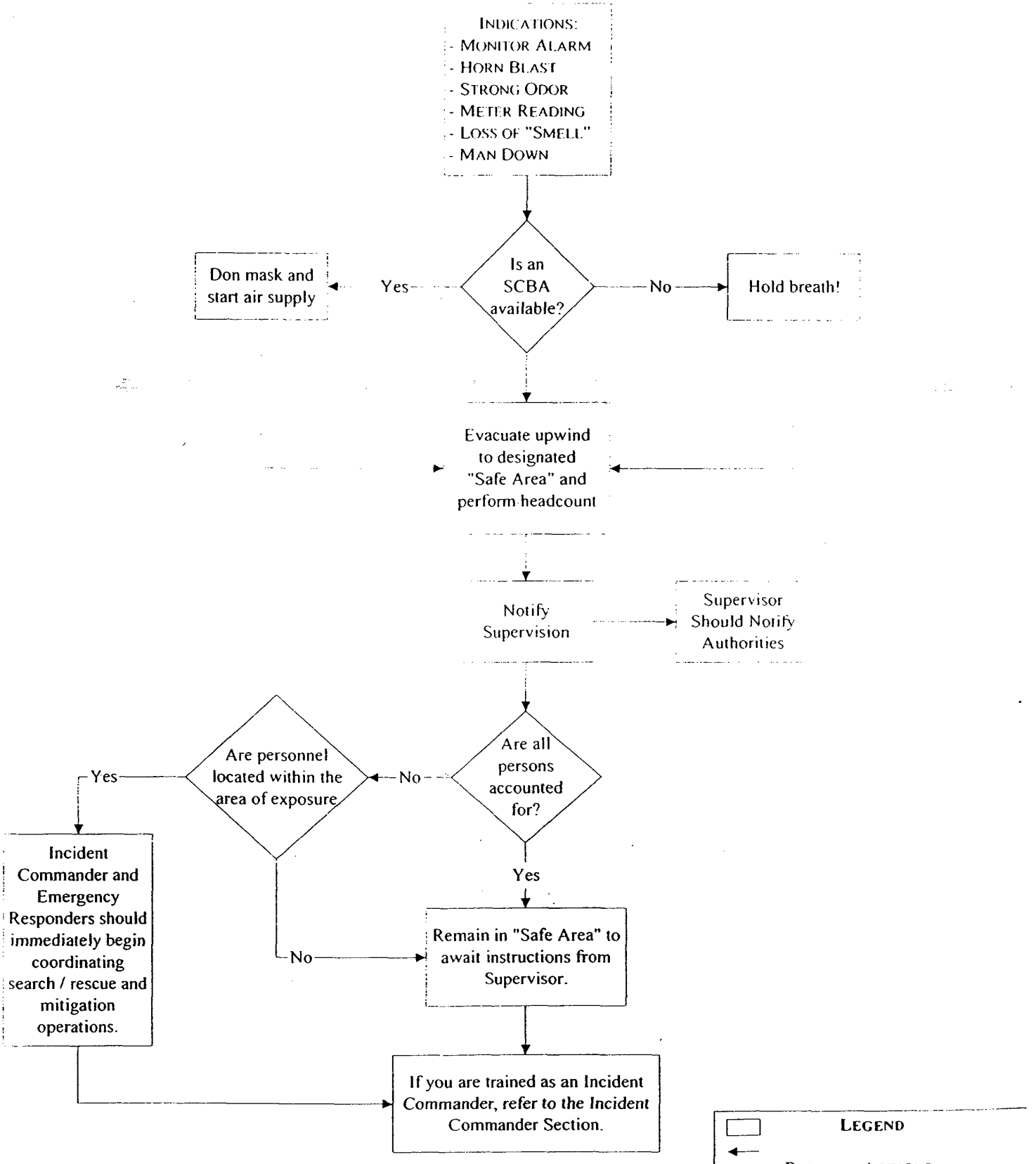
* Concurrent Actions are to be taken at the same time as other actions.

COMPRESSOR GAS LEAK / FIRE
EMERGENCY PROCEDURE FLOW CHART



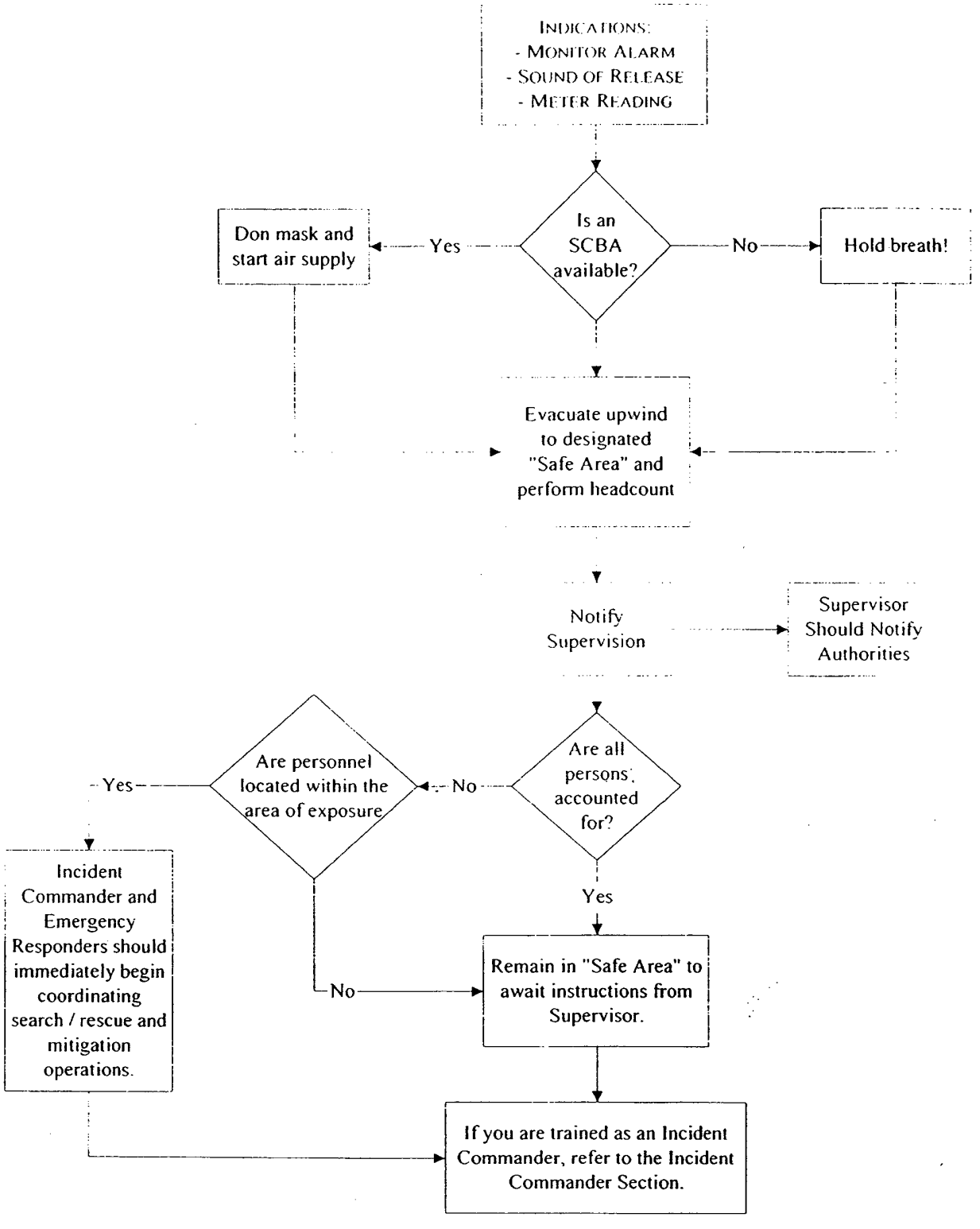
* Concurrent Actions are to be taken at the same time as other actions.

HYDROGEN SULFIDE RELEASE
EMERGENCY PROCEDURE FLOW CHART



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

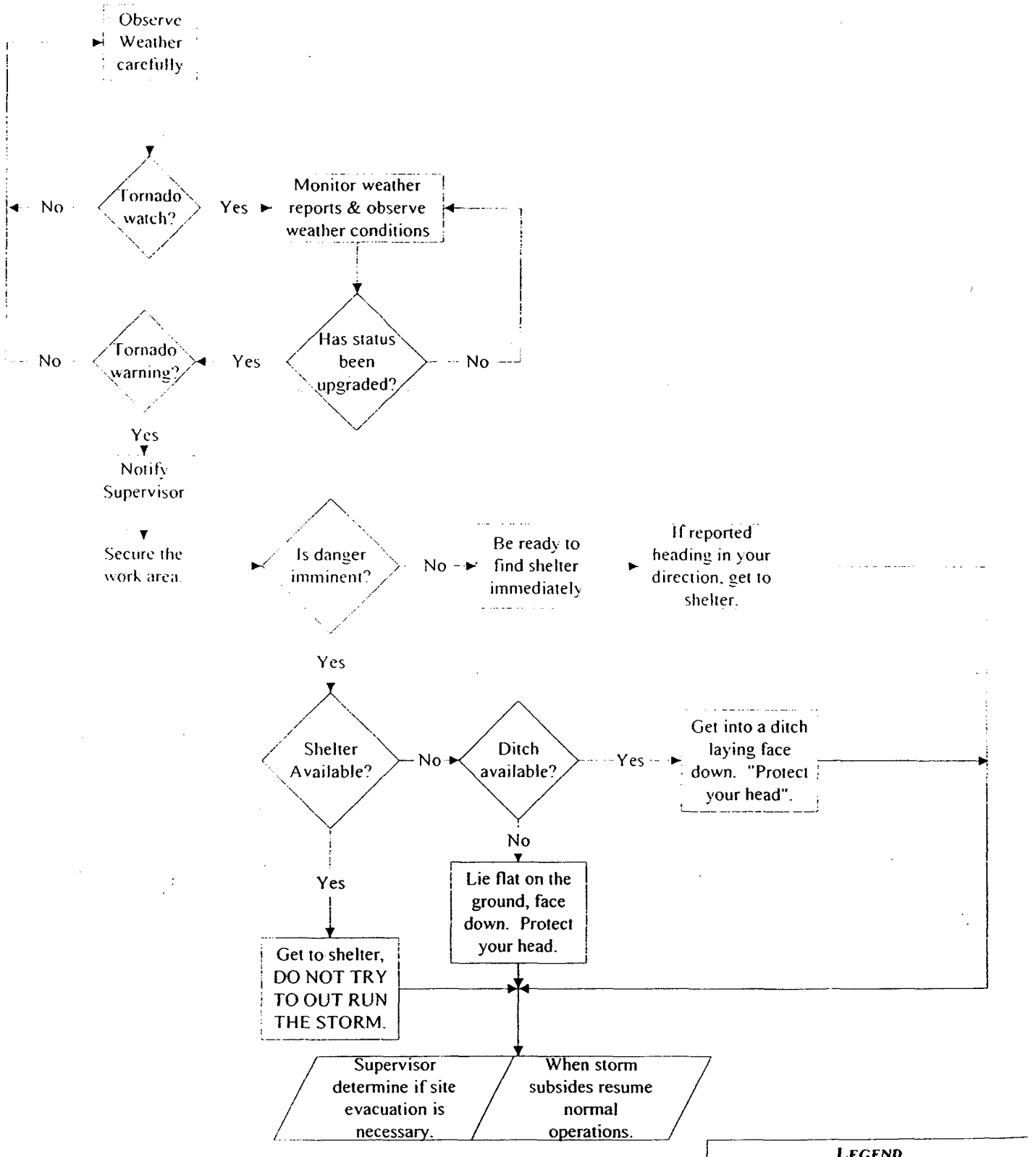
CO2 Release
Emergency Procedure Flow Chart



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

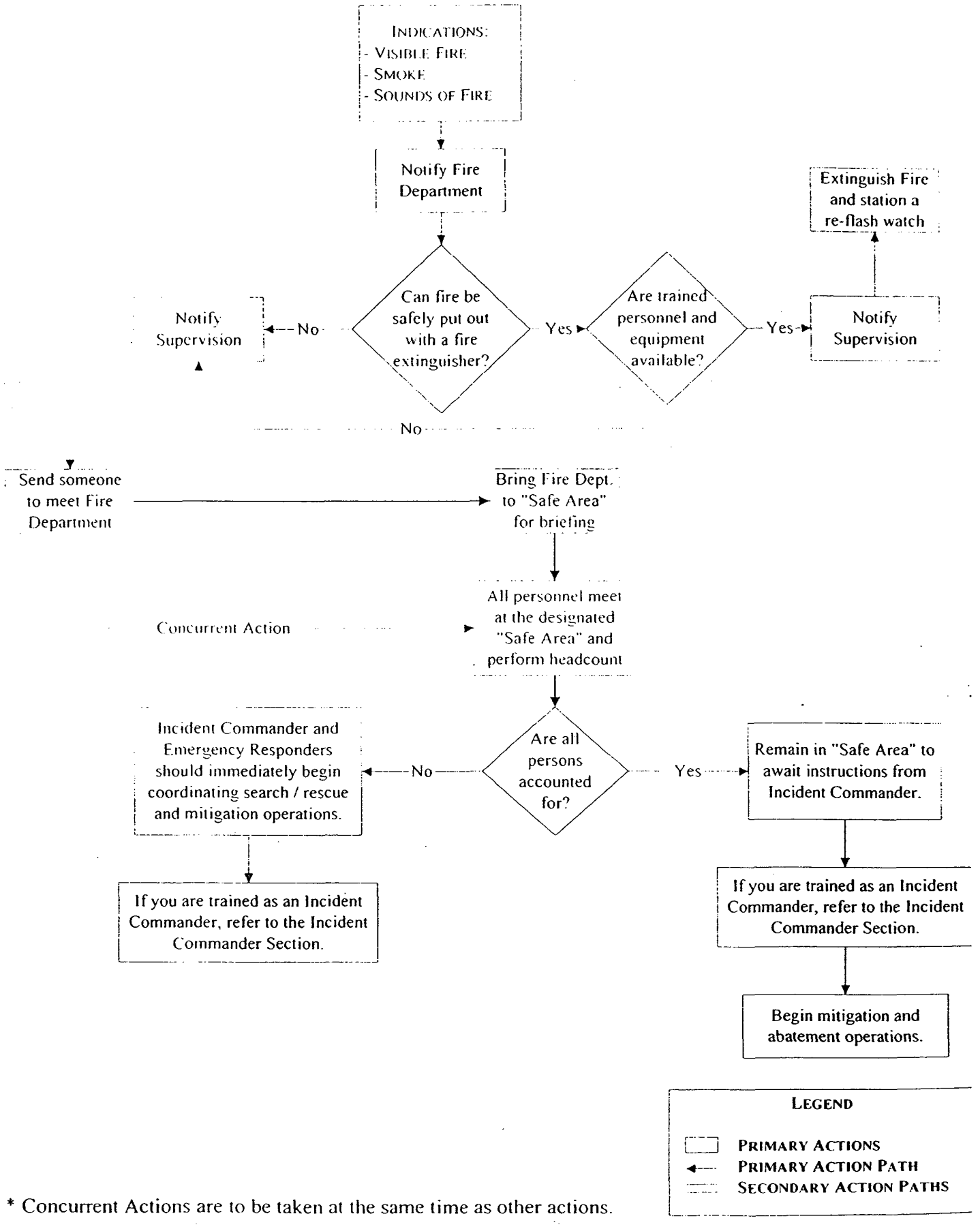
TORNADOS

EMERGENCY PROCEDURE FLOW CHART



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

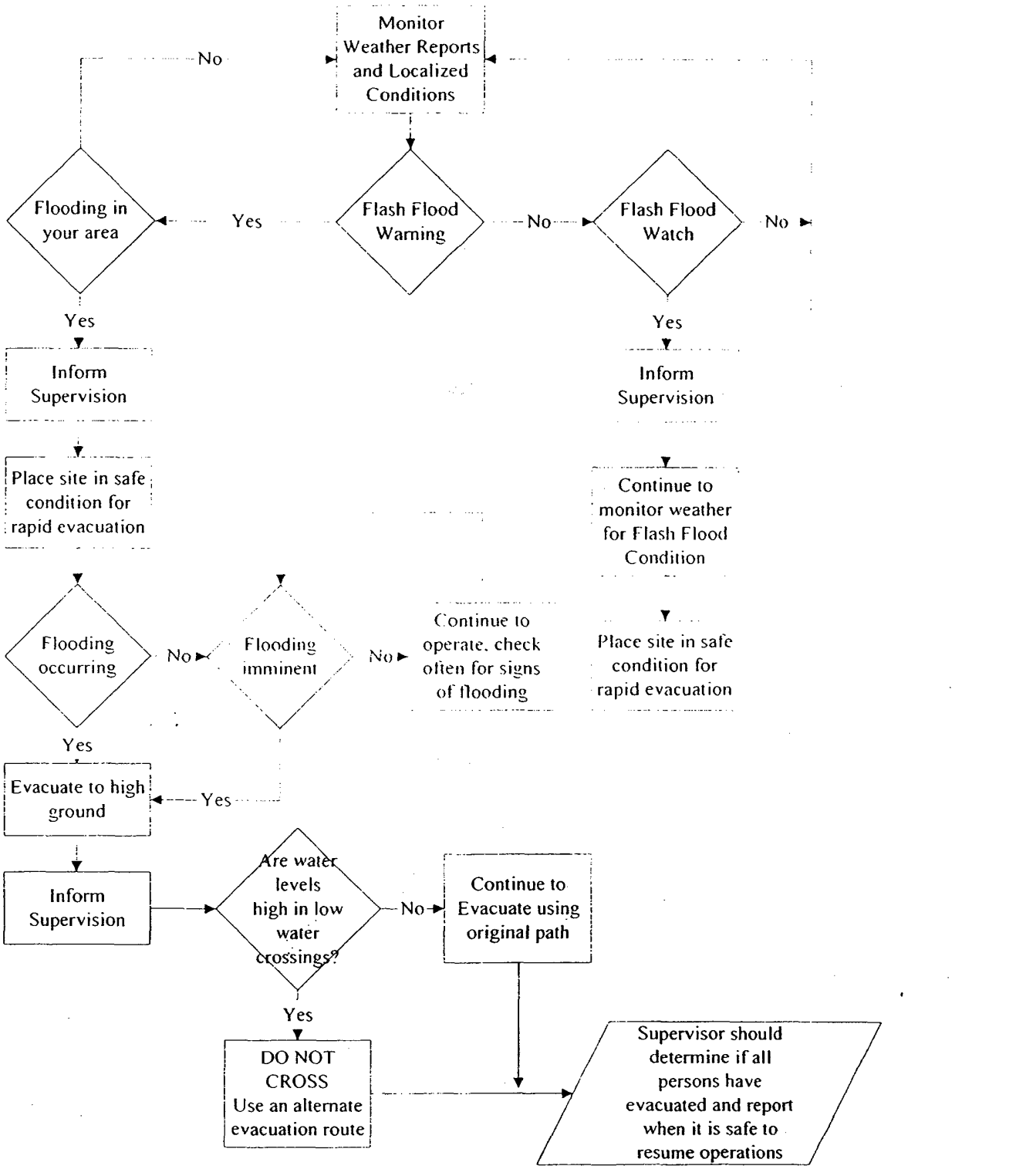
TANK BATTERY FIRE
EMERGENCY PROCEDURE FLOW CHART



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

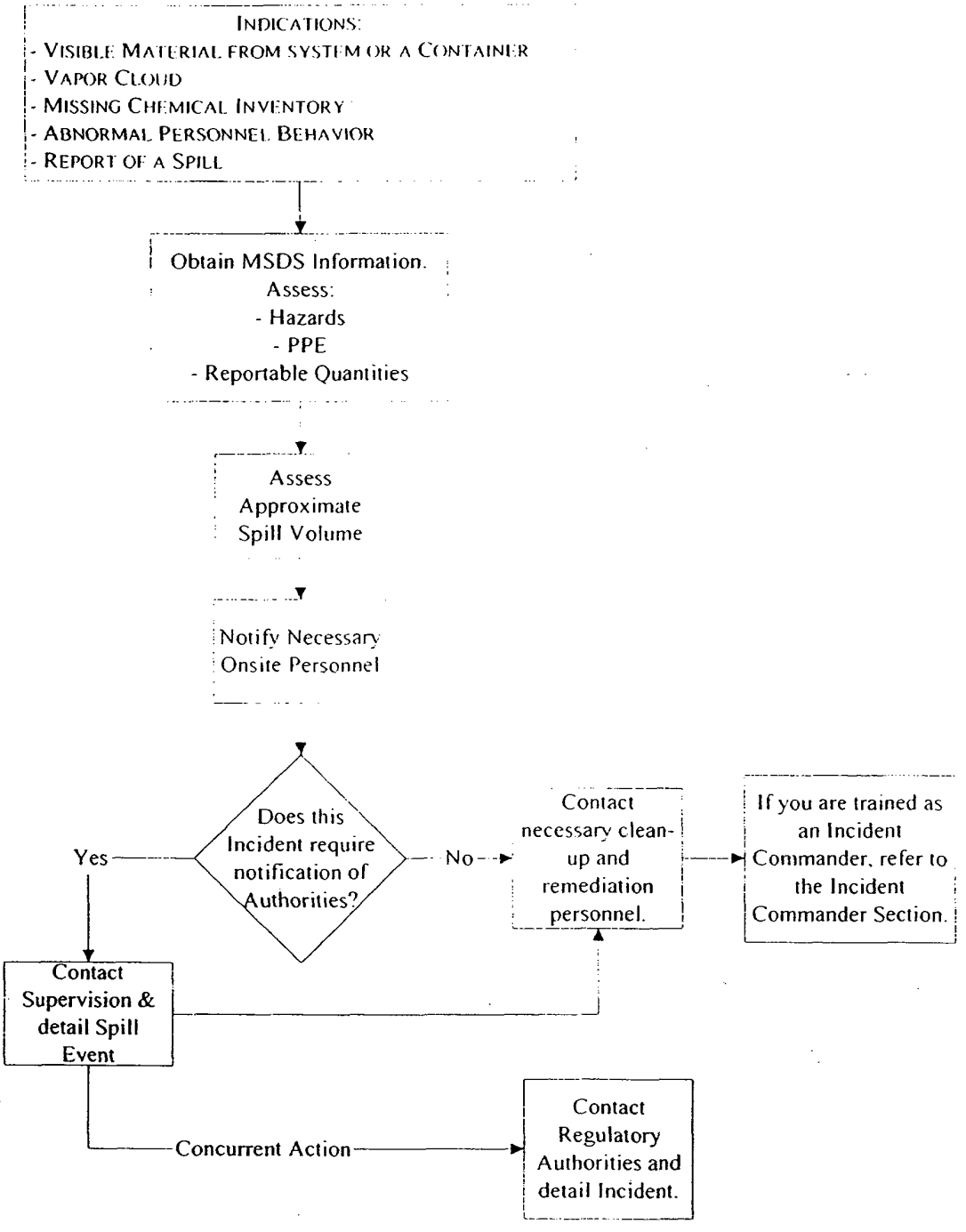
FLOODING

EMERGENCY PROCEDURE FLOW CHART



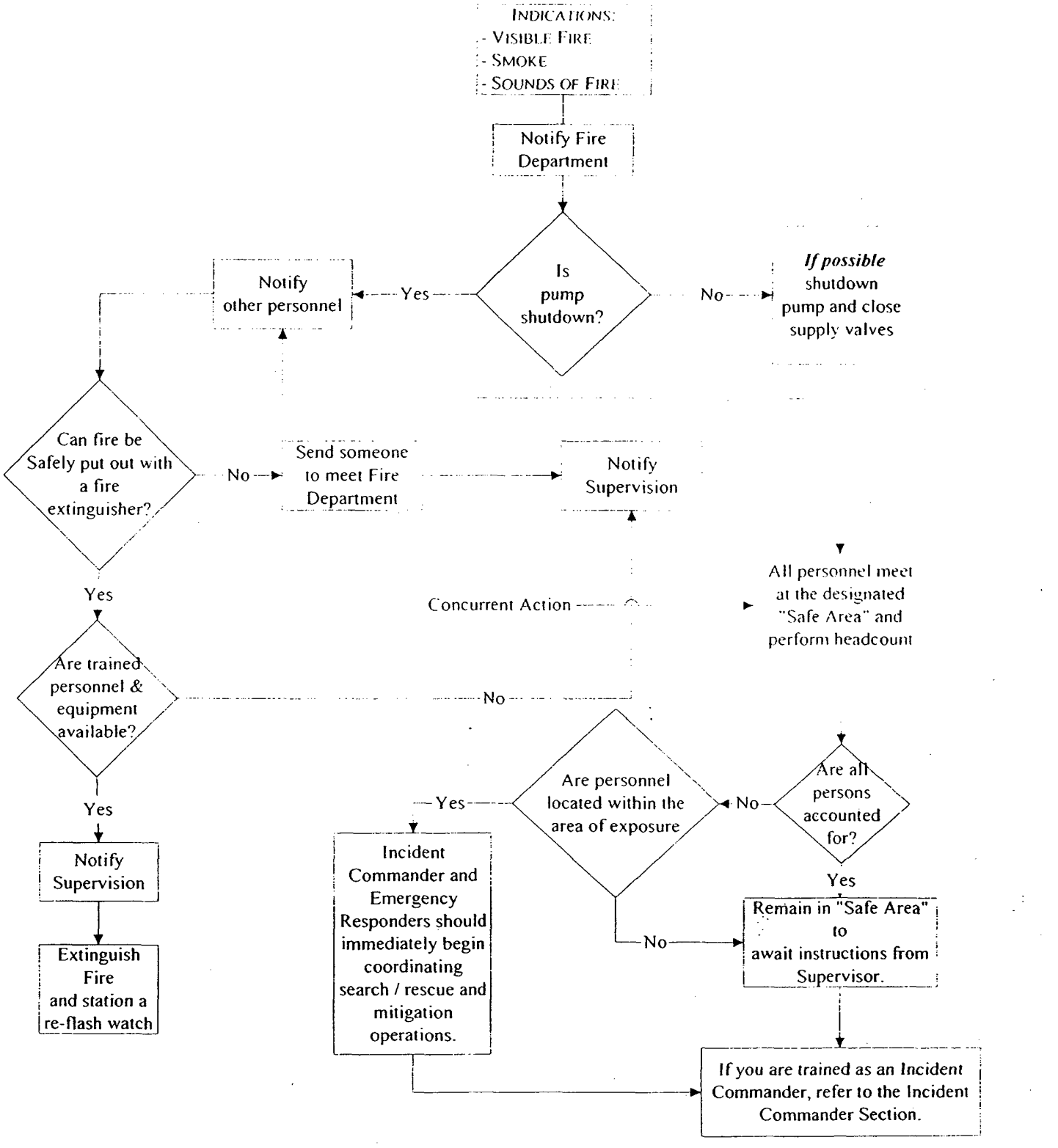
* Concurrent Actions are to be taken at the same time as other actions.

CHEMICAL SPILL OR LEAK
EMERGENCY PROCEDURE FLOW CHART



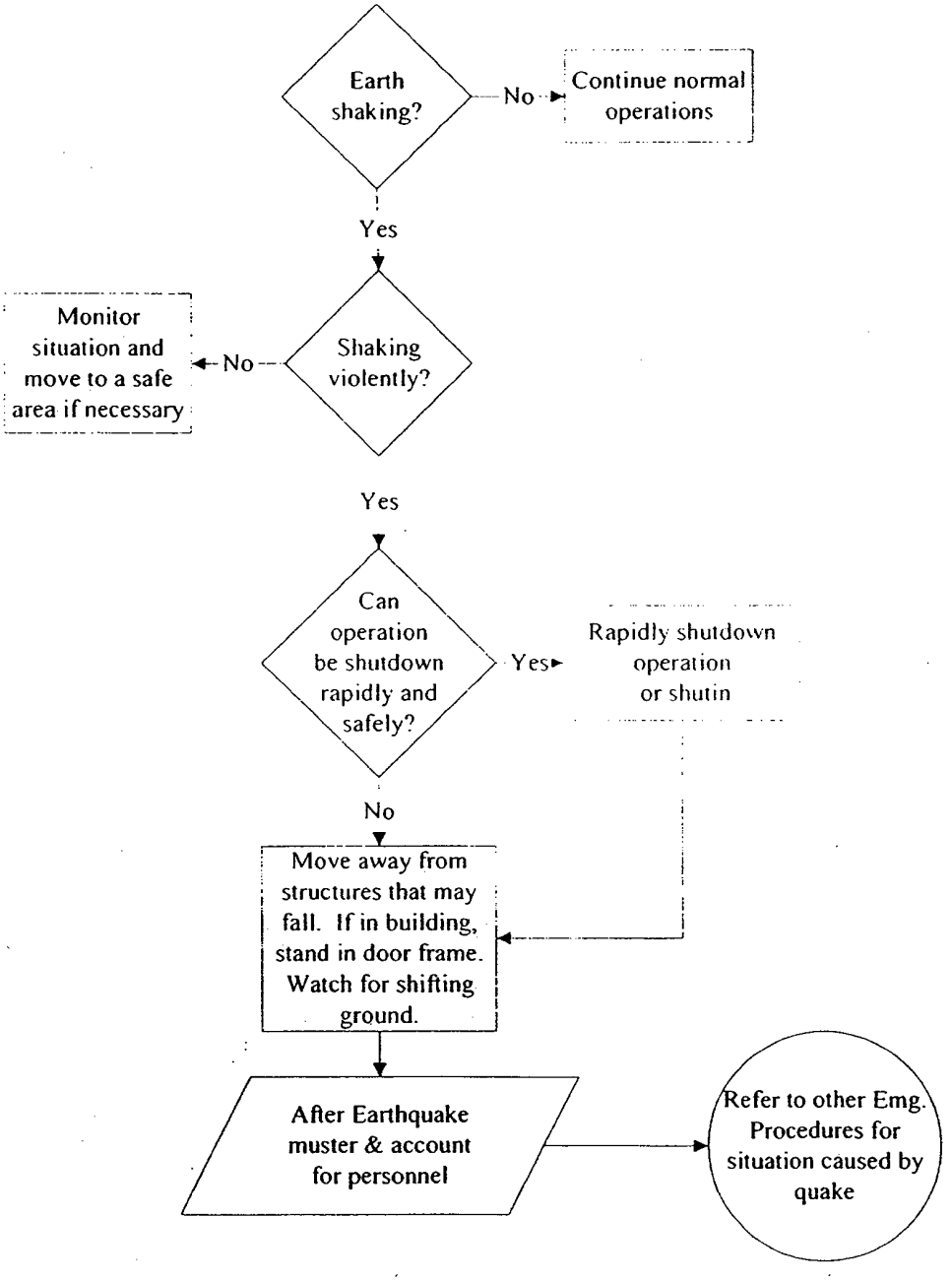
* Concurrent Actions are to be taken at the same time as other actions.

PUMP FIRE
NATURAL GAS
EMERGENCY PROCEDURE FLOW CHART



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

EARTHQUAKE
EMERGENCY PROCEDURE FLOW CHART

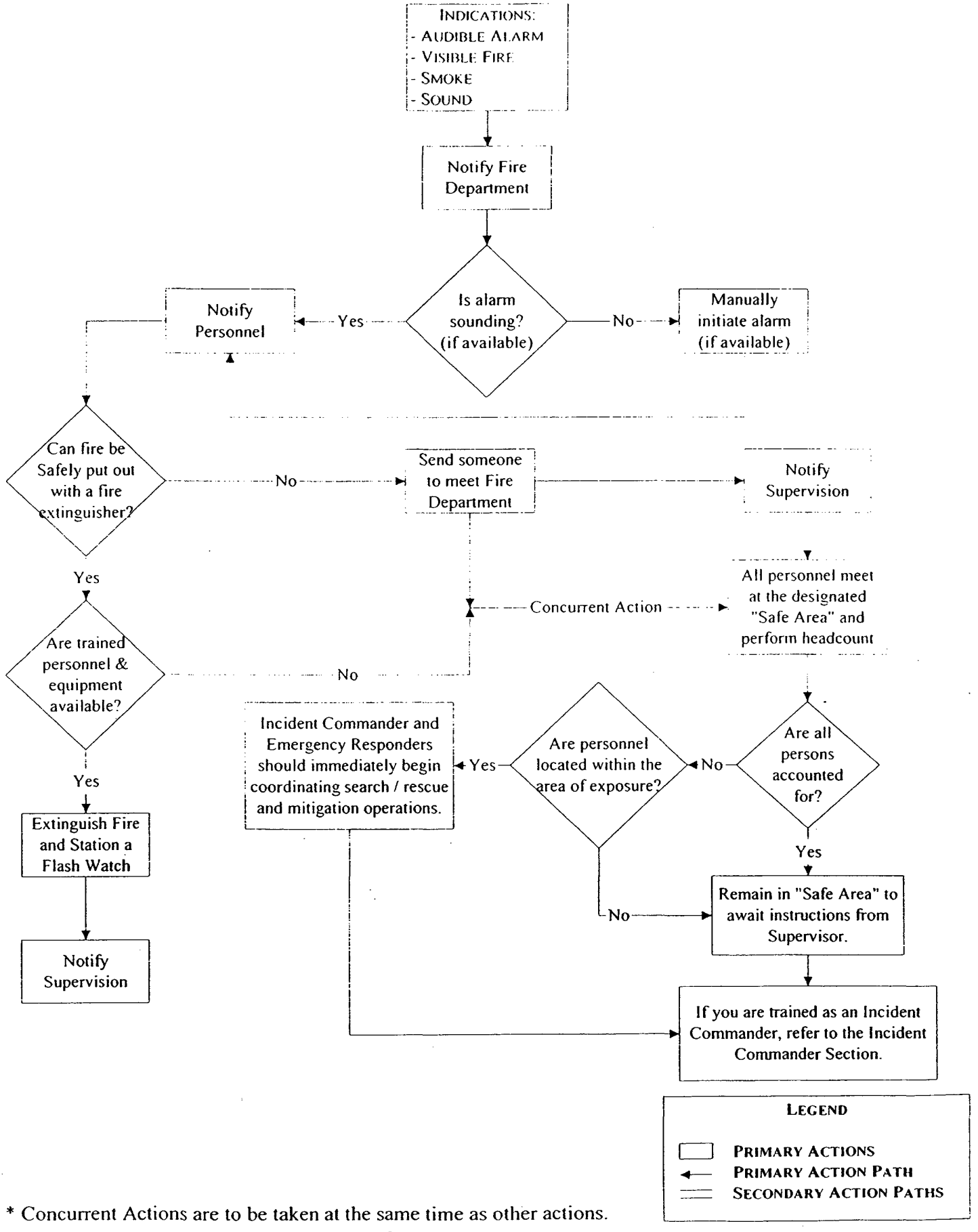


LEGEND

- PRIMARY ACTIONS
- PRIMARY ACTION PATH
- SECONDARY ACTION PATHS

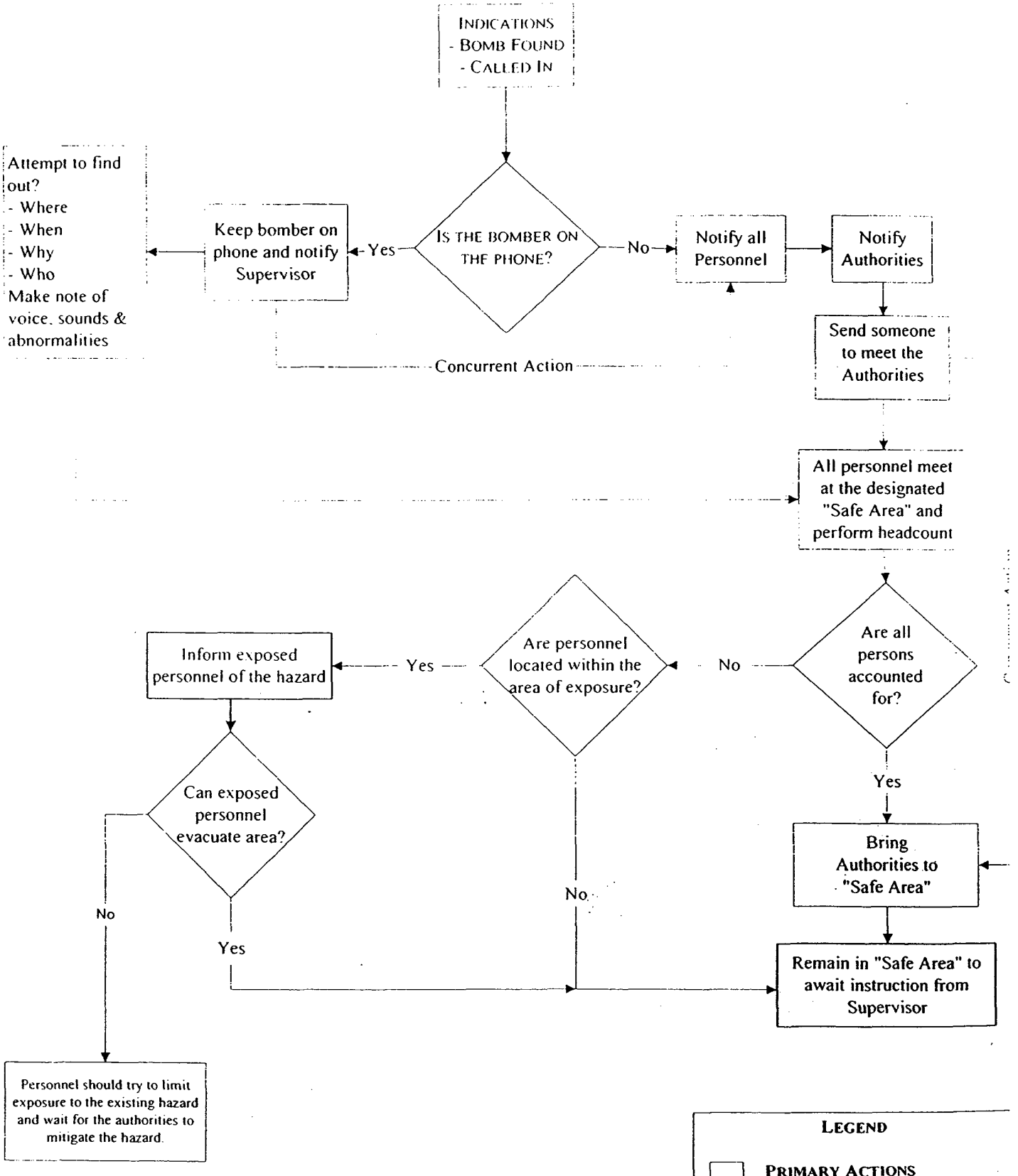
* Concurrent Actions are to be taken at the same time as other actions.

FIRE
EMERGENCY PROCEDURE FLOW CHART



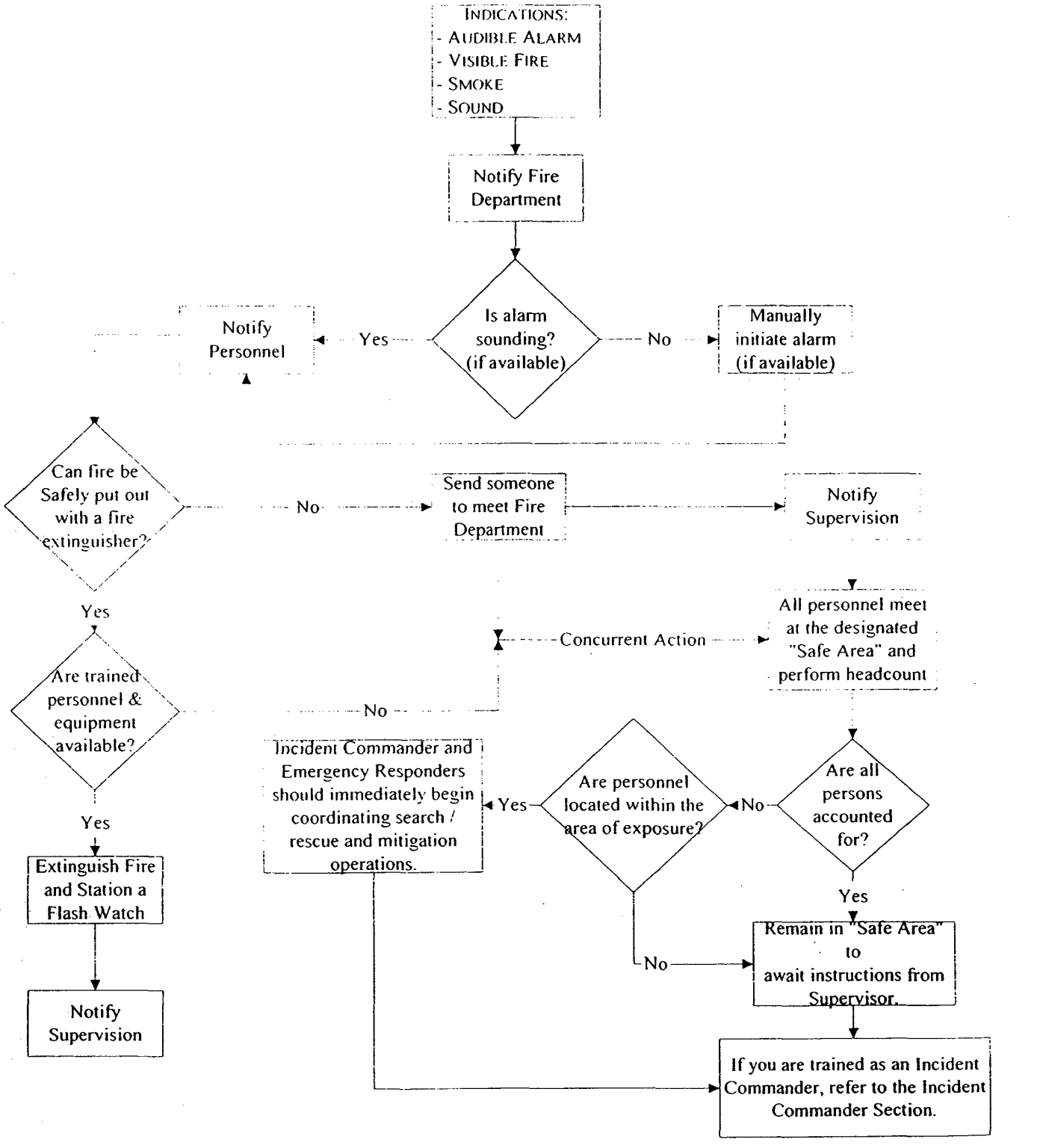
* Concurrent Actions are to be taken at the same time as other actions.

BOMB THREAT
EMERGENCY PROCEDURE FLOW CHART



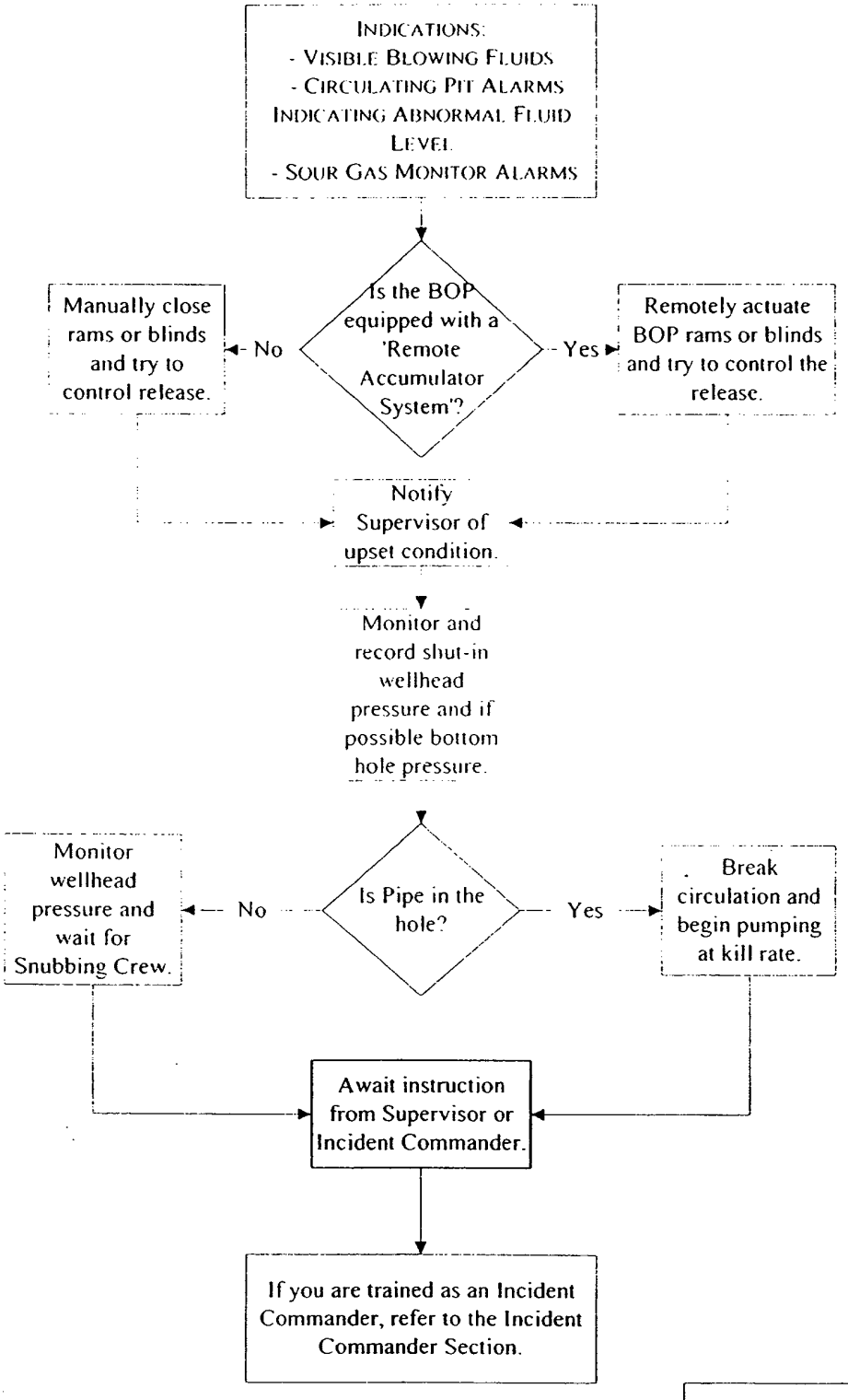
* Concurrent Actions are to be taken at the same time as other actions.

EXPLOSION
EMERGENCY PROCEDURE FLOW CHART



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

WELL BLOWOUT
EMERGENCY PROCEDURE FLOW CHART



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

UNOCAL 76

PURE RESOURCES

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.)

REV. 03/17/03

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) 424-8802 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 liability **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 - As Needed
Significant news media coverage	3, 6, 7, 9, 10, 11, 13				As Needed	8 - As Needed
SERIOUS Incidents – (within 24 hours reporting)						
Lost Workday Case (LWC) 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	
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			
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		
Vehicle accident (See "Serious" or "Major" loss if applicable)	7, 9, 11		5			
Fire/explosion/spill/release/hospitalization or other events with casualty/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
Near Miss for any "Serious" item.	9, 11		5 - As Needed			

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

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.

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.

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 immediate 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. Emergency Number - (432) 498-8600 or (800) 725-6612

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 (432) 697-1549 Home	FAX (432) 620-5610 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 Permian Oil Drilling Superintendent	(432) 498-8664 Office (432) 631-4295 Cell (432) 570-8657 Home	FAX (432) 498-8656 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 President	(432) 498-8678 Office (432) 557-7979 Cell (979) 690-1064 Home	FAX (432) 498-2607 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

Supplemental Information
Operational Procedures
02/25/2005

Well: Esperanza "13" #2

Section 13 - T22S - R26E
621' FSL & 2287' FEL (Surface Location)
1980' FSL & 660' FEL (BHL)
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 13⅝" – 10,000 psi WP BOP stack, will be installed prior to drilling out the 13⅜" 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 13⅜" casing set at 400', 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 9⅝" intermediate casing set @ 1800', 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 9⅝" casing will be tested, using rig pumps, to1500 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 9⅝" 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 9300' 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 H_2S 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 9⅝" 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.

4. Contingency Planning / Safety

4.1. An Emergency Response Plan (Attachment "C") and a H_2S 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.

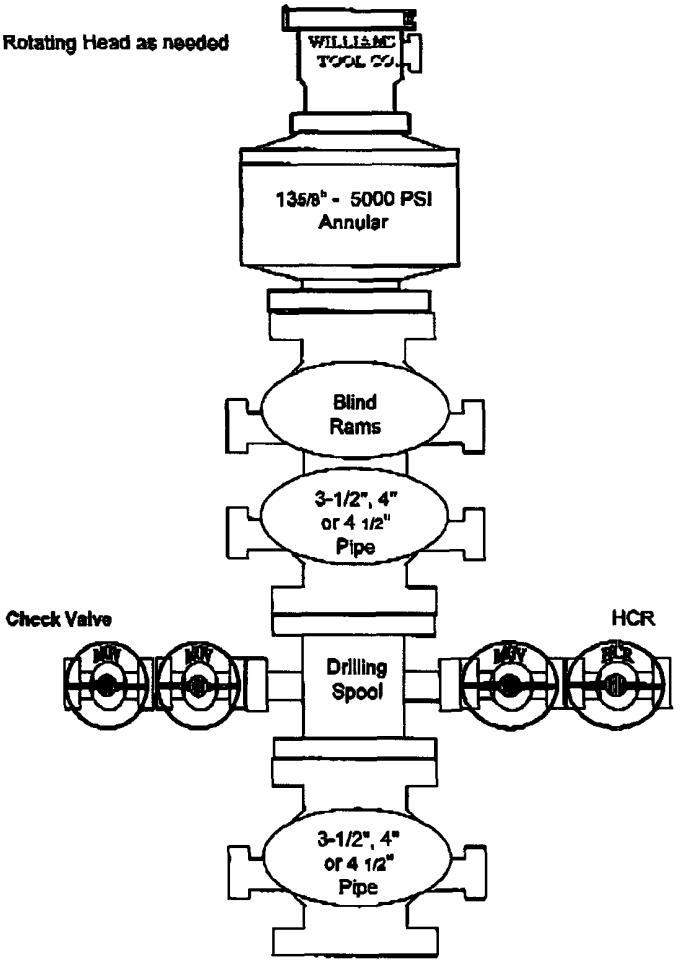
4.2. Safety meetings will be held on a regular basis and prior to any non-routine activities or prior to a significant operation, such as running casing, nippling-up BOPE, open hole logging, etc.

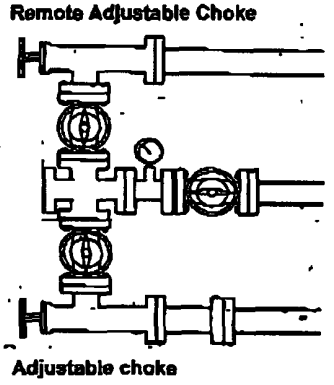
4.3. Local law enforcement and emergency response personnel will be apprised of upcoming operations and will be involved in coordinating any emergency response involving the public.

5. Nearest Resident:

The distance from the wellbore stake to the nearest business is 1554' and 2424' to the nearest residence.

13 5/8" - 10K Stack





2" min 10,000 psi WP Double valve manifold