N. M. Oil Cons. Division

811 S. 1ST ST. 88210-2884

Form 3160-3 (August 1999)

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

DEPARTMENT OF THE IN BUREAU OF LAND MANAG	TEREON S	5. Lease Serial No. LC-065478-B
APPLICATION FOR PERMIT TO DR	1 V X	6. If Indian, Allottee or Tribe Name N/A
Ia. Type of Work: 💆 DRILL 🔲 REENTER	3	7. If Unit or CA Agreement, Name and No. 28635
b. Type of Well: 🛛 Oil Well 🖵 Gas Well 📮 Other	Single Zone 🔲 Multip	8. Lease Name and Well No. Ple Zone Malco A #3
2. Name of Operator Amtex Energy, Inc. 789		9. API Well No. 31963
3a. Address (79701) 301 N. Colorado, Ste. 354, Midland	3b. Phone No. (include area code) 915-686-0847	10. Field and Pool, or Exploratory Red Lake (Q-GB-SA)
4. Location of Well (Report location clearly and in accordance with a At surface 990' FNL & 990' FEL At proposed prod. zone (SAME)	any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or Area Lot 1, Section 3 T18S-R27E
14. Distance in miles and direction from nearest town or post office* Approximately 7 miles southeast of A	Artesia, NM	12. County or Parish 13. State Eddy County NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in lease 642.88	17. Spacing Unit dedicated to this well 40
13. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 680	19. Proposed Depth 2500'	20. BLM/BIA Bond No. on file NM2846
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3582	22. Approximate date work will sta 9-15-01	23. Estimated duration 10 days
	24. Attachments	swell Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name (Printed/Typed)	Date
William K. Savage	William J. Savage	6-11-01
Title President		1
Approved by Signature ESLIE A. THEISS	Name (Printed/Typed) /S/ LESLIE A. THEISS	Date AUG 1 3 2001
FIELD MANAGER	Office CARLSBAD FIELD	OFFICE
Application approval does not warrant or certify the the applicant holds	legal or equitable title to those rights in the subject lease which would	d entitle the applicant to conduct

APPROVAL FOR 1 YEAR operations thereon.

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

DECLARED WATER BASIN / CEMENT BEHIND THE 8-18 CASING MUST BE ___

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

JMOM GWA, IV UABRUB BORTO JJBWOOR

8E:01 MA SI JUL 1005

BECEINED

Energy, Minerals and Natural Resources Departmen

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

P.O. Box 2088

Santa Fe, New Mexico 87504-208B

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Axtec, NM 87410 DISTRICT IV WELL LOCATION AND ACDEACE DEDICATION DIAT

P.O. BOX 2068, BANTA PE, N.M. 87604-20	WELL LOCATION AND	ACREAGE DEDICATION PLAT	□ AMENDED REPORT		
API Number	Pool Code	Pool Nam	ne		
Property Code		perty Name LCO A	Well Number		
OGRID No.		ENERGY, INC.	Elevation 3582		

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	3	18-S	27-E		990	NORTH	990	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
Dedicated Acres	Joint o	r Infill Co	nsolidation	Code Ore	ier No.				

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

	UR A NON-STAI	NUARD UNII HAS	BEEN APPROVED BY T	HE DIVISION
LOT 4	LOT 3	LOT 2	3588.2' 3588.5'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and betief. William J., Jarage
38.58 AC	38.88 AC	39.17 AC	3578.4'	Signature William J. Savage Printed Name President Title 7/13/01 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
				MAY 23, 2001 Date Surveyed AWB Signature & Stalfor May 25/29/01 Professional Surveyor MAY 29/01 Certificate No. RONALD EIDSON 3239 GARY EIDSON 12841

DRILLING PROGRAM

Attachment to Form 3160-3 Amtex Energy, Inc. Malco A #3 990' FNL & 990' FEL Lot 1, Section 3-T18S-R27E Eddy County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. <u>Estimated Tops of Important Geologic Markers</u>

Queen

540'

Grayburg

930'

San Andres 1190'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

The estimated depths at which water, oil and gas will be encountered are as follows:

Water:

None anticipated.

Oil:

1690-1975'

Gas:

None anticipated.

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 8 5/8" casing at 350' and circulating cement back to surface. The Grayburg and San Andres intervals will be isolated by setting 5 $\frac{1}{2}$ " casing to total depth (2500'±) and circulating cement to surface.

MALCO A #3 DRILLING PROGRAM PAGE 2

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	Casing OD	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
12 1/4"	0' - 350'	8 5/8"	24#	J-55	ST&C, new R-3
7 7/8"	0' - TD (2500'±)	5 ½"	15.5#	J-55	ST&C, new R-3

Cementing Program

8 5/8" Surface Casing: Cement to surface: 105 sx Lite (35% Poz, 65% Class C, 6%

gel) with 2% CaC12 and 1/4 lb/sx Cellophane flakes + 70 sx Class C with 2% CaC12 and 1/4 lb/sx Cellophane flakes.

WITNESS

5 ½" Production

Casing: Cement to surface: 100 sx Lite (35% Poz, 65% Class C, 6%

gel) with 5 lb/sx salt and 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% KC1. .3% Fluid Loss. 1/4 lb/sx Cellophane

flakes.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach surface.

5. <u>Minimum Specifications for Pressure Control</u>

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. Both BOP's will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be function tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System

The well will be drilled to total depth with fresh water, cut brine and starch mud systems. Depths of systems are as follows:

<u>Depth</u>	<u>Type</u>	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' - 350'	Fresh Water	8.3-8.8	28-36	No control
350' - TD	Cut Brine with starce	h 10.0-10.1	28-30	10-20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- 8. <u>Logging, Testing and Coring Program</u>
 - A. No drillstem tests are planned.
 - B. The open hole electrical logging program will be:

Dual Laterolog-Micro SFL with Gamma Ray, Caliper and SP from total depth to 350'.

Compensated Neutron-Litho Density with Gamma Ray and Caliper from total depth to 350'.

Gamma Ray/Neutron from total depth to surface.

- C. No coring program is planned.
- D. No additional testing will be initiated subsequent to setting the 5 ½" production casing.

MALCO A #3 DRILLING PROGRAM PAGE 4

9. <u>Abnormal Pressures, Temperatures and Potential Hazards</u>

No abnormal Pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 104 degrees and maximum bottom hole pressure is 800 psig. No major loss circulation intervals have been encountered in adjacent wells. Small quantities of hydrogen sulfide gas are associated with the Yates and Queen formations in this area. A hydrogen sulfide operations plan is attached.

10. Anticipated Starting Date and Duration of Operations

Barry Hunt of the Carlsbad, New Mexico BLM office has performed the onsite inspection for the proposed pad site of this location. A cultural resources examination will be submitted by Desert West Archaeological Services to the Bl_M office in Carlsbad, New Mexico.

Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The anticipated spud date for the project is approximately September 1, 2001. The drilling operation should require approximately 10 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3 Amtex Energy, Inc. Malco A #3 990' FNL & 990' FEL Lot 1, Section 3-T18S-R27E Eddy County, New Mexico

1. Existing Roads

- A. The well site and elevation plat for the proposed Malco A #3 are reflected on Exhibit #2. This well was staked by John West Surveying of Hobbs, New Mexico.
- B. All roads into the location are depicted in Exhibit #3. No new road will be required to access the location. The existing roads will be upgraded as needed.
- C. Directions to location: From Artesia go east on Highway 82 for 4.5 miles to Chalk Bluff Road. Turn south off Highway 82 onto Chalk Bluff Road and go approximately 4.2 miles. Turn east onto Little Diamond Road and go approximately 2 miles to the Malco A #3 location.

2. Proposed Access Road

Exhibit #3 shows the existing lease roads that will be used to access the location.

3. <u>Location of Existing Wells</u>

Exhibit #4 shows all existing wells within a one-mile radius of the proposed Malco A #3.

4. <u>Location of Existing and/or Proposed Facilities</u>

- A. The production facilities will be located on a well pad.
- B. In the event the well is found productive, facilities will be constructed similar to those shown in Exhibit #5.
- C. The well will be operated by means of an electric motor.

MALCO A #3 SURFACE USE AND OPERATING PLAN PAGE 2

- D. If the well is productive, rehabilitation plans are as follows:
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting.)
 - 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The Malco A #3 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and trucked to the location. Additionally, produced salt water from lease gathering tanks may be used. No water well will be drilled on the location.

6. Source of Construction Materials

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit. All roads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks or lined earthen pits and the reserve pit. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit roughly 100' x 80' x 5', or smaller, in size.
- C. The working pits and reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks and injected into the water injection system. Produced oil will be separated into steel stock tanks until sold.

MALCO A #3 SURFACE USE AND OPERATING PLAN PAGE 3

- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed. The portion of the drilling pad used by the production equipment (pumping unit) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

8. Ancillary Facilities

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil, if any found, will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit and earthen pits will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

- A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days after the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

The well site is owned by the Bureau of Land Management.

12. Other Information

- A. The area surrounding the well site is gypsiferous and supportive of desert scrub and grassland formation. The vegetation is moderately sparse with desert scrub.
- B. There is permanent water (Pecos River) approximately 0.8 mile W/SW of the location.
- C. A cultural resources examination will be submitted by Don Clifton, Archaeological Consultant, to the BLM office in Carlsbad, New Mexico.

MALCO A #3 SURFACE USE AND OPERATING PLAN PAGE 5

13. Lessee's and Operator's Representative

The Amtex Energy, Inc. representatives responsible for ensuring compliance of the surface use plan is:

William J. Savage

(915) 686-0847 (office)

President

(915) 683-6549 (home)

Amtex Energy, Inc. P.O. Box 3418 Midland, TX 79702

Brent D. Hilliard

(915) 683-9100 (work)

Agent

550 W. Texas, Ste. 410

Midland, TX 79701

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Amtex Energy, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: William S. Savage Date: 7/11/01

CONFIGURATION A

3 MWP

STACK REQUIREMENTS

No	Hem		Min LD	Min
1	Flowline			
2	Filt up line			2.
J	Drilling supple		1	
4	Annulai preventer			<u> </u>
5	Two single or one dual hydra. operated rams	utcally		
64	Drilling speel with 2" mm. lill 3" min choke line suitlets	ine and		
6 b	2" min. titl line and 3" min. ci outlets in ram. (Alternate to &	hoke line s above.)		
7) verve	Bale D Plug D	3-1/8"	
•	Gate valve—power operated	-	3-1/6"	
9	Line to choke manifold			3.
10	A 91441	iale C Hug C	2-1/16*	
11	Check valve		2-1/16"	
12	Casing head			
13		iate D Nug D	1-12/16*	
14	Pressure gauge with needle vi	ive		
	Kitt kne to rig mud pump menil			2.

ANNULAR PREVENTER	
PIPE NAMS	
Delicting Short)
HEAD BY	

OPTIONAL		
16 Flanged valve	1-13/16*	

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 pst, minimum.
- Automatic accumulator (80 gallion, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- E.inside blowout prevventer or its equivalent on detrick floor at all times with proper threads to fit pripe being used.
- Kelty saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- 8.Extra set pipe rams to fit drill pipe in use on location at all times.
- 2. Type RX ring paskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side valves
- 2. Wear bushing, If required.

GENERAL NOTES:

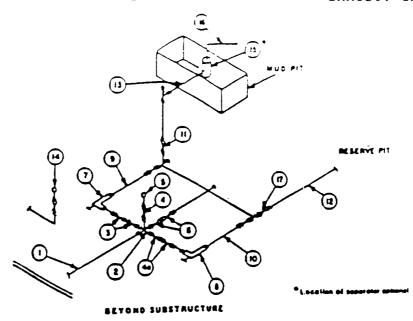
- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clemp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chord. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beens. Replaceable parts for adjustable choke, other been sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- Choice lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drifting spool to be kept open. Use outside valves except for emergency.
- 8.All seamiess steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

Amtex Energy, Inc.
Malco A #3
990' FNL & 990' FEL
Lot 1, Section 3-T18S-R27E
Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.



			MINI	HUM REOL	REMENT	5				
	T		3.000 NWP			5,000 MWP			10,000 HWP	,
No		I.D	HOMINAL	RATING	1.0.	HOLENAL	RATING	I.D.	HOMINAL	RATING
MO 1	Line from drilling speci		3.	3.000		3.	\$.000		2.	10.000
	Cross 3, 13, 13, 15,			3,000			\$.000			
2	Ctort 3,17,13,13,	 								10,000
3	Valves(1) Cale C	3-18"		3,000	3-1/A*		000.2	3-1/6"		10,000
4	Valve Gate Ci Plug (CZ)	1-13/16*		3,000	1-13/16*		\$,000	1-12/16*		10,000
48	Valves(1)	2-1/16"		3,000	2-1/16"	ļ	5,000	3-1/6"		10.000
5	Pressure Gauge			3,000		1	5,000		·	10,000
6	Valves Gale C	3-1/6"		3,000	3-1/6"		\$,000	3-1/8*		10,000
7	Adjustable Chote(3)	2.		3.000	2*		5.000	2.		10,000
	Adjustable Choice	1.		3,000	1.		5,000	2.		10,000
9	Line		3.	3.000		3.	\$,000		2.	10,900
10	Line		7"	3.000		2.	5.000		3.	10,000
11	Valves Gale []	3-1/6*		3.000	3-1A*		\$.000	3-1/E*		10,000
12	Lines		3.	1,000		-3.	1,000		2.	2,000
13	Lines		2.	1,000		3*	1,000		3.	2,000
14	Remote reading compound standard pressure gauge			3.000			5.000			10.000
15			2'z\$'			2'ES'			2'z5'	
16	Line		1.	1,000		4.	1,000		4.	2.000
17	Valves Plug D(Z)	3-1/6"		3.000	3-1/6"		8.000	3-1/8"		10,000

- (1) Only one required in Class 3M.
- (2) Gate valves early shall be used for Class 1014.
- (3) Remote operated hydrautic choke required on 5,000 pal and 10,000 pal for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 68 or 68X and ring gaskets shall be API RX or 8X. Use only 8X for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig hoor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged test.
- 7. Discharge lines from chokes, choke bypass and from top of ges separator should vent as far as practical from the well

DISTRICT I P.O. Box 1960, Hobbs, NM 86241-1980

DISTRICT II P.O. Drawer DO, Artenia, NM 86211-0719

OIL CONSERVATION DIVISION

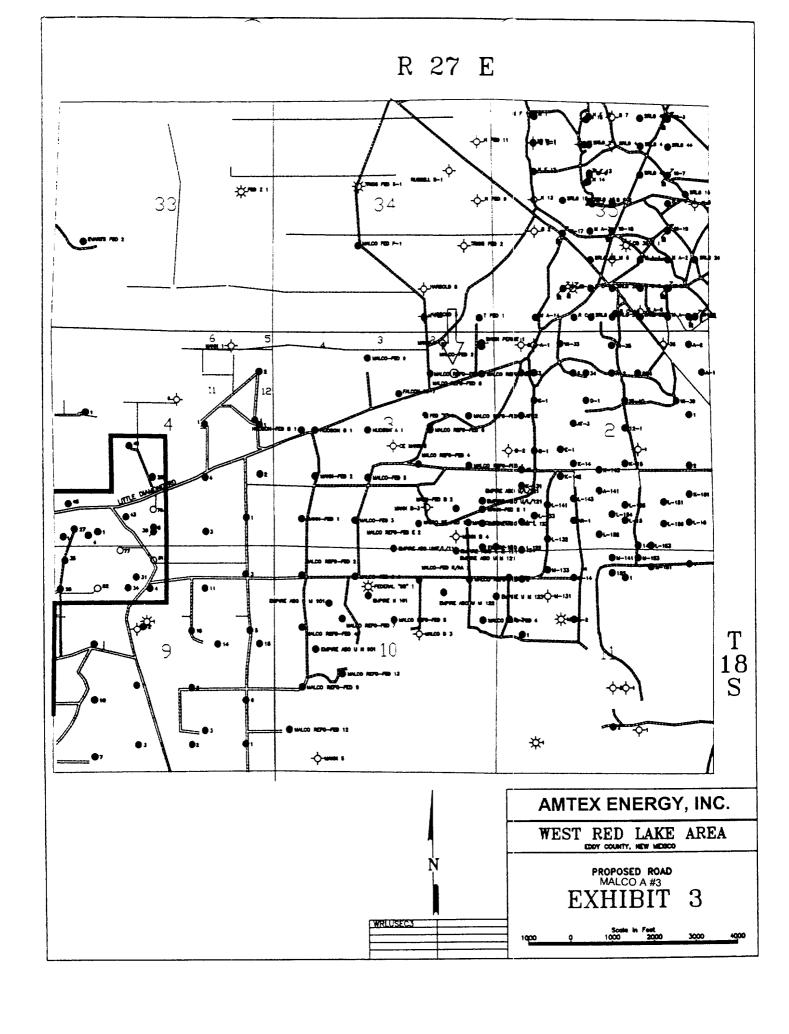
Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

P.O. Box 2088

DISTRICT III 1000 Rio Brazos Rd., Autoc, NM 87410 Santa Fe, New Mexico 87504-2088

State Lease - 4 Copies
Fee Lease - 3 Copies

API N	lumber			Pool Code				Pool Name		***
Property Co	ode		Property Name					·	Well Nur	nber
					MA		3			
OGRID No.				Al		TEX ENERG	y, inc. Y, INC.		Elevation	
· ·	<u></u>	I				ace Loca			358:	
L or lot No.	Section	Township	Range	Lot Idn		rom the	North/South line	Feet from the	East/West line	County
1	3	18-S	27-E		99	90	NORTH	990	EAST	EDDY
			Bottom	Hole L	ocation	If Diffe	rent From Sur	face	I	<u> </u>
L or lot No.	Section	Township	Range	Lot Idn	Feet f	rom the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infili C	onsolidation	Code (order No.					
					71441 1141					
NO ALLO	WABLE W	TILL BE A	SSIGNED	TO THIS	COMPL	ETION U	NTIL ALL INTER	RESTS HAVE BE	EEN CONSOLIDA	ATED
		OR A	NON-STAN	NDARD U	NIT HAS	BEEN	APPROVED BY	THE DIVISION		
LOT 4		LO	7 3		LOT 2		LOT 1 39.47 AC	OPERATO	R CERTIFICAT	TION
	ı			1		1	55.77 AG		y certify the the in	
	1			1		l	,066	contained hereis	n is true and compl	
						3588.2°	3588.5	best of my know	oledge and belief.	
	1			1		15				
	1						990'			
38. <u>58 AC</u>	;	38.88	AC	39	.17 AC	3578.3	3578.4'	Signature		
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	1			i					Y 23, 2001	
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				1		1		The state of the s	GARY EIDSON	



DISTRICT I P.O. Box 1980, Hobbe, NM 88341-1980

DISTRICT II P.O. Drawer DD, Artonia, NM 86211-0719

OIL CONSERVATION DIVISION

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

1000 Rio Brazos Rd., Astec, NM 87410

DISTRICT IV P.O. BOX 2008, SANTA FE, N.M. 87504-2008 WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPOR

API Number	Pool Code	Pool Name
Property Code	Property Name MALCO A	3
OGRID No.	AMTEX ENERGY, INC. AMTEX ENERGY, INC.	Elevation 3582'

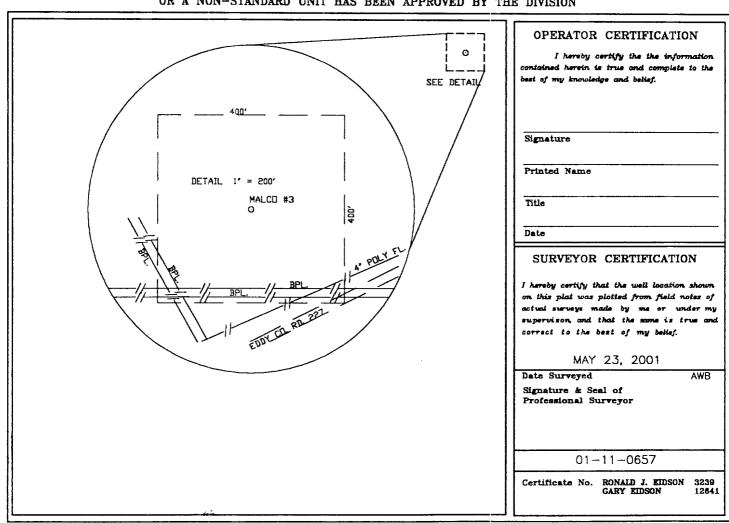
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	3	18-S	27-E		990	NORTH	990	EAST	EDDY

Bottom Hole Location If Different From Surface

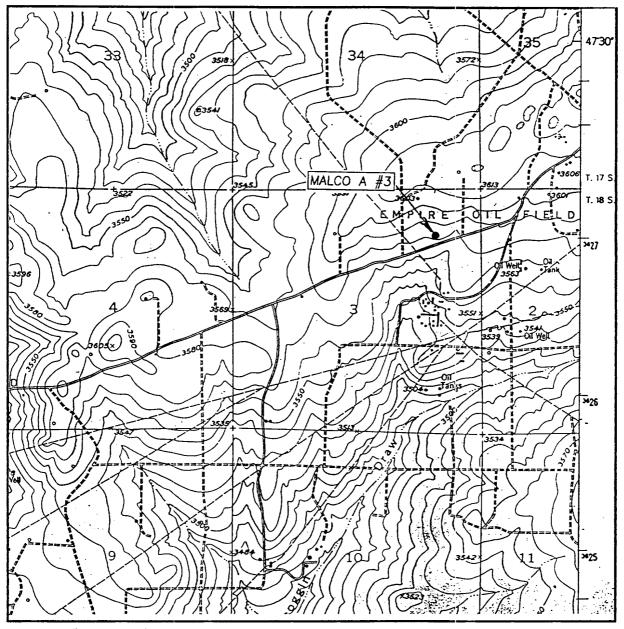
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	r Infill Co	nsolidation (Code Or	ler No.				L

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



LOCATION VERFICATION MAP

EXHIBIT 3A



SCALE: 1" = 2000'

SPRING LAKE, N.M.

CONTOUR INTERVAL:

10'

SPRING LAKE, N.M.

SEC. 3 TWP. 18—S RGE. 27—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 990' FNL & 990' FEL

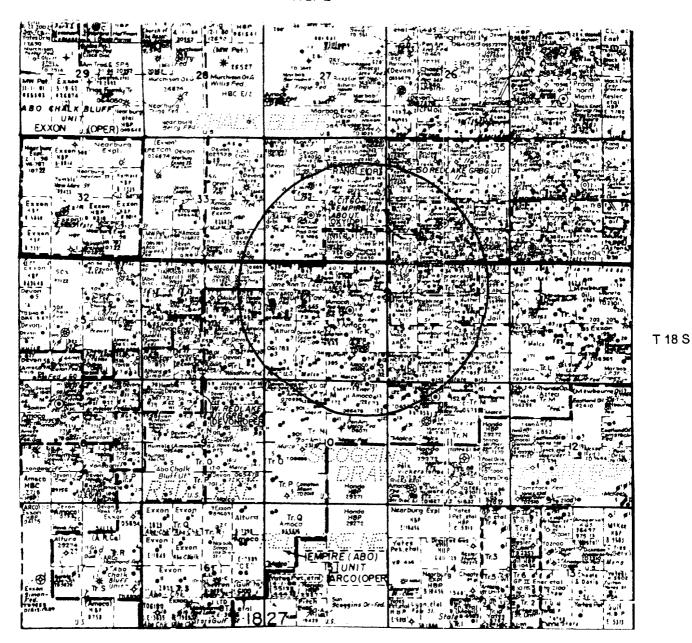
ELEVATION 3582'

OPERATOR AMTEX ENERGY, INC.

LEASE MALCO A

U.S.G.S. TOPOGRAPHIC MAP

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117



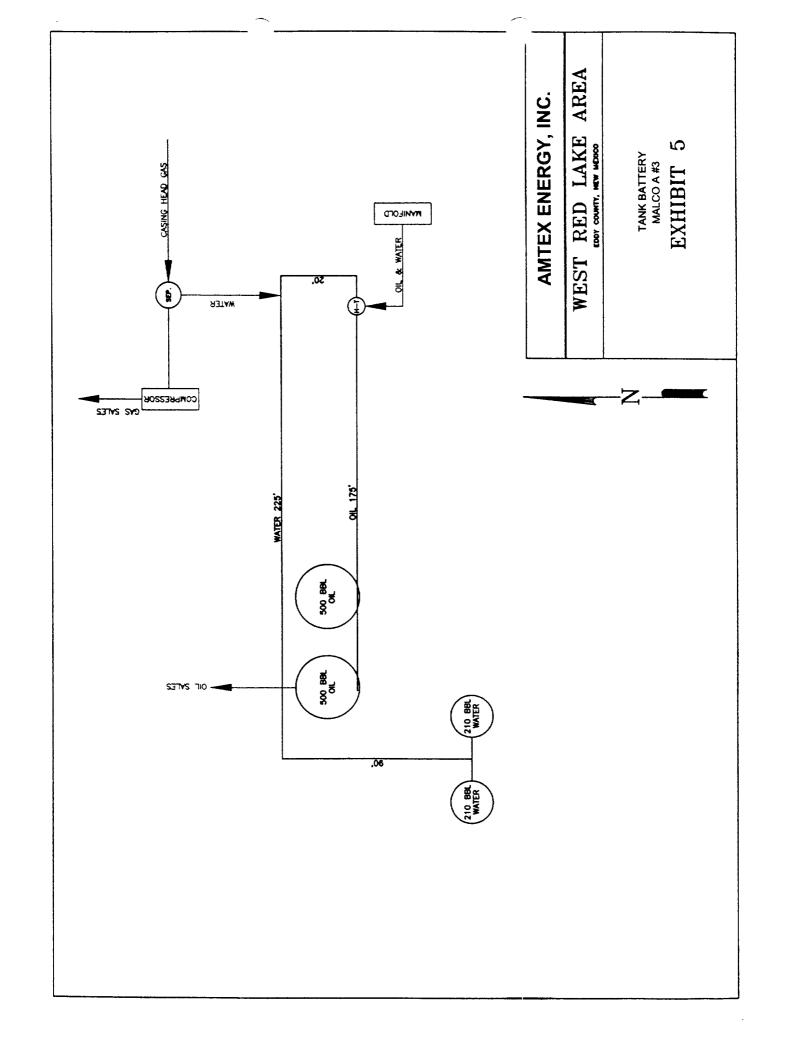
AMTEX ENERGY, INC.

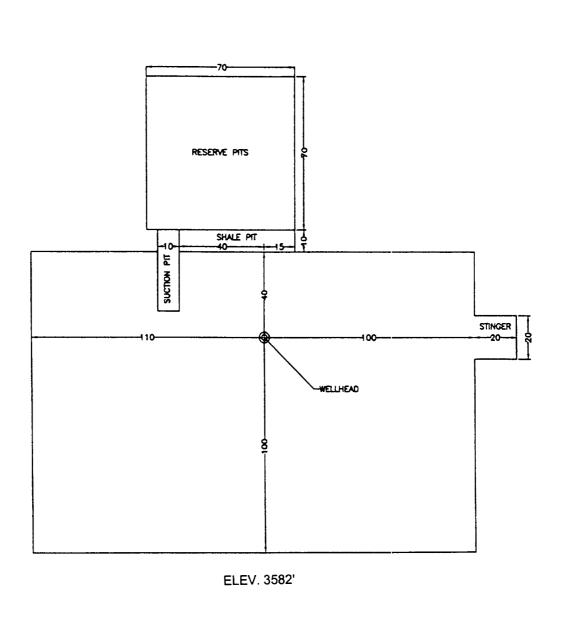
WEST RED LAKE AREA

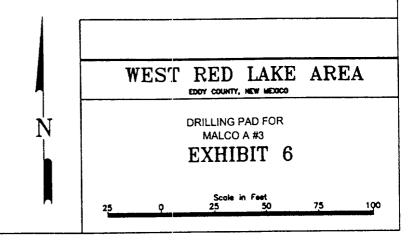
WELLS WITHIN 1 MILE RADIUS MALCO A #3

EXHIBIT 4

SCALE: 1:4000







DEVON ENERGY

Operator: Amtex Energy, Inc. | Well Name: Malco A #3

Project ID: | Location: Eddy County, New Mexico

Design Factors: <u>Design Parameters:</u> Mud weight (9.20 ppg) : 0.478 psi/ft Collapse : 1.125 Shut in surface pressure : 1035 Burst ps i : 1.00 Internal gradient (burst): 0.100 psi/ft 8 Round : 1.80 (1) Annular gradient (burst) : 0.000 Buttress. : 1.60 (J) Tensile load is determined using air weight **Body Yield** : 1.50 (B) Service rating is "Sweet" Overpuil 0 lbs.

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	e Joi	nt	Depth (feet)	Drift (in.)	Cost
1	350	8-5/8*	24.00	J-55	5 ST&	<u> </u>	350	7.972	
	Load (psi)	Collapse Strgth (psi)		Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	1	Tension Strgth (kips)	S.F.
1	550	1370	2.491	1150	2950	2.57	27.60	244	8.84 J

Prepared by : Date : Remarks :

Minimum segment length for the 1,150 foot well is 1,100 feet.

Surface/Intermediate string:

Next string will set at 2,800 ft. with 9.20 ppg mud (pore pressure of 1,338 . psi.) The frac gradient of 1.000 at the casing seat results in an injection pressure of 1,150 psi. Effective BHP (for burst) is 1,150 psi.

The minimum specified drift diameter is 4.887 in.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with
evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body
Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and
Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.
Costs for this design are based on a 1970 pricing model. (Version 1.0G)

DEVON ENERGY

gy, Inc.	Well Name: Malco A #3
	Location: Eddy County, New Mexico

Design Factors: : 1.125 Collapse 0.478 psi/ft Burst : 1.00 1058 psi 8 Round : 1.80 (J) 0.100 psi/ft : 1.60 0.000 psi/ft Buttress (J) : 1.50 (B) Body Yield ing air weight Overpull 0 lbs.

eight b/ft	Grad	e Joi		Depth feet)	Drift (in.)	Cost	
L5.50	J-5	5 ST&	С	2,800	4.825		
.F.	Burst Load (psi)	Min Int Strgth (psi)			Tension Strgth (kips)	S.F.	
019	1338	4810	3.59	43.40	202	4.65 J	

he 2,800 foot well is 1,500 feet. hole pressures (for burst) are 0.478 psi/ft and

irs used in this casing string design are as shown above. As a general guideel recommends using minimum design factors of 1.125 - Collapse (with 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body rength under axial tension was calculated based on the Westcott, Dunlop and neering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G) : 1.125

: 1.00

: 1.80 (J)

DEVON ENERGY

0.478

1058

0.100

psi/ft

psi/ft

ps i

gy, Inc.	Well Name: Malco A #3
	Location: Eddy County, New Mexico

Design Factors:

Collapse

Burst

8 Round

0.000 Fing air	psi/ft weight		Buttress Body Yield Overpull	d	: 1.60 (J) : 1.50 (B) : 0 lbs.			
eight lb/ft		e Joi		Depth (feet)		Cost		
15.50	J- 5	5 ST&6	C	2,800	4.825			
.F.	1	Min Int Strgth (psi)		Load	Tension Strgth (kips)	S.F.		
.019	1338	4810	3.59	43.40	202	4.65 J		

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AMTEX ENERGY, INC.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of the H2S safety equipment and of personal protective equipment to be utilized at the location such as H2S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
- 3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H2S bearing formation, H2S training will be required at the rig site for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H2S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H2S training.

This Hydrogen Sulfide Drilling and Operations Plan shall be available at the well site during drilling operations.

B. H2S Safety Equipment and Systems

All H2S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H2S bearing formation. The safety systems to be utilized during drilling operations are as follows:

AMTEX ENERGY, INC. Hydrogen Sulfide Drilling Operations Plan Page 2

1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.
- 3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) five minute escape packs located at strategic points around the rig.
- (b) Two (2) thirty minute rescue packs to be located at the designated briefing areas.
- 4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

AMTEX ENERGY, INC. Hydrogen Sulfide Drilling Operations Plan Page 3

5. Mud Program

(a) The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H2S bearing formations.

6. Metallurgy

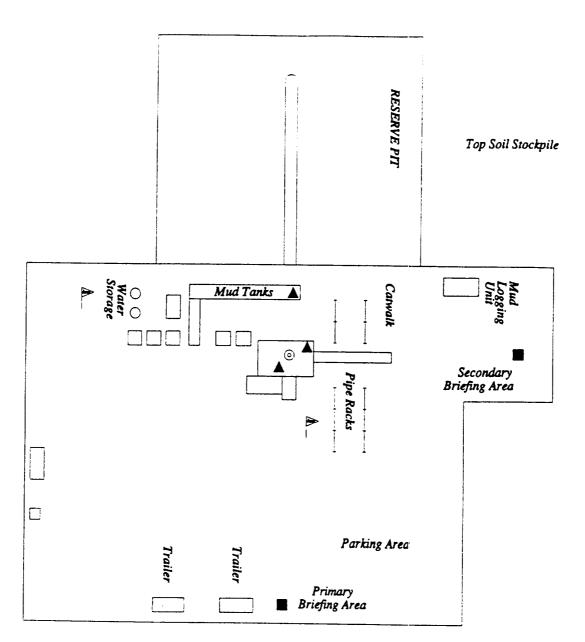
(a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

7. Communication

(a) Two way radio and cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

1. Attached is a diagram representing a typical location layout as well as the location of H2S monitors, briefing areas, and wind direction indicators.



- H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT

