Fai n 3160-3 (December 1990)

## UNITED STATES

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DEPAR NT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

N. M. Oil Cons. Division FORM APPROVED 811 8. ARTESIA NM applica Budget Bureau No. 1004-0136 Expires: December 31, 1991

UBMIT IN TRIPLICATE			m	5. Lease Designation and S	erial No. <del>C029420</del> A
AF	PPLICATION FOR PE	RMIT TO DRILL	OR DEEPEN	8. If Indian, Alottee or Tribe	Nam
1b. Type of Well OIL GAS [	RILL DEE	PEN 🗌	SINGLE ZONE	7. If Unit or CA, Agreement 8. Well Name and Number SKELLY UNIT	
2. Name of Operator		TION & PRODUCTIO		907	1169]
3. Address and Telephon	P.O. Box 3109, Midla	and Texas 79702	688-4606	9. API Well No. 30 - 015 - 3	1385
4. Location of Well (Repo	ort location clearly and in acc	ordance with any State	UN DES. FREN	10. Field and Pool, Explorte	
Unit Letter K : 2310 At proposed prod. zone		H Line and 2310	Feet From The WEST Line	11. SEC., T., R., M., or BU Sec. 21. Township	K. and Survey or Area
14. Distance In Miles and D	Pirection from Nearest Town or			12. County or Parish EDDY	13. State
15. Distance From Propose Lease Line, Ft. (also to nea	ed* Location to Nearest Proper		16. No. of Acres in Lease 4160	17. No. of Acres Assigned To	
18. Distance From Propose Completed or Applied For,	ed Location* to Nearest Well, D On This Lease, Ft.	Orilling, 381.3°	19. Proposed Depth 5700	20. Rotary or Cable Tools	ARY
21.Elevations (Show wheth		-3796		22. Approx	x. Date Work Will Start* 9/5/00
23		PROPOSED CAS	ING AND CEMENT PROG	RAM	
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY	OF CEMENT
3456789	PROGRAM FOR PROPOSITION OF PROPOSITI	osal is to deepen, give n subsurface locations	data on present productive zone and measured true verticle depth	and proposed new productive	
SIGNATURE TYPE OR PRINT NAME	Had Kya	TITLE (	ammission G	oordinator DAT	E 8/8/00
(This space for Federal or State o	office use)	7			
DEDLUT NO			_APPROVAL DATE		
Application approval does no	ot warrant or certify that the applican	nt holds legal or equitable title	Assistant Field	ich would entitle the applicant to cond Manager,DATE_	duct operations thereon.
CONDITIONS OF APPR	OVAL, IF ANY:		lands And Mine	AP2110	VED FOR 1 YEAR
Title 18 U.S.C. Section 1001 representations as to any ma	, makes it a crime for any person k atter within its jurisdiction.	nowingly and willfully to make	e to any department or agency of the Ur	nited States any false, fictitious or fra	udulent statements of

DISTRICT 1 P. O. Box 1980, Hobbs, NM 88240

DISTRICT II P. O. Drawer DD, Artesia, NM 88210

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

DISTRICT IV P. O. Box 2088, Santa Fe, NM 87504~2088 State of New Mexico
Energy, Minerals and Natural Resources Department

#### OIL CONSERVATION DIVISION

PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease-4 copies Fee Lease-3 copies

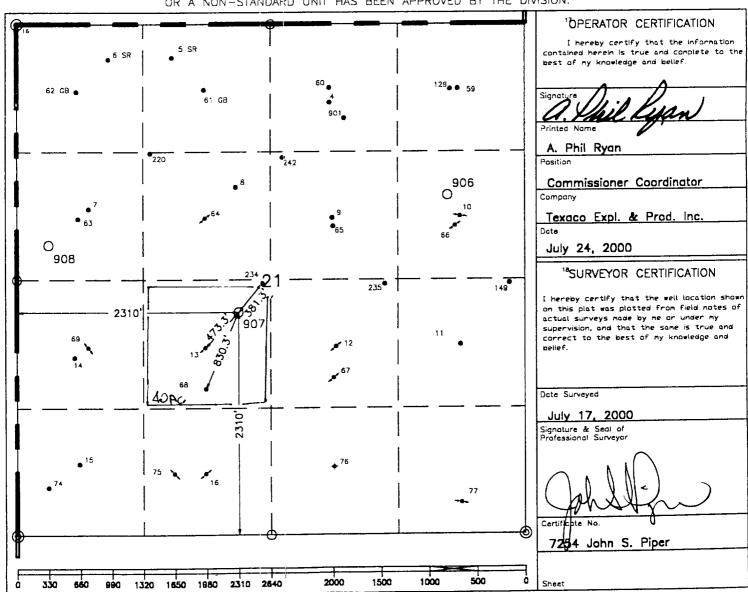
☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	<sup>2</sup> Pool Code	<sup>3</sup> Paal Name	
	Loco Hill	s, Paddock	
Property Code	<sup>5</sup> Property Name		<sup>5</sup> Well Number
	Skeily Unit		907
OGRIO No.	<sup>8</sup> Operator Name		g Elevation
1	TEXACO EXPLORATION & PF	RODUCTION, INC.	3796'

		,			10 Surface l	Location			
UL or Tal no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	<sup>7</sup> County E <b>ddy</b>
K	21	17 <b>–</b> S	31-E		2310'	South	2310'	West	Ludy
			'' B	<u>ottorn Hal</u>	<u>e Location If</u>	Different From	Surtace		
UL or lat no.	Section	Township	Range	Lat lan	Feet from the	North/South line	Feet from the	East/West line	<sup>7</sup> County
1Dedicated Acres	1370!	nt or Infill	<sup>1</sup> Consolid	lation Code	<sup>15</sup> Order No.	<u> </u>	<u> </u>		
40			1						

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



Texaco Exp! tion and Production Inc.-Operator
Documental prepared by Mack Energy Corporation-Di ag Contractor
Attached to Form 3160-3
Mack Energy Corporation
Skelly Unit #907
2310 FSL & 2310 FWL
NE/4 SW/4, Sec 21 T17S R31E
Eddy County, NM

#### **DRILLING PROGRAM**

#### 1. Geologic Name of Surface Formation

Quaternary

#### 2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Top of Salt	505'
Base of Salt	1025'
Yates	1600'
Queen	2130'
San Andres	3050'
Glorietta	4320'

#### 3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	150'	Fresh Water
Grayburg	2580'	Oil/Gas
San Andres	3050'	Oil/Gas
Paddock	4400'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 450' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 8 5/8" casing to 1620' and circulating cement back to surface. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing which will be run at TD.

#### 4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 ½" 12 ¼" 7 7/8"	0-450' 0-1620' 0-TD		48#, K-55, ST&C, New, R-3 24#, K-55, ST&C, New, R-3 17#, J-55, LT&C, New, R-3

Drilling Program

Texaco Explession and Production Inc.-Operator
Documentatis prepared by Mack Energy Corporation-Dr. ag Contractor
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#### 5. Cement Program:

- 13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl2.
- 8 5/8 Intermiate Casing: Circulate to Surface with Class C W/2% CaCl2.
- 5 1/2" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to tie back to 8 5/8" Casing.

#### 6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ramtype (2000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nippled up on the 8 5/8" Intermiate casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of intermediate casing, the ram type BOP and accessory equipment will be tested to 2000 psi. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.

#### 7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE		WEIGHT	VISCOSITY	WATERLOSS
0-450'	Fresh Water	8.5	28	N.C.	
425-1620'	Brine	10	30	N.C.	
1620'-TD	Cut Brine	9.1	29	N.C.	

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

#### 8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.

Drilling Program Page 2

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B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

Drilling Program Page 3

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#### 9. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 8 5/8 casing shoe.
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

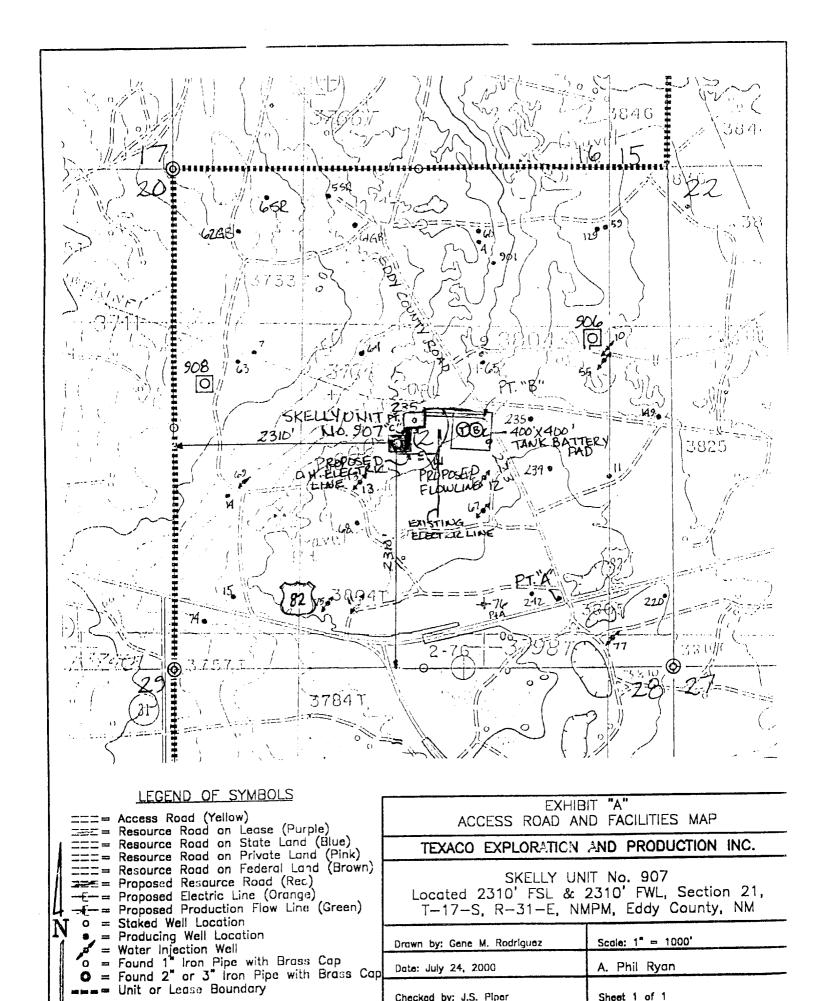
#### 10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and estimated maximum bottom hole pressure is 2300 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

#### 11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is October 1, 2000. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

Drilling Program Page 4



Date: July 24, 2000

Checked by: J.S. Piper

A. Phil Ryan

Sheet 1 of 1

#### SURFACE USE AND OPERATIONS PLAN

#### FOR

#### TEXACO EXPLORATION AND PRODUCTION, INC.

SKELLY UNIT NO. 907

2310' FSL & 2310' FWL, SECTION 21,

TWP. 17 SOUTH, RANGE 31 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO

LOCATED: 9 miles Easterly of Loco Hills, New Mexico

FEDERAL LEASE NUMBER: LC 029420A

LEASE ISSUED: Lease is in a producing status.

ACRES IN LEASE: 4160

RECORD LESSEE: Texaco Exploration and Production, Inc.

**SURFACE OWNERSHIP: USA** 

GRAZING PERMITTEE: Charles R. Martin, Inc.

c/o Charlene Ward P.O. Box 706 Artesia, NM

POOL: Loco Hills, Paddock

<u>POOL RULES:</u> Field Rules are for no wells to be located closer than 330' to any quarter-quarter section and 330' from the nearest lease line.

EXHIBITS: A. Access Road and Facilities Map

- B. Drilling Rig Layout Diagram
- C. Well Location and Acreage Dedication Plat 40 acres

De week and

#### 1. EXISTING ACCESS ROADS

A. Exhibit "A" is an enlarged portion of a 7.5 minute U.S.G.S. topographic map showing the proposed well site and the existing roads in the area. Point "A" is the junction of Eddy County Road 223 and State Highway 82. Said intersection is approximately 7.4 miles Southwesterly of Maljamar, New Mexico and 9 miles Easterly of Loco Hills, New Mexico along the major established Public Road System. From Point "A" as shown in Yellow on Exhibit "A", go Northwesterly 0.40 miles along said Eddy County Road No. 223 to Point "B", an intersection with an existing resource road. Then Westerly along said resource road as shown in purple on Exhibit "A" 0.15 miles and Southerly 0.05 miles to Point "C", the beginning of the proposed resource road.

#### 2. PLANNED RESOURCE ROAD

- A. <u>Length and Width:</u> From Point "C" as shown on Exhibit "A", a new 14 foot wide resource road will be constructed approximately 210 feet Southerly as shown in red on Exhibit "A" to the Southeast corner of the proposed well pad, as shown on Exhibits "A" and "B".
- B. <u>Surfacing Material</u>: Caliche material will be used to surface the proposed road. It will be watered, compacted, and graded.
- C. <u>Maximum Grade</u>: An approximate grade of one percent will be encountered ascending from point "C" to the proposed well pad.
  - D. Turnouts: Turnouts will not be required.
- E. <u>Drainage Design:</u> The new road will be crowned at the center to direct drainage to ditches on both sides of the roadway with turnout ditches to be constructed as required.
  - F. Culverts: None will be required.
- $G.\ \underline{Cuts}\ \underline{and}\ \underline{Fills}:$  A moderate amount of leveling will be required.
  - H. Gates and Cattle Guards: None will be required.

#### 3. LOCATION OF EXISTING WELLS

A. Existing wells on the lease and in the immediate area are shown on Exhibit "A".

#### 4. LOCATION OF EXISTING AND PROPOSED FACILITIES

- A. The oil, gas, and/or water that this well produces will be transported by 1083 linear feet of a 2 7/8" steel or a 3" poly surface flowline (shown in Green on Exhibit "A") to a tank battery to be constructed in a 400x400 archaeological cleared tract as shown on Exhibit "A".
- B. An electric power line 359 feet long will need to be constructed to service this site. It will be a 12,470 phase to phase, no neutral, rapture protected line.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

A. It is not contemplated that a water well would be drilled. Water necessary for drilling operations will be purchased and trucked to the well site or will be transported to the well site by a temporary pipeline laid on the ground along existing roads.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche needed for the well pad will be transported to the well site from the existing pit located in the Northwest quarter of the Northeast quarter of Section 21 and the Southwest quarter of the Southeast quarter of Section 16, T17S, R31E, by Eddy County Road 223 and the existing resource roads.

#### 7. METHOD OF HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of at commercial or company facilities.
- D. Oil produced during tests will be stored in test tanks until sold.
- E. Trash, waste paper, garbage and junk will be placed in a trash bin located on the drill site pad. It will be transported to an approved landfill for disposal within 30 days after completion of drilling and/or completion of operations. All waste material will be contained to prevent scattering by the wind.

#### 8. ANCILLARY FACILITIES

A. None required.

#### 9. WELL SITE LAYOUT

- A. Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, and the location of the major rig components.
- B. Cut and Fill requirements will be moderate, but clearing and leveling of the well site will be necessary.

#### 10. PLANS FOR RECLAMATION OF THE SURFACE

- A. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until the pits are dry.
- C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special reclamation and/or special revegetation requirements of the Surface Management Agency will be complied with and will be accomplished as rapidly as possible.

#### 11. OTHER INFORMATION

- A. <u>Topography:</u> The land surface in the area of the well is relatively level with moderate sand dunes. Regionally, the land slopes Northerly with average slopes of less than five percent.
  - B. Soil: Top soil at the well site is a moderate sandy loam.
- C. Flora and Fauna: The vegetation cover is moderate. It includes range grasses, weeds, scrub oak bushes, and mesquite bushes. Wildlife in the area is that typical of a semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, hawks, dove, quail and other small birds.
- D. <u>Ponds and Streams</u>: There are no rivers, lakes, ponds, or streams in the area.
- E. Residences and Other Structures: There are no occupied dwellings or other structures within 3/4 mile of the well site.
- F. <u>Archaeological</u>, <u>Historical</u>, <u>or other Cultural Sites</u>: None were observed in the area.
- G. <u>Land Use:</u> Grazing, oil and gas production, and wildlife habitat.

#### H. Surface Ownership: Federal

#### 12. OPERATOR'S REPRESENTATIVE

A. Phil Ryan Commission Coordinator Texaco Exploration and Production, Inc. P. O. Box 3109 Midland, Texas 79702 Office Phone: (915) 688-4606

#### CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, and, that the work associated with true and correct; operations proposed herein will be performed bу Exploration and Production, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

8/16/00

A. Phil Ryan

Commission Coordinator

Midland, Texas

Enclosures jsp

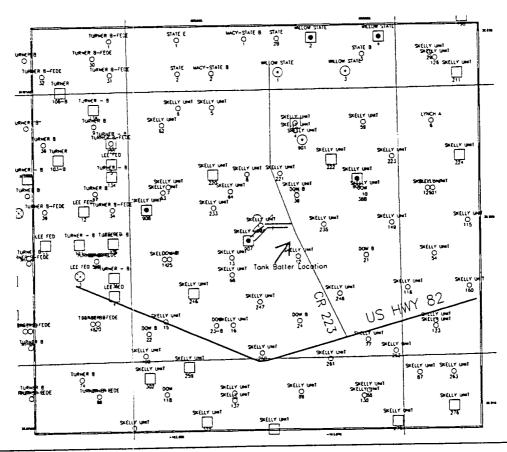
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NE/4 SW/4, Sec 21 T17S R31E
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#### SURFACE USE AND OPERATING PLAN

#### 1. Existing & Proposed Access Roads

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs, NM.
- B. All roads to the location are shown in Exhibit below. The existing roads are illustrated in Blue and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.
- C. Directions to Location: Go 1 mile east of 529 on Hwy 82, turn north on CR 223, go ½ mile, turn west to location.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

  Exhibit #4



Texaco Explorition and Production Inc.-Operator
Documenta: prepared by Mack Energy Corporation-D. ag Contractor
Attached to Form 3160-3
Mack Energy Corporation
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#### 2. Proposed Access Road:

Exhibit #3 shows the 75' of new access road due to the location being located in Chase Oil Corporation's yard. The road (if any) will be constructed as follows:

- A. The Maximum width of the running surface will be 14'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit or reserve pit area.
- F. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering, Hobbs, New Mexico.

#### 3. Location of Existing Wells & Proposed flow lines for New Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well. As shown on this plat there are numerous wells that are producing from the Grayburg San Andres and. The flowline will follow the archaeologically approved road from the Skelly Unit 907 to the Skelly Unit Federal battery located on Exhibit 4.

#### 4. Location of Existing and/or Proposed Facilities:

- A. Mack Energy Corporation does not operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
  - 1) Paddock Completion: Will be added to the Skelly Unit tank battery. The Facility is shown in Exhibit #5.
  - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
  - Any additional caliche for firewalls, etc. will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.

Surface Use Plan

Texaco Exp tion and Production Inc.-Operator
Documental. \_ prepared by Mack Energy Corporation-Di....ng Contractor
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4) It will be necessary to run electric power if this well is productive. Power will be run by CVE and they will send in a separate plan for power.

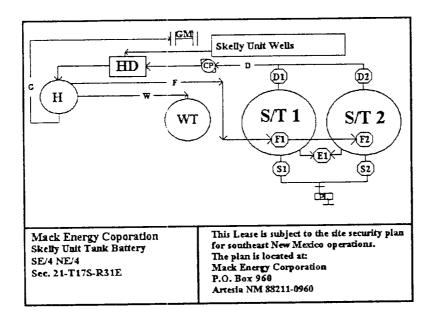


Exhibit #5

- A. 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 the well is completed).
  - Topsoil removed from the drill site will be used to recontour the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

#### 5. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #4. If a commercial fresh water source is nearby, fasline may be laid along existing

Surface Use Plan Page 7

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road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

#### 6. Source of Construction Materials:

All caliche required for construction of the drill pad and proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit or the reserve pit.

#### 7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in a lined working pit. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 150' X 100' X 10' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be only lined 100' X 100' X 10' the remaining 50' of pit will not be lined and used only as an emergency pit. In the event that it is used fluid will be removed in 48 hours. The reserve pit and working pit will be lined (5-7-mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.
- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass) until pumped to an approved disposal system; produced oil will be collected in steel tanks until sold.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and backfill and reseeded as per BLM specifications as weather permits. In the event of a dry hole only a dry hole marker will remain.

Surface Use Plan Page 8

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#### 8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

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#### 9. Well Site Layout:

- A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #6. Dimensions of the pad and pits are shown. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.
- B. Diagram below shows the proposed orientation of reserve pit, working pit and access road. There is a possibility that the pits will be moved around depending on Caliche in the area. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).

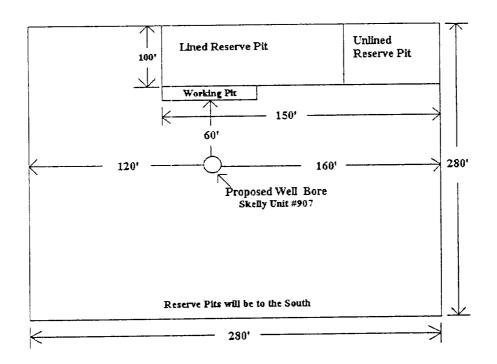


Exhibit #6

Surface Use Plan

Texaco Exp<sup>1-</sup> ation and Production Inc.-Operator
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#### 10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, the pit area, after allowing drying, will be broken out and leveled. The original topsoil will be returned to the pit area, which will be leveled and contoured to as nearly the original topography as possible.
- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock from being entrapped. The fencing will remain in place until the pit area is cleaned up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area to its original natural level and reseeded as per BLM specifications.

#### 11. Surface Ownership:

The well site and lease is located entirely on Private surface. Chase Oil Corporation is the surface owner.

#### 12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass with sagebrush.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

#### 13. Lessee's and Operator's Representative:

The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Matt J. Brewer Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960 Phone (505) 748-1288 (office)

Surface Use Plan Page 11

Attached to Firm 3160-3 Mack Ener | Jorporation Woolley Federal #7 1574 FSL & 1802 FWL NE/4 SW/4, Sec 21 T17S R30E Eddy County, NM

#### **CERTIFICATION**

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mack Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 8/8/00 Signed: 0.1

A. Phil Ryan

Commission Coordinator

Texaco Exploration and Production Inc.

Page 12

DISTRICT 1 P. O. Box 1980, Hobbs, NM 88240

DISTRICT II P. O. Drawer DD, Artesia, NM 88210

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

DISTRICT IV P. 0. Box 2088, Santa Fe, NM 87504-2088

API Number

40

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

- Plunged & Ahandon Well

3 Pool Name

State Lease-4 copies Fee Lease-3 copies

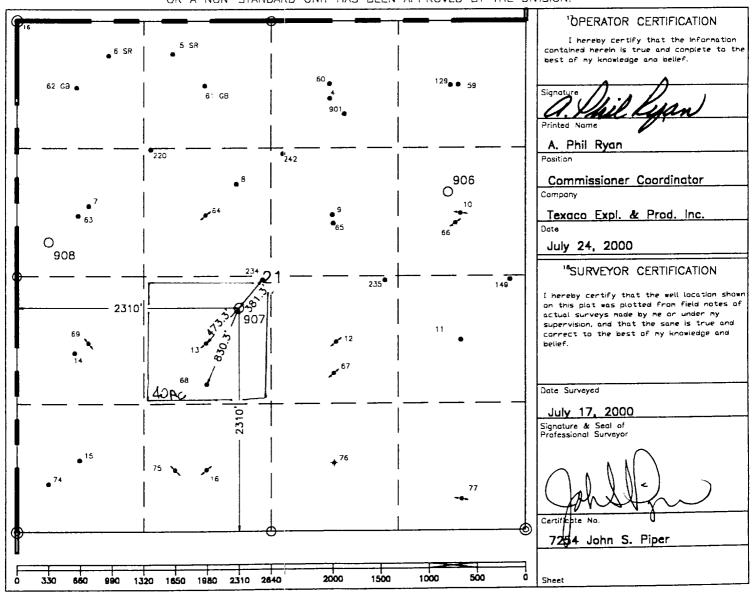
AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>2</sup>Pool Code

					Loc	o Hills. Paddock	(		
Property Coo	ie				<sup>5</sup> Property N	lame			<sup>6</sup> Weil Number
					Skelly	Unit			907
OGRID No.					BOperator N	Name			g Elevation
				TEXACO	EXPLORATION	& PRODUCTION,	INC.		3796°
					<sup>10</sup> Surface L	_ocation			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	<sup>7</sup> County
K	21	17 <b>-</b> S	31-E		2310'	South	2310'	West	Eddy
			'' B	ottom Hal	e Location If	Different From	Surface		
UL or lat no.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	<sup>7</sup> County
<sup>1</sup> Dedicated Acres	13Jpi	nt or Infill	1*Consolid	ation Code	<sup>15</sup> Order No.	<u> </u>	1		<u></u>

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.



# Texaco Exploration and Production Inc.-Operator Mack Energy Corporation-Drilling Contractor Hydrogen Sulfide Drilling Operation Plan

#### I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards an characteristics of hydrogen sulfide (H2S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

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

- 1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

#### II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

#### 1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

#### 2. Protective equipment for essential personnel:

A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

#### 3. H2S detection and monitoring equipment:

A. 1 portable H2S monitors positioned on location for best coverage and response.

These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

#### 4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

#### 5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

#### 6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- B. All elastomers used for packing and seals shall be H2S trim.

#### 7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

#### 8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

#### EXHIBIT #7

### WARNING

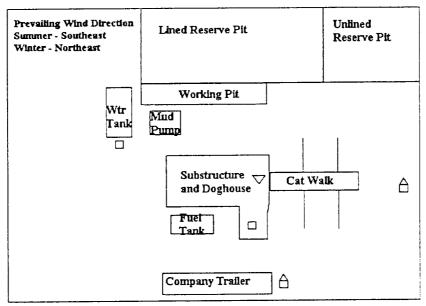
#### YOU ARE ENTERING AN H2S

#### AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE

MACK ENERGY CORPORATION 1-505-748-1288

## DRILLING LOCATION H2S SAFTY EQUIPMENT Exhibit # 8



- ── H2S Monitors with alarms at the bell nipple
- ☐ Wind Direction Indicators
- Safe Briefing areas with caution signs and hreathing equipment min 150 feet from

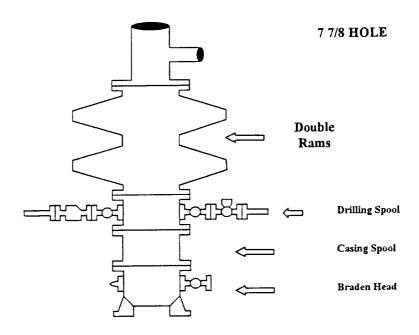
## Attachment to Exhibit #9 NOTES REGARDING THE BLOWOUT PREVENTERS Skelly Unit #907 Eddy County, New Mexico

- 1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
- 2. Wear ring to be properly installed in head.
- 3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
- 4. All fittings to be flanged.
- 5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
- 6. All choke and fill lines to be securely anchored especially ends of choke lines.
- 7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 8. Kelly cock on Kelly.
- 9. Extension wrenches and hands wheels to be properly installed.
- 10. Blow out preventer control to be located as close to driller's position as feasible.
- 11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

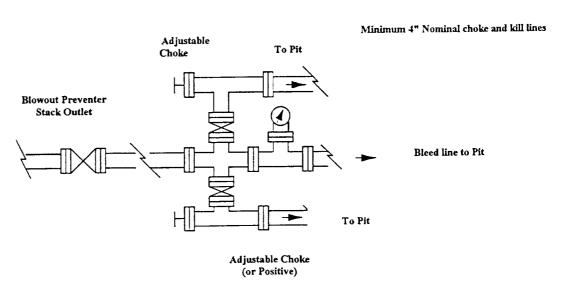
Biowout Preventers Page 17

## **Mack Energy Corporation**

## Exhibit #9 BOPE Schematic



## Choke Manifold Requirement (2000 psi WP) No Annular Required



#### **Mack Energy Corporatio**

#### Minimum Blowout Preventer Requirements

2000 psi Working Pressure 2 MWP EXHIBIT #10

Stack Requirements

NO.	Min. Nominal
1	2"
2	2"
3	
4	
5	
6a ]	2" Choke
6b 3	
7	
8 (	
9 1	3"
10	
11	
12	
13	5
14	
15	2"
11 (1) 12 (1) 13 (1) 14 (1)	

 OPTIONAL		
Flanged Valve	1 13/16	

#### CONTRACTOR'S OPTION TO FURNISH:

16

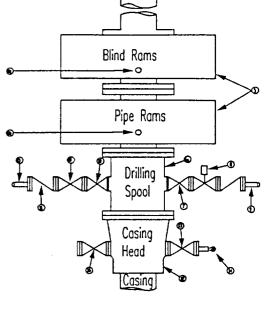
- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls, to be located near drillers' position.
- 4. Kelly equipped with Kelly cock.
- Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- Type RX ring gaskets in place of Type R.

#### MEC TO FURNISH:

- 1. Bradenhead or casing head 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.
- All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke 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
- Chokes will be positioned so as not to hamper or delay changing of choke beans.
   Replaceable parts for adjustable choke, or bean sizes, retainers, and choke wrenches

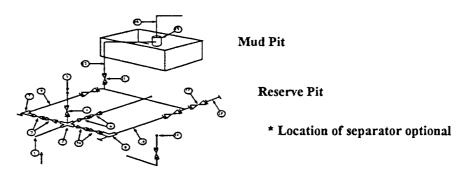


- to be conveniently located for immediate use.
- All valves to be equipped with hand-wheels or handles ready for immediate use.
- Choke lines must be suitably anchored.
- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (2000 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.

#### **Mack Energy Corporation**

Exhibit #11
MIMIMUM CHOKE MANIFOLD

3,000, 5,000, and 10,000 PSI Working Proving
2 M will be used or greater
3 MWP - 5 MWP - 10 MWP



#### **Below Substructure**

#### Mimimum requirements

		3,000 MWP			5,	000 MWP		10,000 MWP			
No.	T	I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating	
ı	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000	
2	Cross 3" x 3" x 3" x 2"			3,000			5,000				
2	Cross 3" x 3" x 3" x 2"								1	10,000	
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000	
4	Valve Gate Plug	1 13/16		3,000	1 13/16		5,000	1 13/16		10,000	
4a	Valves (1)	2 1/16		3,000	2 1/16	1	5,000	2 1/16		10,000	
5	Pressure Gauge			3,000			5,000			10,000	
6	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000	
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000	
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000	
9	Line		3"	3,000		3"	5,000		3"	10,000	
10	Line		2"	3,000		2"	5,000		2"	10,000	
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000	
12	Line		3"	1,000		3"	1,000		3"	2,000	
13	Line		3"	1,000		3"	1,000		3"	2,000	
14	Remote reading compound Standpipe pressure quage			3,000			5,000			10,000	
15	Gas Separator		2' x5'			2' x5'			2' x5'		
16	Line		4"	1,000		4"	1,000		4"	2,000	
17	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000	

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

#### EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX 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.
- 5. 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 floor in conjunction with the standpipe pressure gauge.
- 6. Line from drilling spool to choke manifold should bee as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.