District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Depart[illegible]

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 199
Instructions on bac
Submit to Appropriate District O
State Lease - 6 Copie
Fee Lease - 5 Copie

☐ AMENDED REPORT

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

[1] Operator name and Address	[2] OGRID Number
Phillips Petroleum Company 4001 Penbrook Street Odessa, TX 797962	017643
	[3] API Number 30-0 25-29815

[4] Property Code	[5] Property Name	[6] Well No.
009112	LEAMEX	39

[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
J	21	17-S	33-E		1805	SOUTH	1980	EAST	LEA

[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

[9] Proposed Pool 1	[10] Proposed Pool 2
WILDCAT (QUEEN)	

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
P	G	R	S B-2118	4166' GL
[16] Multiple	[17] Proposed Depth	[18] Formation	[19] Contractor	[20] Spud Date
NO	4,069'	QUEEN	TO BE DETERMINED	UPON APPROVAL

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#, K-55	1538'	1000 SX	SURFACE
7-7/8"	5-1/2"	17#, K-55	4805'	1600 SX	SURFACE

[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 z
Describe the blowout prevention program, if any. Use additional sheets if necessary

See attached procedure

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

P/Ug-Back

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Celeste A. Dale for: LMS

Printed name: L. M. SANDERS

Title: SUPERVISOR, REGULATION/PRORATION

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

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Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
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Santa Fe, NM 87505

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Fee Lease - 3 Copie

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name	
30-025-29815		WILDCAT (QUEEN)	
4 Property Code	5 Property Name		6 Well Number
009112	LEAMEX		39
7 OGRID No.	8 Operator Name		9 Elevation
017643	Phillips Petroleum Company		4167.8' GL

10 Surface Location

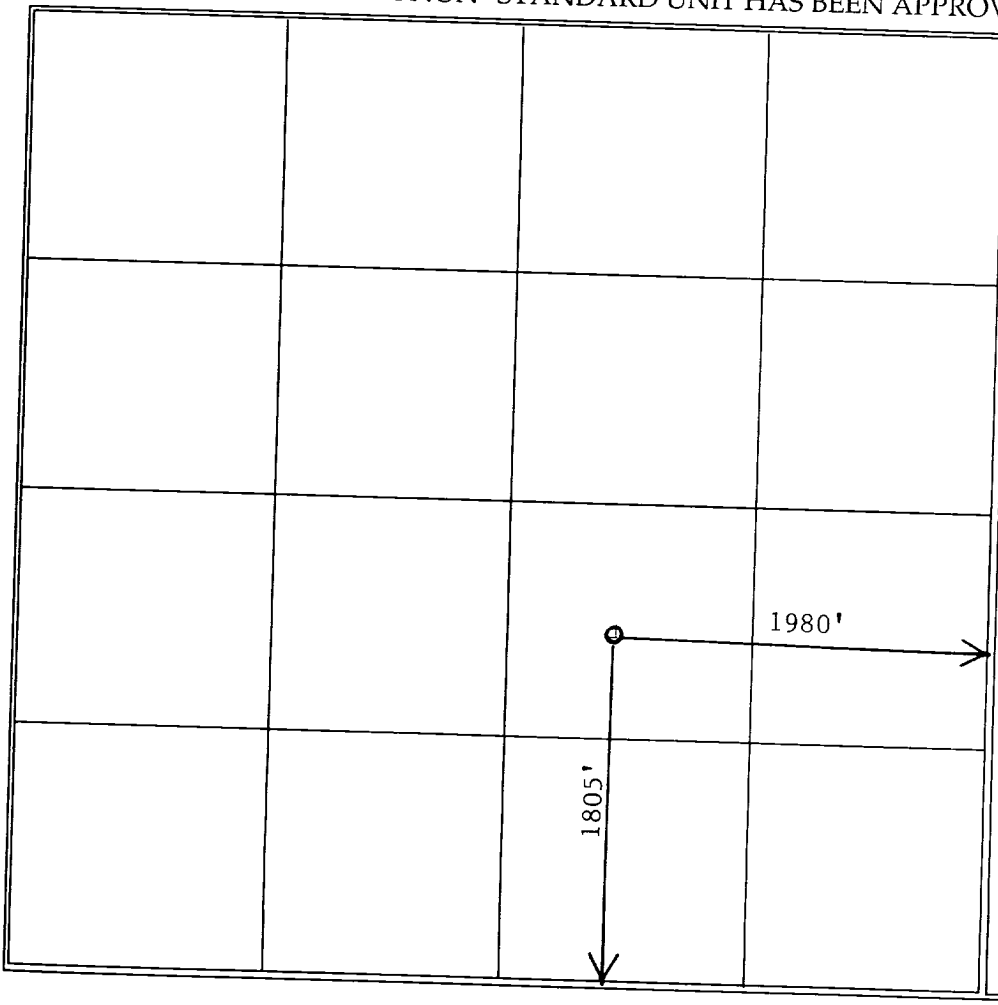
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
J	21	17-S	33-E		1805	SOUTH	1980	EAST	LEA

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
160			

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



17 OPERATOR CERTIFICATION

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

Signature

L. M. SANDERS
Printed Name

SUPV., REGULATION/PRORATION
Title

03/15/00
Date

18 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 supervision, and that the same is true and correct to the best of my belief.

11/07/86
Date of Survey

Signature and Seal of Professional Surveyer:

Certificate Number

INTER-OFFICE CORRESPONDENCE

OFFICE: New Mexico Exploitation Team, Phillips South West Region

DATE: 13 March 2000

TO: JACK LOWDER

SUBJECT: **LEAMEX 39 QUEEN TEST**

Background:-
The subject well is currently producing in Grayburg / San Andres at 2 BO/D , 2 BW/D and 8 MSCF/D. The current perfs will be isolated and Queen perfs added and stimulated. A downhole test is recommended for this interval to determine the Queen Productivity.

A gradient survey and measurement of downhole pressures will determine:-

1) Loading problems.
2) Perm and Skin.
3) Reservoir Pressure for drainage volume estimate.

Downhole Conditions
Reservoir Pressure/Temp = expected to be less than 5000 psi/90 degF

Gauge Requirements
3 Bottom hole memory gauges to record downhole pressures and temperatures (two quartz and one strain gauge). Downhole gauges are to be RIH. The gauge company will determine sampling frequency and memory requirements prior to test.

Flow Rate and Other Measurements
Details of test gas, condensate and water rates must be provided for tests analysis. A test separator is therefore required.

Perforation Depths
Perforations are in the Lower Queen at the following depths:-
4059-4069 (cased)

Leamex #39
Perforate Lower Queen and Fracture Treat

E. Recommended Procedure

1. MIRU DDU. Hook up workover pit. POOH w/ rods and pump. ND wellhead and NU shop tested, Class 1 BOP and environmental tray.

2. TOOH w/ 2 3/8" tubing. Visually inspect tubing while pulling. If condition is good, use tubing as workstring. If not, lay down 2 3/8" tubing and PU 2 7/8" workstring.

3. TIH w/ casing scraper to 4250'+/-. TOOH w/ casing scraper.

4. MIRU wireline. Run GR-CCL log from 4250' to 3950'. Perforate Queen 4059-4069' w/ 4 SPF (44 holes, 0.38" diameter, 90 degree phasing) using 4" casing gun as per Dresser Atlas Compensated Z-Densilog/Compensated Neutron/Gamma Ray Log dated 1/10/87 (log section attached). RDMO wireline.

5. PU and TIH with 5 1/2" production packer, two profile nipples (contact ARC Pressure Data at 800-375-7728 for nipple types to be used in testing), on/off tool, and CIBP on workstring. Test workstring to 6000# while GIH. Set CIBP at 4120'+/-. Set packer at 4100'+/- and test CIBP to 1000#. Release packer and spot 500 gal 15% NEFE HCL across perfs. Set packer at 4000'+/-.

6. Test surface lines to 5000 psig and pressure annulus to 500 psig. Fracture treat Queen perfs 4059-4069' w/ 7000 gallons of Delta Frac 20 carrying 21,000 lbs of 16/30 mesh brown sand. Ramp sand concentration from 1-6 ppg. Treat at 8 BPM and max P of 5000 psig as follows:

   a. Pump 2000 gallons of Waterfrac 20.
   b. Pump 2000 gallons of Delta Frac 20.
   c. Pump 2000 gallons of Delta Frac 20 w/ 1-4 ppg of 16/30 brown sand (4,939 lbs).
   d. Pump 2000 gallons of Delta Frac 20 w/ 4-6 ppg of 16/30 brown sand (9,975 lbs).
   e. Pump 1000 gallons of Delta Frac 20 w/ 6 ppg of 16/30 brown sand (6,000 lbs).
   f. Flush w/ 16 barrels of slick water.
   g. Record ISIP.
   h. Flow back well @ 1-2 BPM until closure.
   i. Shut in well until gel breaks.

7. Install choke manifold, flare, and flare pit. RU swab equipment and swab well in. RD swab equipment. If 2 3/8" production tubing used as workstring, go to step #9. If 2 7/8" tubing used as workstring, set blanking plug in packer. TOOH and LD workstring.

8. TIH with 2 3/8" production tubing. Remove blanking plug.

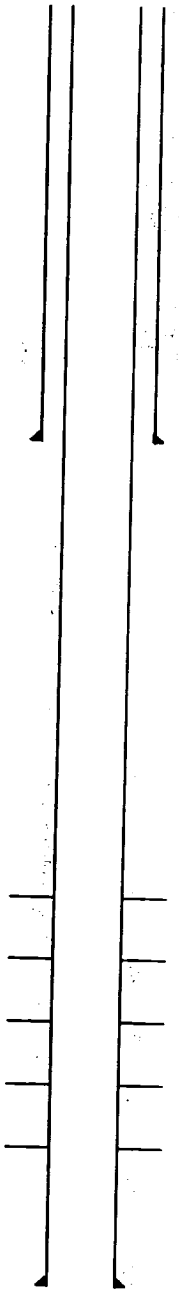
9. ND BOP and NU WH. RDMO workover pit.

10. RDMO DDU and place well on production. Take fluid samples downstream of choke and record surface pressure and choke setting every hour. Flow until well cleans up and pressure stabilizes. Install test separator if gas is produced. Follow attached 3/13/00-test procedure from Rex Owen.

Jack T. Lowder

Jack T. Lowder
3/13/00

Phillips Petroleum Company - Southwest Region
March 3, 2000



RKB 4177'
DF 4176'
GL 4166'

8 5/8" Casing (12 1/4" hole)
set @ 1538', 1000 sx cmt.
Circ. 250 sx
37 jts - 24# K-55 ST&C

Grayburg Perforations

4282' - 4286' w/ 2 SPF (8 holes)

4411' - 4415' w/ 2 SPF (8 holes)

4456' - 4463' w/ 2 SPF (14 holes)

4476' - 4480' w/ 2 SPF (8 holes)

4532' - 4544' w/ 2 SPF (24 holes)

5 1/2" Casing (7 7/8" hole)
set @ 4805', 1600 sx cmt.
Circ. 304 sx
117 jts - 17# K-55 ST&C

PBTD: 4744'
TD: 4805'

Lease & Well No.: **Leamex #39**

Well Category:	One	Status : Active
Area:	New Mexico	
Subarea:	Maljamar	Field : Maljamar Grayburg/San Andres
Legal Description:	API #30-025-29815	
	1805' FSL, 1980' FEL, Sec 21, T-17-S, R-33-E	
	Lea County, New Mexico	
Spudded:	01/01/1987	
Completed:	02/15/1987	

Well History:

2/87 Perf'd Grayburg 4282-86', 4411-15', 4456-63',
4476-80', and 4532-44' w/ 2 spf (62 holes)
Acdzd 4532-4544' w/ 1800 gal 15% NEFE HCl
Acdzd 4282-4480' w/ 1900 gal 15% NEFE HCl
Frac'd 4282-4544' w/ 32,000 gal x-linked 2% KCl wtr
and 62,000 lbs 20-40 mesh sand
IPP 3/26/87 40 bo, 18 mcf, 18 bw / 24 hrs

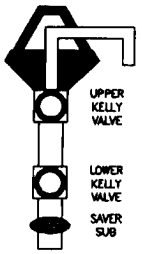
2/88 Acdzd 4282-4544' overall w/ 2000 gal 15% NEFE HCl
Scale sqzd w/ 1 drum Techni-Hib 756 in 20 BW
Prod before: Pmpd 25 bopd, 18 mcfd, 15 bwpd
Prod after: Pmpd 17 bopd, 12 mcfd, 25 bwpd on 2/22/88

7/92 Acdzd 4282-4544' overall w/ 1500 gal 15% NEFE HCl
Prod before: Pmpd 25 bopd, 1 mcfd, 1 bwpd on 12/8/91
Prod after: Pmpd 10 bopd, 10 mcfd, 6 bwpd on 7/17/92

Equipment Data as of 10/97 (last pull):
142 jts 2 3/8" 4.7# J-55 Tubing @ 4580'
TAC @ 4187', SN @ 4579'
2" x 1 1/4" x 16' rod pump
48 7/8" D rods and 133 3/4" D rods

File name: o:\everyone\wellfile\caprock\leamex\Leamex #39.xls

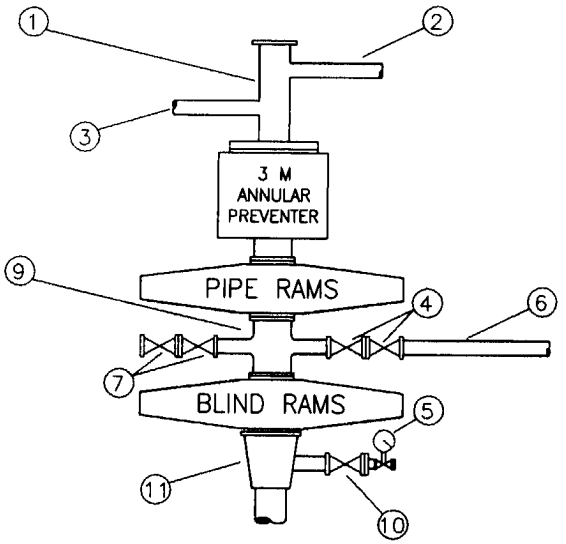
DRILLSTRING CONTROL DEVICES



ON DRILL FLOOR

FULL OPENING

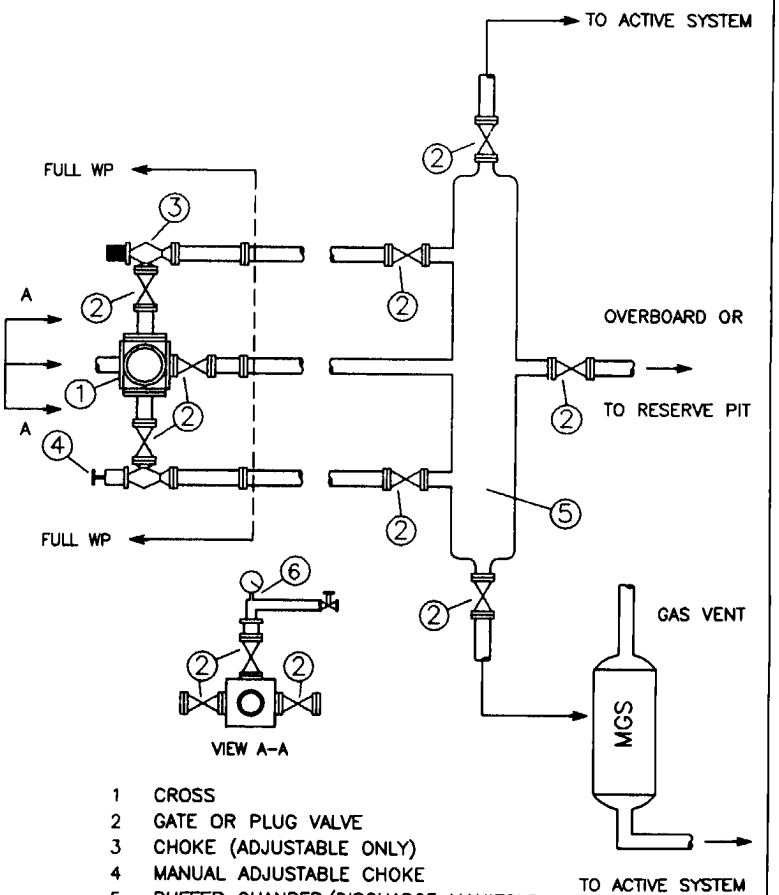
BOP STACK



1 BELL NIPPLE
2 FLOW LINE
3 FILL-UP LINE
4 3" FE PRESSURE-OPERATED CHOKE LINE VALVE
5 PRESSURE GAUGE
6 3" CHOKE LINE TO CHOKE MANIFOLD
7 3" FE GATE OR PLUG VALVES
8 2" KILL LINE
9 DRILLING SPOOL
10 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
11 CASING HEAD HOUSING

CHOKE MANIFOLD

DISCHARGE MANIFOLD OPTIONAL FOR LAND RIGS



1 CROSS
2 GATE OR PLUG VALVE
3 CHOKE (ADJUSTABLE ONLY)
4 MANUAL ADJUSTABLE CHOKE
5 BUFFER CHANBER/DISCHARGE MANIFOLD
6 NEEDLE VALVE AND PRESSURE GAUGE

DRLCTRL.DWG\LWS-7/11/97