

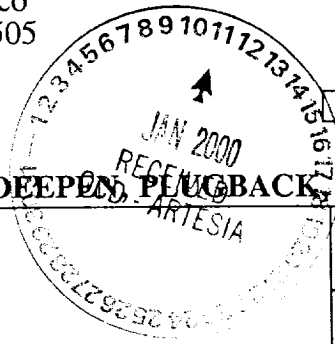
District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 S. 1st Street, Artesia, NM 88210-2834
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

1991

Form C-101
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505



AMENDED REPORT

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

¹ Operator name and Address KERR-McGEE OIL & GAS ONSHORE LLC P.O. Box 809004 Dallas, TX 75380-9004		² OGRID Number 012558
⁴ Property Code 24520		³ API Number 30-0 15-25654
⁵ Property Name LOWE STATE		⁶ Well No. 2

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
M	36	21 S	23 E		330'	SOUTH	330'	WEST	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
⁹ Proposed Pool 1 WC INDIAN BASIN (ATOKA), EAST					¹⁰ Proposed Pool 2 97000				

¹¹ Work Type Code P	¹² Well Type Code G	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3907'
¹⁶ Multiple NO	¹⁷ Proposed Depth 9092'	¹⁸ Formation AKTOKA	¹⁹ Contractor NOT YET AWARDED	²⁰ Spud Date 01/10/00

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
	13 3/8"	54.5#	324'	324 SXS	SURFACE
10 3/4"	9 5/8"	36#	1999'	850 SXS	SURFACE
8 3/4"	7"	26#	7415'	200 SXS	6350' TS
5 1/4"	4 1/2"	N-80	7200 - 9585'	350 SXS	

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

MIRU. ND WH. NU BOP'S. RIH W/ GAUGE RING & TAG 4 1/2" PKR W/ BLANKING PLUG @ 9127'. MORROW PERFS 9223-9399'. RIH W/ DUMP BAILER & SPOT 35' CMT ON TOP OF PKR. WOC OVERNIGHT. RIH & TAG TOC. PRESSURE CSG TO 1000 PSI. RIH W/ EQUIP. W/ PERF GUNS AND POSITION TO PERF ATOKA SANDS 8720- 8728'.

ATTACHMENTS OF WORKOVER DETAIL.

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

Signature:
 Printed name: STEPHEN FORE 972-715-4520
 Title: TECHNICAL ANALYST 01/06/00

OIL CONSERVATION DIVISION	
Approved by:	ORIGINAL SIGNED BY TIM W. GUM
Title:	DISTRICT II SUPERVISOR
Approval Date: 1-11-00	Expiration Date: 1-11-01

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 Energy, Minerals & Natural Resources Department

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 Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name INDIAN BASIN (ATOKA)	
⁴ Property Code		⁵ Property Name LOWE STATE			⁶ Well Number
⁷ OGRID No. 012558		⁸ Operator Name KERR MCGEE OIL & GAS ONSHORE LLC			⁹ Elevation 3845' GL

¹⁰ Surface Location

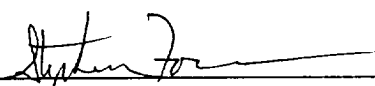
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
M	36	21-S	23-E		330	SOUTH	330	WEST	EDDY

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 300 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON--STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p></p> <p>Signature STEPHEN FORE</p> <p>Printed Name TECHNICAL ANALYST</p> <p>Title 01-06-00</p> <p>Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>_____</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>_____</p> <p>Certificate Number</p>

DATE: SEPT 30, 1999
WELL NAME: LOWE STATE #2
FIELD: INDIAN BASIN
LOCATION: 330' FSL, 330' FWL SEC 36, T21S, R23E

AFE _____

DATA

Permanent Zero Point: KB @ 3857', GL @ 3845'
PBSD: 9470 FT.
Casing Size, Weight, Depth: 7", 26#, K-55 @ 7415',
..... 4-1/2", N-80, 11.6# FR. 7200 - 9595'
Tubing Size, Weight, Type, Depth: 2" KILL STRING
Packer: NONE
TOC: 6350'
Log: DENSITY-NEUTRON
Perfs (Formation & Depth) : U. MORROW, 9223-9399'

RECOMMENDED WORKOVER PROCEDURE

"SAFETY IS TOP PRIORITY"

1. MIRU WO RIG. RD WELLHEAD. RU BOP'S. TEST TO 250/5000 PSI. POOH W/ 2" KILL STRING AND LD.
2. RU W/L. RIH W/ GAUGE RING AND TAG PLUG AT 9127 FT. RIH W/ DUMP BAILER AND SPOT 35 FT. CMT ON TOP OF PLUG. NEW CMT TOP EST AT 9090 FT. WOC OVERNIGHT. RIH W/ GAUGE RING, TAG TOC. POOH. RD WL. PRESSURE TEST CSG AND PLUG TO 1000 PSI.
3. RU HALLIBURTON. PU AND RIH W/ THE FOLLOWING(SEE ATTACHED SCHEMATIC):
 - A. 8' 2 3/4", 6 SPF, 60 DEG PHASE TCP GUNS
 - B. MODEL II D FIRING HEAD
 - C. 30 FT 2-3/8", 6.5#, N-80 TBG(KMG SUPPLIED)
 - D. 2-3/8" FILL DISC
 - E. 4 FT. 2-3/8", 6.5# PUP JT.
 - F. 2-3/8", MECHANICAL TUBING RELEASE
 - G. 10 FT. 2-3/8", PUP JT.
 - H. "X" LANDING NIPPLE

- I. 6 FT. 2-3/8" PUP JT.
- J. 4-1/2" PERMALATCH(PLS) PKR
- K. 4-1/2" X 2-3/8" ON/OFF TOOL W/ "X" PROFILE
- L. 2-3/8" X 2-7/8" CROSSOVER
- M. RA TAG
- N. 2-7/8", 6.5#, N-80 TO SURFACE

- 4. RIH TO APPROX 8730 FT. POSITION GUNS ACROSS ATOKA SAND. RU EL. RIH W./ GR/CCL. CORRELATE GUNS ACROSS ATOKA SAND FR. 8720-8728 FT. SPACE OUT PRODUCTION STRING. PICKLE PIPE WITH 1000 GALS 15% HCL. REVERSE OUT WITH 2% KCL SET PKR. LAND PROD. STRING IN WELLHEAD.
 - 5. RD BOPS. RU 5K TREE. RIH W/ SAND LINE, SWAB OFF APPROX. 2000 FT OF FLUID TO ACHIEVE AN UNDERBALANCE OF 500-1000 PSI. RD WO RIG. RU LUBRICATOR. DROP BAR AND PERFORATE WELL. FLOW BACK WELL 1-2 HRS TO CLEAN UP PERFS. SI MASTER VALVE. RD HALLIBURTON LUBRICATOR. RU WL LUBRICATOR. RIH W/ SLICKLINE SHIFTING TOOL TO RELEASE TCP GUNS. LATCH MECHANICAL RELEASE . JAR UP AND RELEASE GUNS. POOH. RD WL.
 - 6. RU SCHLUMBERGER DOWELL. INSTALL HALLIBURTON TREE SAVER. HOLD SAFETY MEETING. PRESSURE TEST LINES TO 6000 PSI.
 - 7. FRACTURE STIMULATE THE WELL AS FOLLOWS PER THE ATTACHED SCHLUMBERGER DOWELL PROCEDURE:
 - A. 22000 GALS WF 140 W/ 70Q CO2
 - B. 4000 GALS WF 140 W/ 70Q CO2 + 1 PPG 20/40 ECONOPROP
 - C. 6000 GALS WF 140 W/ 70Q CO2 + 2 PPG 20/40 ECONOPROP
 - D. 8000 GALS WF 140 W/ 70Q CO2 + 3 PPG 20/40 ECONOPROP
 - E. 7000 GALS WF 140 W/ 70Q CO2 + 4 PPG 20/40 ECONOPROP
 - F. 2756 GALS WF 140 W/ 70Q CO2 FLUSH
- NOTE: (1) MAX SURFACE TREATING PRESSURE CALC. @ 5200 PSI
(2) TOTAL PROPPANT @ 68,000 LBS
(3) AVG PUMP RATE @ 10 BPM
(4) TOTAL PUMP TIME @ 126 MINS
- 8. SI WELL. RD TREESAVER. RD SCHLUMBERGER DOWELL. FLOW BACK WELL, POP.

WELL COMPLETION SKETCHES SUN-5036-4-A

WELL
Lowe State #2

FIELD
Indiana Basin

DATE
9-22-99

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

3/8" 54.5# K55 @ 324'
cmt'd w/ 370 SXS

2" kill string

9 5/8" K55 31# @ 1999'
cmt'd w/ 850 SXS

TOC @ 6350' (T.S.I.)

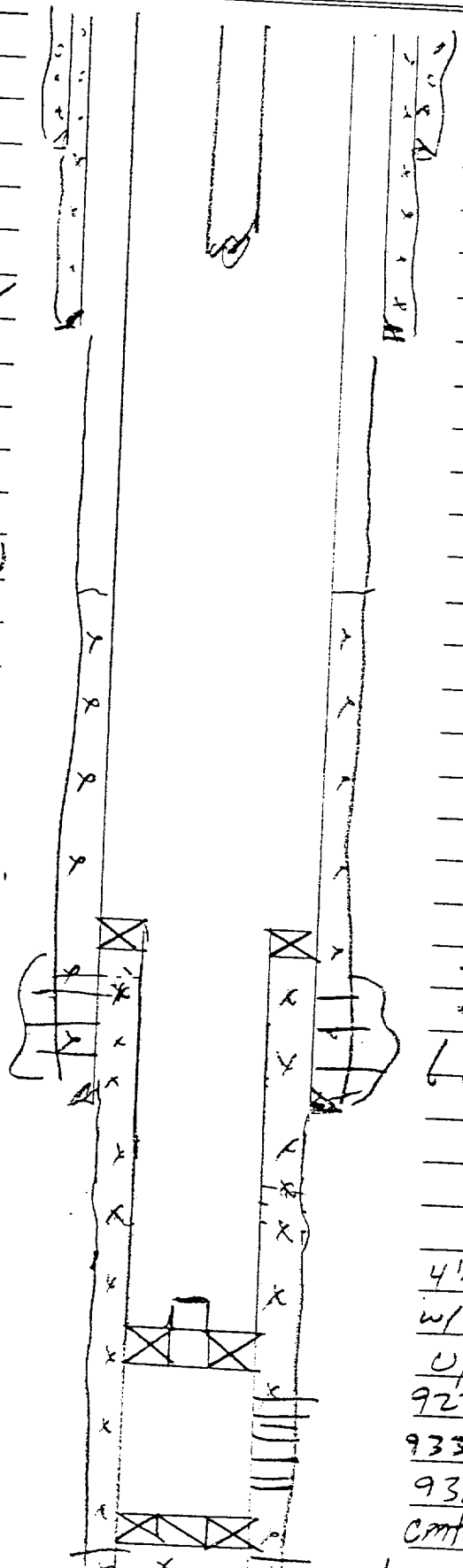
liner top 293' w/ 100 SXS

U. Penn
7356-72, 4 spf
598 w/ 200 SXS
(perf. 12/86, 598-12/90)

1" K55 26# @ 7415'
cmt'd w/ 200 SXS, 2/91

4 1/2" UNFB per @ 9127'
w/ blanking plug (at on/off tool)
Upper Morris
9223-39', 9284-88',
9330-34', 9376-80',
9386-99'
cmt string @ 9470'

1/2" N-80 11.4# liner
2. 7200 - 9545'



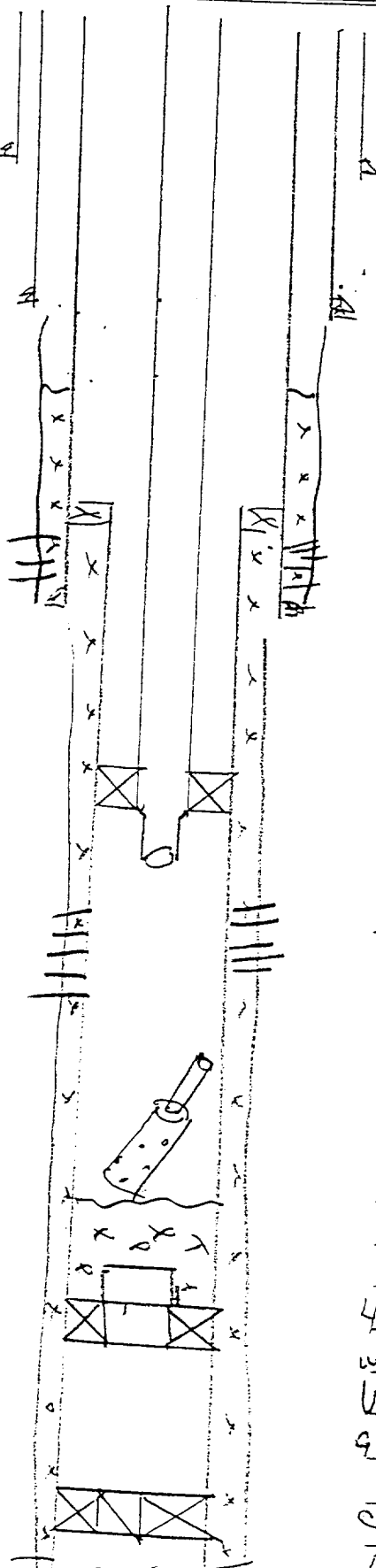
WELL lowe st. #2 FIELD Indian Basin DATE 9-22-99

PRESENT COMPLETION SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

2", K55, 26" @ 7415'
Cmt'd w/ 200 SXS, 2/41)



2 7/8", 6.5, N-80 eve end
to tr. 7300'
2 7/8", 6.5, N-80 IJ
fr. 7300-8620'

U. Penn
7356-72, 4 spf
Sgs w/ 200 SXS.
(perf 12/86, sgs - 12/90)

4 1/2", permeateh place
+ on/off tool @ 8620'

Atoka
- 8720-28' (6 spf)
est BHP = 4000 psi @ 2'

2 3/4" TCP guns (± 58ft)

35' cmt. plug rec'd 9092

4 1/2" unseal place @ 9127'
w/ blanding plug: on/off tool
U. Morris: 9323-39, 94-88,
9330-34, 9376-80, 986-99'

cmt rtax @ 9470'

1 1/2" N80, 11.6# line