

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTN.M. Oil Cons. Div-Dist. 2
1301 W. Grand Avenue
Alamosa, NM 88210
FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

Serial No.
NM 36915

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6. If Indian, Allottee or Tribe Name
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. Unit or CA Agreement Name and No.
2. Name of Operator Chevron U.S.A. Inc.		8. Lease Name and Well No. LOWELL "15" FEDERAL #2
3a. Address 15 Smith Road, Midland Texas 79705	3b. Phone No. (include area code) (915) 687-7375	9. API Well No. 30-025-36261
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 330' FNL, & 990' FWL, UNIT D At proposed prod. zone SAME		10. Field and Pool, or Exploratory TONTON-SEVEN RIVERS
14. Distance in miles and direction from nearest town or post office* 30 Miles West of Hobbs, NM		11. Sec., T., R., M., or Blk. and Survey or Area SEC 15, T-19S, R-33E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 330'	16. No. of Acres in lease 800	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3950'	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3760'	22. Approximate date work will start* 05-27-03	23. Estimated duration 4 WEEKS

24. Attachments

Captain 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Denise Pinkerton</i>	Name (Printed/Typed) DENISE PINKERTON	Date 2-26-03
Title REGULATORY SPECIALIST		
Approved by (Signature) <i>/s/ LESLIE A. THEISS</i>	Name (Printed/Typed) /s/ LESLIE A. THEISS	Date APR 21 2003
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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 5/8"
CASING MUST BE CIRCULATEDAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED*KG*

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

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

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36261	Pool Code -	Pool Name Into Seven Rivers
Property Code 32266	Property Name LOWELL "15" FEDERAL	Well Number 2
OGRID No. 4323	Operator Name Chevron U.S.A. INC.	Elevation 3670'

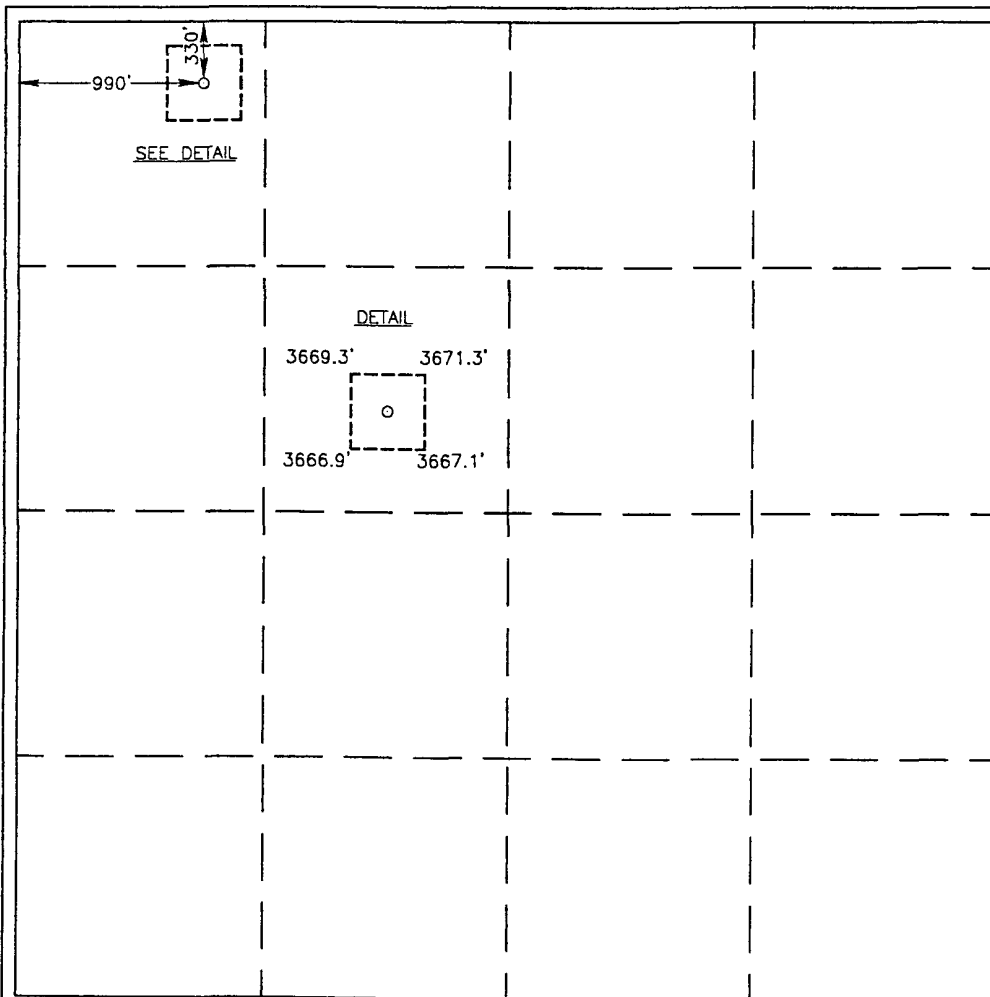
Surface Location

UL or lot No. D	Section 15	Township 19-S	Range 33-E	Lot Idn	Feet from the 330'	North/South line NORTH	Feet from the 990'	East/West line WEST	County LEA
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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 40		Joint or Infill	Consolidation Code	Order No.					

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



OPERATOR CERTIFICATION

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

Denise Leake Pinkerton
Signature

Denise Leake Pinkerton
Printed Name

Regulatory Specialist
Title

2-26-03
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
supervision and that the same is true and
correct to the best of my belief.

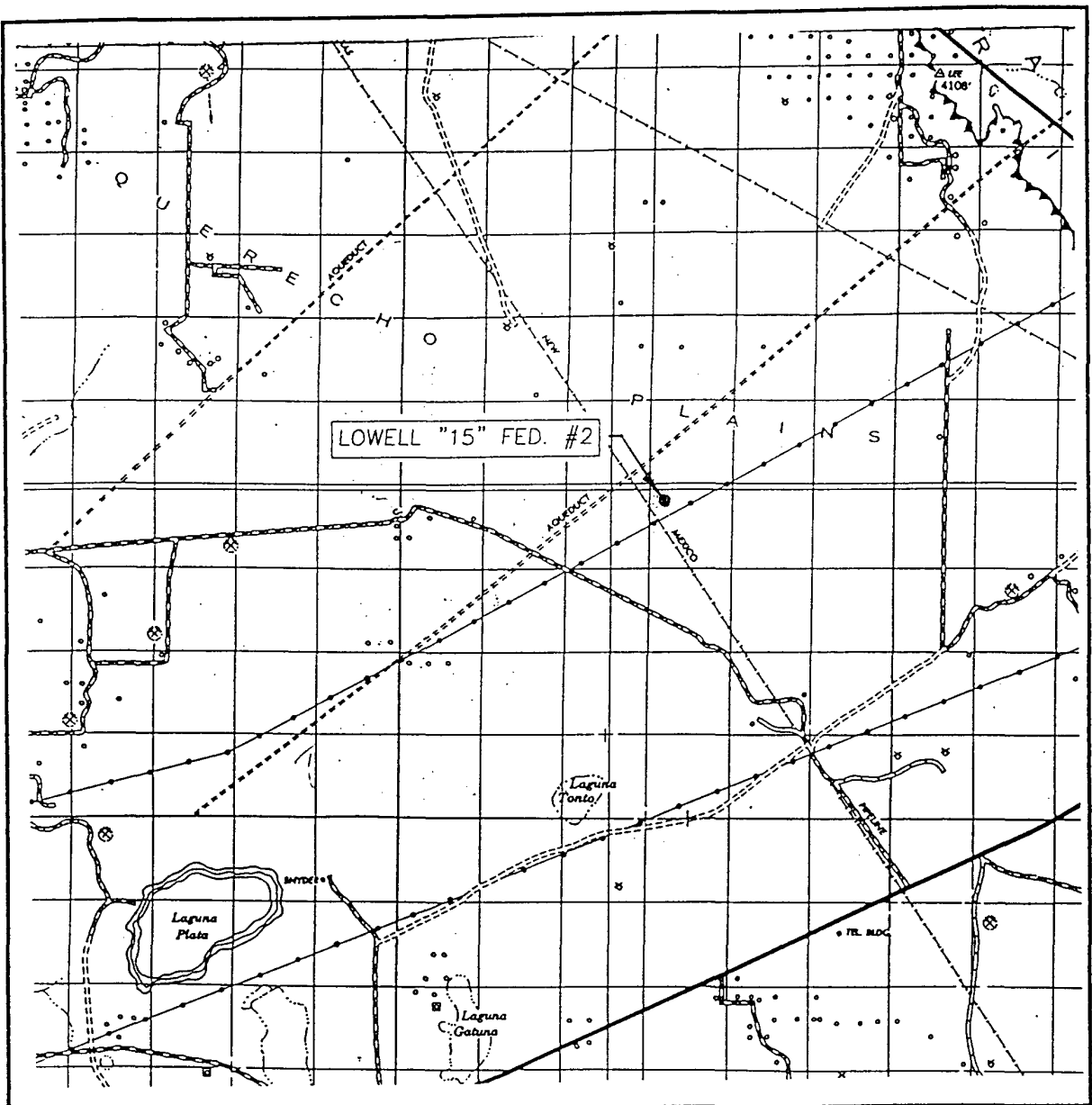
DECEMBER 02, 2002

Date Surveyed. **LA**
Signature & Seal of
Professional Surveyor

Ronald J. Eidson 12/03/02
02.11:0923

Certificate No. **RONALD J. EIDSON 3239**
GARY EIDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 15 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FNL & 990' FWL

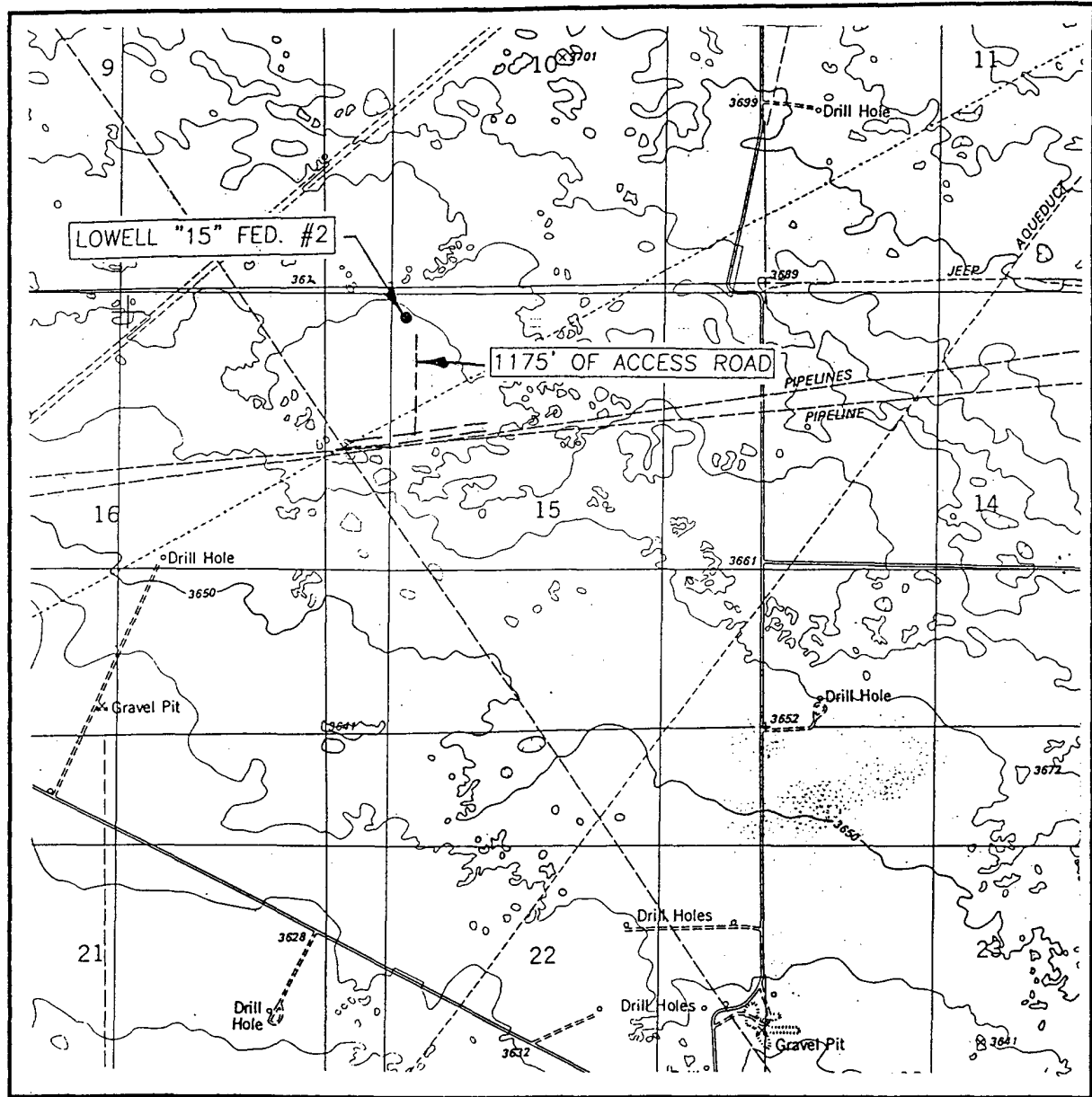
ELEVATION 3670'

OPERATOR ChevronTexaco Corporation

LEASE LOWELL "15" FED.

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

LAGUNA GATUNA NW, N.M.

SEC. 15 TWP. 19-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FNL & 990' FWL

ELEVATION 3670'

OPERATOR ChevronTexaco Corporation

LEASE LOWELL "15" FED.

U.S.G.S. TOPOGRAPHIC MAP

LAGUNA GATUNA NW, N.M.

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

ANTICIPATED DRILLING PROGRAM

Date 12/9/2002

WBS. No. ?

Cost Center ?

Field Tonto - Seven Rivers

Lease Lowell 15 Federal Well No. 2

Surface Location 330' FNL, 990' FWL, Section 15, T19S, R33E

Bottom Hole Location _____

Approved Total Depth	Estimated Cost	Dry Hole Cost	_____ Days Drill	<input checked="" type="checkbox"/> Single	Dev. <input type="text" value="XXX"/>
<u>3,950</u> TVD	<u>265,900</u>	Cost Completion	_____ Days Compl.	<input type="checkbox"/> Dual	Res. <input type="text"/>
<u>3,950</u> MD		Cost	_____ Days Total	<u>100</u> % Tx. Int.	OSWC <input type="text"/>
<u>3,668</u> GL ELEV		Total			RWC <input type="text"/>

ANTICIPATED FORMATION TOPS

Sand Name	TVD Expected	Press Grad. (psi/ft)	B H P	P. P.	G a u g e	F. L.	Equiv. Mud Wt.	Antcpd. Prod.	Antcpd. SITP
Rustler Anhydrite	1445								
Transill									
Yates Sandstone									
Seven Rivers	3540								
Seven Rivers Pay Sand	3620	Primary Pay							
Grayburg Dolomite									
San Andres Dolomite									
TD	3950								

CASING AND CEMENTING DATA

SIZE	Depth			Sacks	Wt. (PPG)	Instructions
Hole	Csg.	Depth				
12.25	8.625	1500	FW	A 920	14.8	Class "C" with 2% CaCl2
			Brine			
			--Intermediate			
7.875	5.5	3950	Brine	L 550	12.4	Class "H" 35/65 Poz with 6% gel, 5% salt, 1/4# cell.
			--Production	T 300	14.2	Class "H" 50/50 Poz with 2% gel, 5% salt, 1/4# cell.

Prepared by: B. D. Schaneman Phone # 915-687-7402 Reviewed by: _____

Reviewed by: _____ Approved by: _____

CEMENT

	Surface	Llr	Prod. Tail	Prod. Lead
System	C; 2%S1	0.2	50/50H; 2%D20,	35/65H; 6%D20,
Lowell 15 Federal 2			5%D44, 0.25#D29	5%D44, 0.25#D29
Density, ppg	14.8000	# #	14.2000	12.4000
Yield, cf/s	1.3400	# #	1.3500	2.1400
Water, g/s	6.3100	# #	6.3000	11.9500
Class C \$/sx	3.0960			
Class C # of sx	1.0000			
Class H \$/sx		# #	2.9600	2.9600
Class H # of sx		# #	0.5000	0.6500
Poz \$/sx		#	1.6520	1.6520
Poz # of sx		#	0.5000	0.3500
S1 \$/#	0.1600			
S1 #/sx	1.8800			
D20 \$/#		#	0.0680	0.0680
D20 #/sx		#	1.7300	5.3300
D44 \$/#		#	0.0520	0.0520
D44 #/sx		#	2.6200	4.3500
D29 \$/#		#	0.7080	0.7080
D29 #/sx		#	0.2500	0.2500
D79 \$/#				
D79 #/sx				
D42 \$/#				
D42 #/sx				
Cost \$/sx	3.3970	# #	2.7370	3.2680
Cost \$/cft	2.5350	# #	2.0270	1.5270
Feet of fill	1500	# #	1050	3000
Casing Size	8.6250		5.5000	5.5000
Hole Size	12.2500		7.8750	7.8750
Annular Factor	0.4127	# #	0.1732	0.1732
Excess	2.0000	# #	2.2500	2.2500
Sacks	920	0 0	300	550
Cement Bottom	1500	# #	4050	3000
Cement Top	0	0 #	3000	0
Placement Time	31	0 0	10	30
Flush Time	15	0 0	17	12
Bottom Hole Temp	81	# #	100	93
	Surface	Llr	Prod. Tail	Prod. Lead

CHEVRON U.S.A., Inc.
Well Proposal Data Sheet

Well Name: Lowell 15 Federal #2 Field/Area: Carlsbad Date: 11-19-02
 Surf. Loc. : 330' FNL, 990' FWL Sec 15-T19S-R33E County/State: Lea Co., NM
 Shot Pt. for Surf. Loc.: _____ Authorized TD: 3950' MD
 B.H. Target: _____ @ _____ TVD Actual Est. TD: _____ MD
 Shot Pt. for B.H. Target: _____ Actual Est. TD: _____ TVD

Estimated Formation Tops (based on 3668' GL, est. elevations):

Formation	TVD	Subsea
Rustler	1445'	
Severn Rivers	3540'	
Severn Rivers Pay Sand	3620'	

Formation	TVD	Subsea

Suggested Csg Depths: 8 5/8 @ 1550', 5 1/2 @ 3950'

Required Mud Parameters: _____

Sample, Drilling Time & ML Requirements: Collect 10' samples from 3000' to TD

DST's (incl any special requirements): _____

Cores (20 Sidewall Cores, Est cost \$1300): _____

Anticipated Completion Intervals:		
Formation	Depths	Pressures
Seven Rivers	3620-38	

Other Potential Pay Zones:		
Formation	Depths	Pressures

Type of Logs (incl sidewall cores) and Est. Total Cost: _____

Run # 1 Platform Express W/High Res Laterologs and NGT GR & Sidewall Coring Tool

Run # 2 (logs & intervals): _____

Run # 3 (logs & intervals): _____

Possible Drilling Hazards (High press, lost circ, H2S, deviation, etc.): _____

Remarks (Special well, production csg size/OH completion or location requirements, etc): _____

Base Fresh Water: _____ By: Water Board Letter/Other (Specify) _____

Rule 37/Unorthodox Location?: YES / NO Date Regulatory Approval Expected?: _____

Required height of tubing spool above GL: _____ Offset Well Data Available? YES / NO

Required Xmas tree size & pressure rating: _____ Completion Type (Flwg/Type Art Lift): _____

Prep by: _____

11/26/2002

Data Sheet - New Well Staking - Carlsbad Team

Date: 11-19-2002

Well Name:	Lowell 15 Federal #2
Chevron W.I.:	100%
Section-Township-Range:	S15-T19S-R33E
County, State	Lea Co., NM.
Proposed Surface Location:	330' FNL, 990' FWL
Seismic Shot Points for Surface Location:	
Proposed Bottom Hole Target:	
Seismic Shot Points for Bottom Hole Location:	
Estimated KB (from topo.):	3683'
Proposed Depth:	3950'
Permit Depth:	3950'
Field:	Tonto-Seven Rivers
Objective Formation(s):	Seven Rivers
Formation at TD:	Seven Rivers
Formation at TD for Permit:	Seven Rivers
Produced Fluid:	Oil
Proration Unit :	40 acre

Proposed write-up for AFE cover sheet:

[Time] 11/26/2002

Prepared By:

PRELIMINARY DRILLING PROGRAM

Lease and Well No.

Lowell 15 Federal #2**LAND INFORMATION**

Distance to Nearest Lease Line _____

No. Acres in Lease _____

No. Acres Assigned to Well _____

Distance to Nearest Well _____

MUD PROGRAM

Depth	Type	Weight	Remarks
0-1500'	Fresh Water	8.4	Circulate pits or reserve, visc. 28
1500-3950'	Brine	10	Circulate reserves, Lime pH 9, visc. 29
	Starch/Gel if needed		Starch / LCM for seepage as needed.
			visc. 29-40, mud up to a WL of 15 and 35 visc. by 3600'

TUBULAR PROGRAM

String Type	Hole Size	Depth	Feet	Casing Diameter	Weight	Grade	Connection Type	ERW/Seamless	Critical Inspectn
Surface	12-1/4"	1500	1500	8-5/8"	24	J-55	STC	ERW	NO
Production	7-7/8"	3950	3950	5-1/2"	15.5	K-55	LTC	ERW	NO

Note: Pipe to end up in hole from top to bottom as shown.

CEMENT PROGRAM

String Type	DV Depth	Stage Lead/Tail	Cement Bottom	Cement Top	No Sacks	Cement Type	Cement Yield	Cement Weight
Surface		All	1500	0	920	"C"	1.34	14.8
Production		Lead	3000	0	550	35/65 Poz	2.14	12.4
		Tail	4050	3000	300	50/50 Poz	1.35	14.2

BOP PROGRAM

Hole Size	Exhibit	Pressure Rating
12-1/4"	Annular	2M
7-7/8"	Exhibit C	3M

Remarks: _____

Salt Muds below Surface for logging requirements

Install H2S equipment from 1500' - TD

Mudloggers from 3000' to TD

Prepared By:

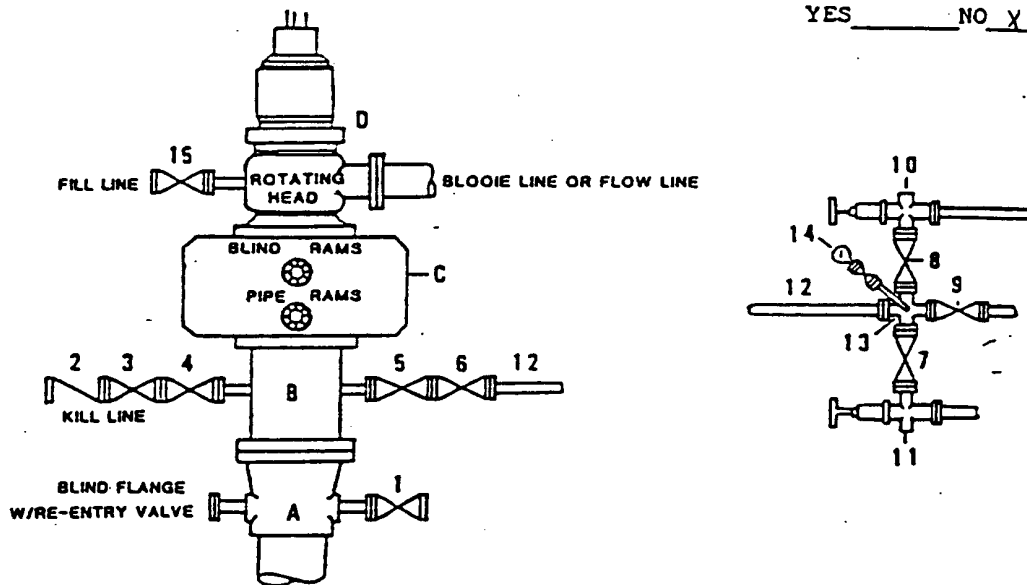
B. D. Schaneman

Date:

12/9/2002

**DRILLING CONTROL
CONDITION II-B 3000 WP
FOR AIR DRILLING OR
WHERE NITROGEN OR AIR BLOWS ARE EXPECTED**

H₂S TRIM REQUIRED
YES _____ NO X



DRILLING CONTROL

MATERIAL LIST - CONDITION II - B

- | | |
|----------------|---|
| A | Texaco Wellhead |
| B | 3000# W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. |
| C | 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram type preventers may be utilized). |
| D | Rotating Head with fill up outlet and extended Blooie Line. |
| 1,3,4,
7,8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve. |
| 2 | 2" minimum 3000# W.P. back pressure valve. |
| 5,6,9 | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve. |
| 12 | 3" minimum schedule 80, Grade "B", seamless line pipe. |
| 13 | 2" minimum x 3" minimum 3000# W.P. flanged cross. |
| 10,11 | 2" minimum 3000# W.P. adjustable choke bodies. |
| 14 | Cameron Mud Gauge or equivalent (location optional in choke line). |
| 15 | 2" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve. |



TEXACO, INC.
MIDLAND DIVISION
MIDLAND, TEXAS



SCALE	DATE	EST. NO.	DRG. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT C