

DISTRICT I

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

DISTRICT II

P.O. Box Drawer DD, Artesia, NM 88211-0719

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

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

Form C-101

Revised February 10, 1999

Instructions on back
Submit to Appropriate District Office

State Lease - 6 Copies

Fee Lease - 5 Copies

AMENDED REPORT

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

¹ Operator Name and Address		² OGRID Number
CHEVRON USA INC		4323
15 SMITH ROAD, MIDLAND, TX 79705		³ API Number
		30-025-34823
⁴ Property Code	⁵ Property Name	⁶ Well No.
	ARROWHEAD GRAYBURG UNIT	352

⁷ Surface Location									
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
H	2	22-S	36-E		2500'	NORTH	100'	EAST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface									
UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	2	22-s	36-E		2500'	NORTH	2500'	EAST	LEA
⁹ Proposed Pool 1					¹⁰ Proposed Pool 2				
ARROWHEAD GRAYBURG									

¹¹ Work Type Code	¹² WellType Code	¹³ Rotary or C.T.	¹⁴ Lease Type Code	¹⁵ Ground Level Elevation
P (Horizontal)	O	ROTARY	S	3530' KB
¹⁶ Multiple	¹⁷ Proposed Depth	¹⁸ Formation	¹⁹ Contractor	²⁰ Spud Date
No	3895'	GRAYBURG		1/15/2003

²¹ Proposed Casing and Cement Program					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
		NO CHANGE			

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.

CHEVRON U.S.A. INC. INTENDS TO DRILL A HORIZONTAL LATERAL IN THE SUBJECT WELL.

KICK OFF POINT - 3776'
 RADIUS 100' AZIM 270 DEG
 TARGET #1 100' VS, 3876' TVD
 TARGET #2 1000' VS, 3780' TVD
 TARGET #3 2400' VS, 3900' TVD
 (SURFACE CSG - 9 5/8" 36# K-55 @ 507' CMT TO SURF; PRODUCTION: 7", 20#, K-55, @ 3895', CMT TO SURFACE
 PERFS: 3724-60' SQZ'D, 3780-3846' OPEN SET CIBP & WHIPSTOCK @ 3776. DRILL 2400' LATERAL. STIMULATE. PLACE ON PRODUCTION.

²³ I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Denise Leake*

Printed Name: Denise Leake

Title: Regulatory Specialist

Date: 12/17/2002

Telephone: 915-687-7375

OIL CONSERVATION DIVISION	
Approved By:	<i>PAUL F. KAUFZ</i>
Title:	PETROLEUM ENGINEER
Approval Date:	Expiration Date:
Conditions of Approval:	
Attached <input type="checkbox"/>	



Scientific Drilling Planning Report

ChevronTexaco

Company: Chevron Texaco	Date: 11/20/2002	Time: 16:47:38	Page: 2
Field: Arrowhead Grayburg Unit	Co-ordinate(NE) Reference: Well: A G U#352, Grid North		
Site: Arrowhead Grayburg Unit	Vertical (TVD) Reference: SITE 0.0		
Well: A G U#352	Section (VS) Reference: Site (0.00N,0.00E,270.00Azi)		
Wellpath: 1	Plan: Plan #1		

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3776.00	0.00	0.00	3776.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start Build 57.30

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3780.00	2.29	270.00	3780.00	0.00	-0.08	0.08	57.30	57.30	0.00	0.00
3785.00	5.16	270.00	3784.99	0.00	-0.40	0.40	57.30	57.30	0.00	0.00
3790.00	8.02	270.00	3789.95	0.00	-0.98	0.98	57.30	57.30	0.00	0.00
3795.00	10.89	270.00	3794.89	0.00	-1.80	1.80	57.30	57.30	0.00	0.00
3800.00	13.75	270.00	3799.77	0.00	-2.87	2.87	57.30	57.30	0.00	0.00
3805.00	16.62	270.00	3804.60	0.00	-4.18	4.18	57.30	57.30	0.00	0.00
3810.00	19.48	270.00	3809.35	0.00	-5.72	5.72	57.30	57.30	0.00	0.00
3815.00	22.35	270.00	3814.02	0.00	-7.51	7.51	57.30	57.30	0.00	0.00
3820.00	25.21	270.00	3818.59	0.00	-9.52	9.52	57.30	57.30	0.00	0.00
3825.00	28.07	270.00	3823.06	0.00	-11.77	11.77	57.30	57.30	0.00	0.00
3830.00	30.94	270.00	3827.41	0.00	-14.23	14.23	57.30	57.30	0.00	0.00
3835.00	33.80	270.00	3831.64	0.00	-16.91	16.91	57.30	57.30	0.00	0.00
3840.00	36.67	270.00	3835.72	0.00	-19.79	19.79	57.30	57.30	0.00	0.00
3845.00	39.53	270.00	3839.65	0.00	-22.88	22.88	57.30	57.30	0.00	0.00
3850.00	42.40	270.00	3843.43	0.00	-26.15	26.15	57.30	57.30	0.00	0.00
3855.00	45.26	270.00	3847.04	0.00	-29.62	29.62	57.30	57.30	0.00	0.00
3860.00	48.13	270.00	3850.46	0.00	-33.25	33.25	57.30	57.30	0.00	0.00
3865.00	50.99	270.00	3853.71	0.00	-37.06	37.06	57.30	57.30	0.00	0.00
3870.00	53.86	270.00	3856.76	0.00	-41.02	41.02	57.30	57.30	0.00	0.00
3875.00	56.72	270.00	3859.60	0.00	-45.13	45.13	57.30	57.30	0.00	0.00
3880.00	59.59	270.00	3862.24	0.00	-49.38	49.38	57.30	57.30	0.00	0.00
3885.00	62.45	270.00	3864.66	0.00	-53.75	53.75	57.30	57.30	0.00	0.00
3890.00	65.32	270.00	3866.86	0.00	-58.24	58.24	57.30	57.30	0.00	0.00
3895.00	68.18	270.00	3868.84	0.00	-62.83	62.83	57.30	57.30	0.00	0.00
3900.00	71.05	270.00	3870.58	0.00	-67.52	67.52	57.30	57.30	0.00	0.00
3905.00	73.91	270.00	3872.08	0.00	-72.29	72.29	57.30	57.30	0.00	0.00
3910.00	76.78	270.00	3873.35	0.00	-77.12	77.12	57.30	57.30	0.00	0.00
3915.00	79.64	270.00	3874.37	0.00	-82.02	82.02	57.30	57.30	0.00	0.00
3920.00	82.51	270.00	3875.15	0.00	-86.96	86.96	57.30	57.30	0.00	0.00
3925.00	85.37	270.00	3875.67	0.00	-91.93	91.93	57.30	57.30	0.00	0.00
3930.00	88.24	270.00	3875.95	0.00	-96.92	96.92	57.30	57.30	0.00	0.00
3933.08	90.00	270.00	3876.00	0.00	-100.00	100.00	57.30	57.30	0.00	0.00



Scientific Drilling Planning Report

ChevronTexaco

Company: Chevron Texaco	Date: 11/20/2002	Time: 16:47:38	Page: 3
Field: Arrowhead Grayburg Unit	Co-ordinate(NE) Reference: Well: A G U#352, Grid North		
Site: Arrowhead Grayburg Unit	Vertical (TVD) Reference: SITE 0.0		
Well: A G U#352	Section (VS) Reference: Site (0.00N,0.00E,270.00Azi)		
Wellpath: 1	Plan:	Plan #1	

Section 3 : Start DLS 16.00 TFO 0.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3950.00	92.71	270.00	3875.60	0.00	-116.91	116.91	16.00	16.00	0.00	0.00
3975.00	96.71	270.00	3873.55	0.00	-141.82	141.82	16.00	16.00	0.00	0.00

Section 4 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4000.00	96.71	270.00	3870.63	0.00	-166.65	166.65	0.00	0.00	0.00	0.00
4100.00	96.71	270.00	3858.95	0.00	-265.97	265.97	0.00	0.00	0.00	0.00
4200.00	96.71	270.00	3847.27	0.00	-365.28	365.28	0.00	0.00	0.00	0.00
4300.00	96.71	270.00	3835.59	0.00	-464.60	464.60	0.00	0.00	0.00	0.00
4400.00	96.71	270.00	3823.91	0.00	-563.92	563.92	0.00	0.00	0.00	0.00
4500.00	96.71	270.00	3812.23	0.00	-663.23	663.23	0.00	0.00	0.00	0.00
4600.00	96.71	270.00	3800.55	0.00	-762.55	762.55	0.00	0.00	0.00	0.00
4700.00	96.71	270.00	3788.87	0.00	-861.86	861.86	0.00	0.00	0.00	0.00
4766.18	96.71	270.00	3781.14	0.00	-927.59	927.59	0.00	0.00	0.00	0.00

Section 5 : Start DLS 16.00 TFO -180.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4775.00	95.30	270.00	3780.22	0.00	-936.36	936.36	16.00	-16.00	0.00	-180.00
4800.00	91.30	270.00	3778.78	0.00	-961.31	961.31	16.00	-16.00	0.00	-180.00
4825.00	87.30	270.00	3779.09	0.00	-986.31	986.31	16.00	-16.00	0.00	-180.00
4838.72	85.10	270.00	3780.00	0.00	-1000.00	1000.00	16.00	-16.00	0.00	-180.00

Section 6 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4900.00	85.10	270.00	3785.23	0.00	-1061.05	1061.05	0.00	0.00	0.00	0.00
5000.00	85.10	270.00	3793.77	0.00	-1160.69	1160.69	0.00	0.00	0.00	0.00
5100.00	85.10	270.00	3802.31	0.00	-1260.32	1260.32	0.00	0.00	0.00	0.00
5200.00	85.10	270.00	3810.85	0.00	-1359.96	1359.96	0.00	0.00	0.00	0.00
5300.00	85.10	270.00	3819.39	0.00	-1459.59	1459.59	0.00	0.00	0.00	0.00
5400.00	85.10	270.00	3827.93	0.00	-1559.23	1559.23	0.00	0.00	0.00	0.00
5500.00	85.10	270.00	3836.47	0.00	-1658.86	1658.86	0.00	0.00	0.00	0.00
5600.00	85.10	270.00	3845.01	0.00	-1758.50	1758.50	0.00	0.00	0.00	0.00
5700.00	85.10	270.00	3853.55	0.00	-1858.13	1858.13	0.00	0.00	0.00	0.00
5800.00	85.10	270.00	3862.09	0.00	-1957.76	1957.76	0.00	0.00	0.00	0.00
5900.00	85.10	270.00	3870.63	0.00	-2057.40	2057.40	0.00	0.00	0.00	0.00
6000.00	85.10	270.00	3879.17	0.00	-2157.03	2157.03	0.00	0.00	0.00	0.00
6100.00	85.10	270.00	3887.71	0.00	-2256.67	2256.67	0.00	0.00	0.00	0.00
6200.00	85.10	270.00	3896.25	0.00	-2356.30	2356.30	0.00	0.00	0.00	0.00
6243.86	85.10	270.00	3900.00	0.00	-2400.00	2400.00	0.00	0.00	0.00	0.00



Scientific Drilling

Field: Arrowhead Grayburg Unit
Site: Arrowhead Grayburg Unit
Well: A G LM352
Wellpath: 1
Plan: Plan #1

Chevron Texaco

