DISTRICT I

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

DISTRICT II

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

DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION

P.O. Box 2088

Form C-101

Revised February 10,1994

Instructions on back

Submit to Appropriate District Office

DISTRICT IV P.O. Box 2088, Santa Fe	, NM 87504-20	088				lexico 87504-20		Fee	Lease - 6 Copie Lease - 5 Copie DED REPOR	
APP	LICATION	FOR PERM	I OT TIM	DRILL, RE-	ENTE	ER, DEEPEN, F	PLUGBACK, O	R ADD A ZON	E	
TEXACO EXPLORATI		erator Name a	ind Addres	SS					RID Number	
205 E. Bender, HOBBS		0110111110.						3	22351	
								API	Number 25-21031	
<sup>4</sup> Property Cod 11125	е			<sup>5</sup> P	roperty	Name TA WEST UNIT		6 ,	Well No.	
		·		7					126	
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UI or lot no. Section	Township	Range	Lot.idn	Feet From	The	North/South Line	Feet From The	East/West Line	T	
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,	<sup>9</sup> Proposed					77	10 Proposed Poo	012		
	GLOR	IETA								
11 Work Tune Code	12			13						
Work Type Code		WellType Cod	de	Rotary o	r C.T.	14 Lea	se Type Code	15 Ground Lev	el Elevation	
16 Multiple	17	Proposed Dep	th	R 18 Formation		19 0-	S			
No	i	6015 TVD		GLORIET.				20 Spud Date		
		21	Propos			Para set D		09/15/19	999 <del></del>	
SIZE OF HOLE	SIZE OF	CASING		PER FOOT		ement Progran				
NO CHANGE					-	SETTING DEPTH	SACKS OF	CEMENT	EST. TOP	
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Described										
Describe the proposed progra Describe the blowout preven exaco intends to drill a 1						Glorieta formation.	The intended proce	edure is attahed:		
I hereby certify that the rules	and regulations o	f the Oil Consour	, itina					back f		
Division have been complied is true and complete to the b	with and that the	information given	above			· · · · · · · · · · · · · · · · · · ·	ONSERVAT		)N 	
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ate 08/31/1999		Telephone		0.405		roval Date: 001	011999 Ex	piration Date:		
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#### **OVERVIEW**

The Vacuum Glorieta West Unit # 126 well was drilled in 1964 and potentialed for 179 BOPD, 0 BWPD and 0 MCFD in the Glorieta formation. The well was perforated from 5900'-5915', 5924'-5928', 5990'-6008', 6012'-6023' and 6036'-6123'. Successful horizontal laterals have been drilled at the VGWU. It is proposed to employ this technology on the subject well and drill a +/-1500 foot lateral at 104.8 degrees and a +/-1200 foot lateral at 246.4 degrees in the Glorieta formation. The basic well plan is as follows:

- a) TOOH with the pump and tubing. Set a 5-1/2" cement retainer at 5890'. Squeeze existing perforations. Set a 5-1/2", 15.5 #/ft TIW or Smith full bore SS-WB-BB permanent packer at +/-5890' (on top of retainer). TIH with latch (1.0'), debris sub (2.55') and a 3 degree multi-lateral selective/reentry whipstock (casing collar at +/-5861', top of window +/-5873', bottom of window +/-5880'). Attached is a correlation log from 4950'-6200'.
- b) Drill a short radius curve using a 4-3/4" bit to a measured depth of +/-6082' (TVD +/-6015'). The final angle will be 88.13 degrees from vertical. Drill +/-1380' horizontal section (azimuth 104.8 degrees). The end point will be +/-7462' MD, +/-6060' TVD and +/-1500' vertical section.
- c) Retrieve the whipstock. TIH with a latch (1'), +/-40' space out assembly (drill collars and a stabilizer), debris sub (2.55') and another 3 degree whipstock (casing collar at 5828', top of window +/-5833', bottom of window +/-5840').
- Drill a short radius curve using a 4-3/4" bit to a measure depth of +/-6093' (TVD +/-6010'). The final angle will be 86.73 degrees from vertical. Drill a +/-1050' horizontal lateral (azimuth 246.4 degrees). The end point will be +/-7143' MD, +/-6070' TVD and +/-1200' vertical section.
- e) Foam/acid wash both horizontal laterals using a coiled tubing unit and 20 gallons/foot 15% HCl. The whipstock will be retrieved before acidizing the second lateral. Place well on production.

50% LOST IN HOLE INSURANCE FOR THE DOWNHOLE MOTOR AND MWD IS INCLUDED WITH THE DAILY RATE FROM SCIENTIFIC DRILLING.

#### PROPOSED WORK

#### **PRODUCTION HOLE:**

- 1. TOOH with pump and tubing. Set a 5-1/2" cement retainer at 5890'. Cement squeeze existing perforations with 100 sacks cement. TIH with a 5-1/2", 15.5#/ft TIW or Smith full bore packer on wireline and set the packer on top of the cement retainer at +/-5890'. Correlate the casing collars with the production logs (casing collar at 5861' & 5828'). TOOH.
- 2. TIH with the orientation lug and gyro survey tool and tag the packer. Strap the pipe going in the hole. This measurement will be used when setting the whipstock. Accuracy is very important. Check the strap with the wireline measurement. Seat into the riser slot for orientation. Re-set the gyro several times until a consistent azimuth is reached. TOOH.
- 3. Pick up the latch, debris sub and retrievable whipstock. Tighten to the required torque. Make up the whipstock assembly over the hole and back off the spline sleeve (this tool has 72 splines with increments of 5 degrees) on the latch assembly. Stretch a string from the whipstock lug to the compass card at the latch. Orient the azimuth of the packer slot to the key on the latch assembly. Once the latch assembly has been aligned, orient the whipstock face to the desired (105 degrees) azimuth. Set the shear pins (5000 #'s per pin) for the required release on the latch.
- 4. Pick up the whipstock assembly using the lifting clevis. Snub into the rotary. Install the starting mill assembly on the whipstock. TIH slowly (no speed records). Record the weight of the assembly prior to stacking out on the packer. Lower the assembly until weight loss is observed. Do not exceed the shear pin requirements! Pick up and pull 5-8000 pounds to verify the latch is set (do not exceed the shear pin requirements). Shear off the starting mill.
- 5. Pick up the power swivel and begin circulating. Pick up the drill pipe until the starting mill has cleared the whipstock and start rotation. Lower the drill pipe slowly until the torque gauge suggest the starting mill is contacting the casing. Adjust weight and speed until satisfied with the penetration rate. Mill to a predetermined depth that will assure the setting lug is completely removed and a cut out in the casing has been initiated. TOOH.

- 6. TIH with the metal muncher window mill, string mill and the watermellon mill. Resume milling operations and mill until the complete assembly has cleared the casing. Pick up and lower the string several times without rotation to assure a good clean window has been obtained. Circulate the hole clean. TOOH.
- 7. Inspect the mill on the surface. If extreme wear is evident, consideration should be given to repeating the above step.

#### **HORIZONTAL PRODUCTION HOLE:**

- 1. Rig up Scientific Drilling Company. Adjust plan to target as necessary. Trip in the hole with Scientific Drilling's curve building assembly. This will be a 4-3/4" insert bit, 3-3/4" PDM, float sub/orienter combo, 2-flexible monel collars and 2-7/8" AOH drill pipe.
- 2. Build curve to estimated target depths and angles as follows:

True Vertical Depth	6015'
Measured Depth	6082'
Final Angle	88.13 degrees
Target Azimuth	104.8 degrees
Build Rate	45.81 degrees/100'

Drill the curve sliding as necessary to stay on target. It is recommended that after each slide, the bit be pulled back and washed through the slide. Once the curve is built, rotate through the curve section noting tight spots and fill. Make at least one short trip prior to tripping out of the hole.

- 3. Trip in the hole with Scientific Drilling's lateral assembly. This will be a 4-3/4" PDC bit, 3-3/4" articulated motor, float sub/orienter combo, 2 flexible monel collars and 2-7/8" AOH drill pipe.
- 4. Drill +/-1380' of horizontal hole per the attached Scientific well plan.
- 5. Continue drilling the horizontal section per the Texaco Engineer (Kevin Hickey 915-688-2950, home 915-684-8136) recommendations.
- 6. Trip out of the hole with the drilling assembly.

7. TIH and retrieve the whipstock. TOOH. TIH with the latch, +/-40' space out assembly (drill collars and stabilizer), debris sub and another retrievable 3 degree whipstock (top of window at +/-5833', bottom of window at +/-5840', collar 5828'). Repeat steps 2-7 (production hole) and steps 1-5 (horizontal hole). Build, the curve to estimated target depths and angles as follows:

True Vertical Depth	6010'
Measured Depth	6093'
Final Angle	86.73 degrees
Target Azimuth	246.4 degrees
Build Rate	35.75 degrees/100'

- 8. Trip in the hole with the lateral drilling assembly. Drill the lateral per Scientific Drilling's well plan. TOOH with the drilling assembly. Set a wireline set, tubing retrievable bridge plug for 5-1/2", 15.5#/ft casing at +/- 5500'. Test plug to 1000 psi.
- 9. Lay down the drill pipe.
- 10. Nipple down the BOP stack. Install a manual 3000 psig BOP equipped with blind rams and 2-7/8" pipe rams. Release the rig. Rig down and move out rotary tools.

## **COMPLETION PROCEDURE:**

- 1. Back drag the location and set pulling unit anchors.
- 2. Move in and rig up a pulling unit.
- 3. Trip in the hole with a retrieving head on 2-7/8" tubing. Retrieve the plug. Trip out of the hole and lay down the plug. TIH with coiled tubing and foam/acid wash each lateral. The whipstock will be retrieved after acidizing the first lateral. Use a bent joint to orient into the lower lateral.
- 4. Flow back immediately.
- 5. Place on production.

# Scientific Drilling **Planning Report**

EAST LATERAL

Company: Texaco E & P, Inc. 7/19/1999 Time: 14:25:30 Page: Vacuum Glorieta West Unit Field: Co-ordinate(NE) Reference: Site: Lea County, New Mexico, True North Site: Lea County, New Mexico Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level Well: VGWU #126 Section (VS) Reference: Site (0.0E,0.0N,104.8Azi) Wellpath: OH Original hole Plan: Plan #1 Field: Vacuum Glorieta West Unit Local Coordinate Reference: Site Centre Location of Field Centre: N/A Field Centre Map Easting: ft Field Centre Map Northing: ft Map Projection & Zone: US State Plane Coordinate System 1927 Direction of Local North: True New Mexico, Eastern Zone Ellipsoid: Clarke - 1866 Local Vertical Reference: Wellpath Datum Field Datum: Mean Sea Level Geomagnetic Model: IGRF95 Site: Lea County, New Mexico Site Centre: 796343.00 ft 56.842 N Latitude 649720.00 ft N 103 22 8.822 W Longitude Site Water Depth: 0.0 ft Magnetic Declination: 8.99 deg Grid Convergence: 0.52 deg Measured Depths Referenced To: SITE 0.0 ft above Mean Sea Level Well: VGWU #126 **Originating From:** 0.0 ft +N/-SMap Easting: 796343,00 ft 0.0 ft +E/-W Map Northing: 649720.00 ft Wellpath: OH Original hole Origin of Vertical Section: Site Centre 0.0 ft + N/-s0.0 ft +E/-W**Direction of Vertical Section:** 104.80 deg Plan: Plan #1 Date Composed: 7/19/1999 Version: Principal: Yes Locked: No Plan Section Information MD Incl Azim TVD +N/-S +E/-W DLS Build Turn TFO Target ft deg deg **R** -------Ħ ft d/100ft d/100ft d/100ft deg 5500.0 0.00 104.80 5500.0 0.0 0.0 0.00 0.00 0.00 0.00 5890.0 0.00 104.80 5890.0 0.0 0.0 0.00 0.00 0.00 0.00 6082.1 88.00 104.80 6015.0 -30.8 116.7 45.81 45.81 0.00 0.00 6084.3 88.13 104.80 6015 1 -31.4 118.8 6.00 6.00 0.070.71 7462.1 88.13 104.80 6060.0 -383.2 1450.2 0.00 0.00 0.00 0.00 East Lateral Section 1: Straight MD Part 1 Hold MD Incl Azim TVD #N/-S +F/-W VS DLS Build Turn TFO ft R deg deg ft ..... ft ft d/100ft deg d/100ft d/100ft 5500.0 0.00 104.80 5500.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 5600.0 0.00 104.80 5600.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 5700.0 0.00 104.80 5700.0 0.0 0.0 0.00.00 0.00 0.00 0.00 5800.0 0.00 104.80 5800.0 0.0 0.0 0.0 0.00 0.000.00 0.00 5890.0 0.00 104.80 5890.0 0.0 0.0 0.00 0.00 0.00 0.00 Section 2: Inc Azi TVD Part 1 Build 45.81 MD Incl Azim TVD 4N/-S +E/-W VS DIS Build Turn TFO ft deg deg ft

ft

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-0.4

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5910.0

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104.80

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ft

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d/100ft

45.81

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# Scientific Drilling Planning Report

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MD ft	Incl deg	Azim deg	TYD ft	+N/-S ft	+E/-W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg	
5920.0	13.74	104.80	5919.7	-0.9	3.5	3.6	45.81	45.81	0.00	0.00	
5930.0	18.32	104.80	5929.3	-1.6	6.1	6.3	45.81	45.81	0.00	0.00	
5940.0	22.90	104.80	5938.7	-2.5	9.5	9.9	45.81	45.81	0.00	0.00	
5950.0	27.49	104.80	5947.7	-3.6	13.6	14.1	45.81	45.81	0.00	0.00	
5960.0	32.07	104.80	5956.4	-4.9	18.4	19.1	45.81	45.81	0.00	0.00	
5970.0	36.65	104.80	5964.7	-6.3	23.9	24.7	45.81	45.81	0.00	0.00	
5980.0	41.23	104.80	5972.4	-7.9	30.0	31.0	45.81	45.81	0.00	0.00	
5990.0	45.81	104.80	5979.7	-9.7	36.6	37.9	45.81	45.81	0.00	0.00	
6000.0	50.39	104.80	5986.4	-11.6	43.8	45.3	45.81	45.81	0.00	0.00	
6010.0	54.97	104.80	5992.4	-13.6	51.5	53.3	45.81	45.81	0.00	0.00	
6020.0	59.55	104.80	5997.8	-15.8	59.6	61.7	45.81	45.81	0.00	0.00	
6030.0	64.13	104.80	6002.5	-18.0	68.2	70.5	45.81	45.81	0.00	0.00	
6040.0	68.71	104.80	6006.5	-20.4	77.0	79.7	45.81	45.81	0.00	0.00	
6050.0	73.29	104.80	6009.8	-22.8	86.2	89.1	45.81	45.81	0.00	0.00	
6060.0	77.87	104.80	6012.3	-25.2	95.5	98.8	45.81	45.81	0.00	0.00	
6070.0	82.46	104.80	6014.0	-27.8	105.0	108.7	45.81	45.81	0.00	0.00	
6080.0	87.04	104.80	6014.9	-30.3	114.7	118.6	45.81	45.81	0.00	0.00	
6082.1	88.00	104.80	6015.0	-30.8	116.7	120.7	45.81	45.81	0.00	0.00	
Section :	Incl	Tang Part 1	TYD ft	+N/-S ft	+E/-W ft	vs	DLS	Build	Turn	TFO	
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	<b>deg</b> 88.13	deg 104.80	6015.1			ft 122.9		5/100ft	d/100ft	deg	
ft 6084.3	88.13	104.80	6015.1	-31.4	118.8	ft 122.9	6.00	6.00	0.07	0.71	
ft 6084.3	88.13		6015.1			122.9	6.00	6.00	0.07	0.71	
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ft 6084.3 Section MD ft 6100.0 6200.0 6300.0 6600.0	88.13 4 : DT5 CH Incl deg 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13	104.80 Tang Part 2 I Azim deg 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80	6015.1 Hold TVD ft 6015.6 6018.8 6022.1 6025.4 6028.6 6031.9 6035.2 6038.4	-31.4 +N/-S R -35.4 -60.9 -86.5 -112.0 -137.5 -163.1 -188.6 -214.1	118.8 +E/-W ft 134.0 230.6 327.3 423.9 520.5 617.2 713.8 810.4	122.9  VS ft  138.6 238.5 338.5 438.4 538.4 638.3 738.3 838.2 938.2	6.00  DLS d/100ft c 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	6.00  Build  1/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.07  Turn d/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.71  TFO deg 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00	
ft 6084.3  Section ft 6100.0 6200.0 6300.0 6400.0 6500.0 6700.0 6800.0 7000.0 7100.0	88.13 4 : DT5 CH Incl deg 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13	104.80 Tang Part 2 I Azim deg 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80	6015.1 Hold TVD ft 6015.6 6018.8 6022.1 6025.4 6028.6 6031.9 6035.2 6038.4 6041.7 6044.9 6048.2	-31.4 +N/-S ft -35.4 -60.9 -86.5 -112.0 -137.5 -163.1 -188.6 -214.1 -239.7	118.8 +E/-W ft 134.0 230.6 327.3 423.9 520.5 617.2 713.8 810.4 907.0	122.9 VS ft 138.6 238.5 338.5 438.4 538.4 638.3 738.3 838.2	6.00 DLS d/100ft c 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	6.00  Build 4/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.07  Turn d/100fl  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.71  TFO deg 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00	
ft 6084.3  Section ft 6100.0 6200.0 6300.0 6400.0 6500.0 6500.0 6700.0 7000.0 7100.0 7200.0	88.13 4: DT5 CH Incl deg 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13	104.80 Tang Part 2 I Azim deg 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80	6015.1 Hold TVD ft 6015.6 6018.8 6022.1 6025.4 6028.6 6031.9 6036.2 6036.2 6038.4 6041.7 6044.9	-31.4 +N/-S ft -35.4 -60.9 -86.5 -112.0 -137.5 -163.1 -188.6 -214.1 -239.7 -265.2	118.8 +E/-W ft 134.0 230.6 327.3 423.9 520.5 617.2 713.8 810.4 907.0 1003.7	122.9  VS ft 138.6 238.5 338.5 438.4 538.4 638.3 738.3 838.2 938.2 1038.1	6.00 DLS d/100ft c 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	6.00  Build  1/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.07  Turn d/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.71  TFO deg 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00	
ft 6084.3 Section MD ft 6100.0 6200.0 6300.0 6400.0 6500.0 6600.0 6700.0 6800.0 7000.0 7100.0 7200.0 7300.0	88.13 4: DT5 CH Incl deg  88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13	104.80 Tang Part 2 I Azim deg 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80	6015.1 Hold TVD fi 6015.6 6018.8 6022.1 6025.4 6028.6 6031.9 6035.2 6038.4 6041.7 6044.9 6048.2 6051.5 6054.7	-31.4 -31.4 -35.4 -60.9 -86.5 -112.0 -137.5 -163.1 -188.6 -214.1 -239.7 -265.2 -290.7 -316.3 -341.8	118.8 +E/-W ft 134.0 230.6 327.3 423.9 520.5 617.2 713.8 810.4 907.0 1003.7 1100.3	122.9  VS f 138.6 238.5 338.5 438.4 538.4 638.3 738.3 838.2 938.2 1038.1 1138.1	6.00  DLS  d/100ft c  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	6.00  Build 4/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.07  Turn d/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.71  TFO deg 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00	
ft 6084.3 ection ft 6100.0 6200.0 6300.0 6600.0 6700.0 6800.0 6800.0 7000.0 7100.0 7200.0	88.13 4: DT5 CH Incl deg 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13 88.13	104.80 Tang Part 2 I Azim deg 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80 104.80	6015.1 Hold TVD ft 6015.6 6018.8 6022.1 6025.4 6028.6 6031.9 6035.2 6038.4 6041.7 6044.9 6048.2 6051.5	-31.4 +N/-S ft -35.4 -60.9 -86.5 -112.0 -137.5 -163.1 -188.6 -214.1 -239.7 -265.2 -290.7 -316.3	118.8 +E/-W ft 134.0 230.6 327.3 423.9 520.5 617.2 713.8 810.4 907.0 1003.7 1100.3 1196.9	122.9  VS ft  138.6 238.5 338.5 438.4 538.4 638.3 738.3 838.2 938.2 1038.1 1138.1 1238.0	6.00  DLS  d/100ft c  0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	6.00  Build 1/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.07  Turn d/100ft  0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.71  TFO deg 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00 180.00	

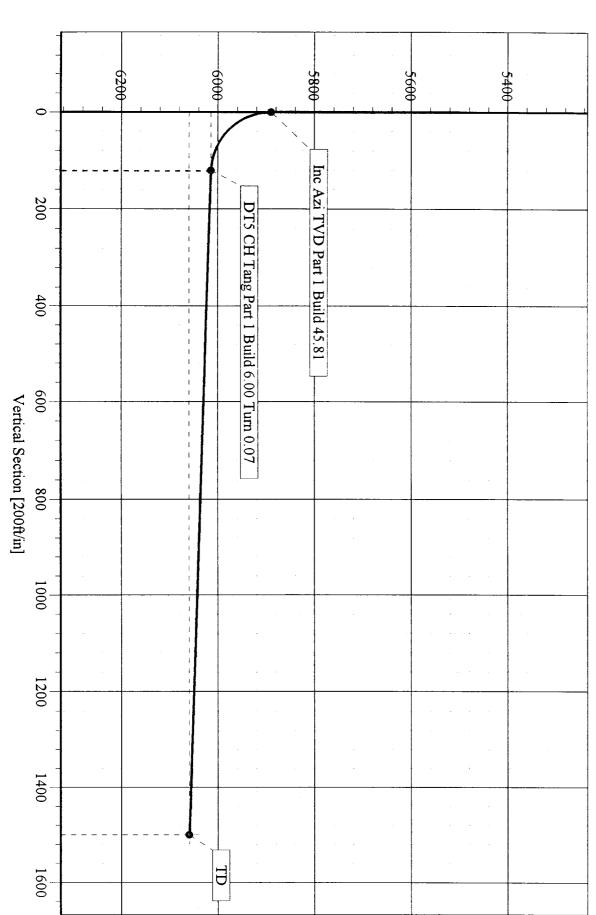




Field: Site: Well:

Texaco E & P, Inc.
d: Vacuum Glorieta West Unit
e: Lea County, New Mexico
ll: VGWU #126
h: OH Original hole
n: Plan #1



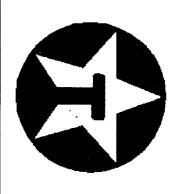






Field: Site: Well: Wellpath: Plan: Texaco E & P, Inc.
d: Vacuum Glorieta West Unit
e: Lea County, New Mexico
ll: VGWU #126
h: OH Original hole
n: Plan #1

Inc Azi TVD Part 1 Build 45.81 DT5 CH Tang Part 1 Build 6.00 Turn 0.07 T



West(-)/East(+) [200ft/in]

# **Scientific Drilling**

#### **Planning Report**

Company: Texaco E & P, Inc.
Field: Vacuum Glorieta West Unit
Site: Lea County, New Mexico
Well: VGWU #126

Field: Vacuum Glorieta West Unit

Date: 7/19/1999 Time: 14:57:48 Page: Co-ordinate(NE) Reference: Site: Lea County, New Mexico, True North Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level

Section (VS) Reference: Site (0.0E,0.0 Plan: West Lateral

Site (0.0E,0.0N,246.4Azi)

Wellpath: West Lateral

Local Coordinate Reference: Location of Field Centre:

Site Centre N/A

Field Centre Map Easting: Field Centre Map Northing: ft ft

Map Projection & Zone: US State Plane Coordinate System 1927

New Mexico, Eastern Zone

Direction of Local North:

True

Ellipsoid: Clarke - 1866

. . . . . .

Field Datum: Mean Sea Level

Local Vertical Reference:

Wellpath Datum

Geomagnetic Model:

IGRF95

Site: Lea County, New Mexico

Site Centre:

796343.00 ft E

649720.00 ft N

32 46 56.842 N **Latitude** 103 22 8.822 W **Longitude** 

Site Water Depth:

0.0 ft

Magnetic Declination: Grid Convergence:

8.99 deg 0.52 deg

Measured Depths Referenced To: SITE

0.0 ft above

Mean Sea Level

Well: VGWU #126

**Originating From:** 

0.0 ft +N/-S 0.0 ft +E/-W Map Easting: Map Northing: 796343.00 ft 649720.00 ft

Wellpath: West Lateral

Origin of Vertical Section: Site Centre

0.0

0.0 ft +N/-S 0.0 ft +E/-W

Direction of Vertical Section:

246.40 deg

Date Composed:

7/19/1999

Version:

Principal: Yes

Plan: West Lateral

Locked: No

#### Plan Section Information

MD ff	inci dea	Azim dea	TVD #	+N/-S	+E/-W	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO	Target
									deg	
5500.0	0.00	246.40	5500.0	0.0	0.0	0.00	0.00	0.00	0.00	
5850.0	0.00	246.40	5850.0	0.0	0.0	0.00	0.00	0.00	0.00	
6092.5	86.70	246.40	6010.0	-60.5	-138.4	<b>3</b> 5.75	35.75	0.00	0.00	
6093.0	86.73	246.40	6010.0	-60.6	-138.8	6.00	5.98	0.53	5.09	
7143.2	86.73	246.40	6070.0	-480.4	-1099.7	0.00	0.00	0.00	0.00	Toe west 126

#### Section 1: Straight MD Part 1 Hold

				****							
MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	TFO	
R	deg	deg	R	ft	ft	ft	d/100ft	d/100ft	d/100ft	deg	·
5500.0	0.00	246.40	5500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5600.0	0.00	246.40	5600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5700.0	0.00	246.40	5700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5800.0	0.00	246.40	5800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5850.0	0.00	246.40	5850.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	

#### Section 2: Inc Azi TVD Part 1 Build 35.75

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg	
5860.0	3.58	246.40	5860.0	-0.1	-0.3	0.3	35.75	35.75	0.00	0.00	
5870.0	7.15	246.40	5869.9	-0.5	-1.1	1.2	35.75	35.75	0.00	0.00	

# Scientific Drilling Planning Report

Company: Teld: Site; Vell: Vellpath:	Texaco E & Vacuum Glo Lea County, VGWU #12 West Latera	prieta West L New Mexico 6	Ve	-ordinate(NI rtical (TVD) ction (VS) Re	) Referenc Reference:	e: Site: Le SITE 0 Site (0.	Time: 14:57:48 Page: 2 Site: Lea County, New Mexico, True North SITE 0.0 above Mean Sea Level Site (0.0E,0.0N,246.4Azi) West Lateral				
Section	2 : Inc Azi T	VD Part 1 Bu	uild 35.75	id balkic anno a garagegy							
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS d/100ft	Build d/100ft	Term d/100ft	TFO deg	
5880.0	10.73	246.40	5879.8	-1.1	-2.6	2.8	35.75	35.75	0.00	0.00	
5890.0	14.30	246.40	5889.6	-2.0	-4.6	5.0	35.75	35.75	0.00	0.00	
5900.0	17.88	246.40	5899.2	-3.1	-7.1	7.7	35.75	35.75	0.00	0.00	
5910.0	21.45	246.40	5908.6	-4.4	-10.2	11.1	35.75	35.75	0.00	0.00	
5920.0	25.03	246.40	5917.8	-6.0	-13.8	15.0	35.75	35.75	0.00	0.00	
5930.0	28.60	246.40	5926.7	-7.8	-17.9	19.6	35,75	35.75	0.00	0.00	
5940.0	32.18	246.40	5935.3	-9.9	-22.6	24.6	35.75	35.75	0.00	0.00	
5950.0	35.75	246.40	5943.6	-12.1	-27.7	30.2	35.75	35.75	0.00	0.00	
5960.0	39.33	246.40	5951.6	-14.5	-33.3	36.3	35.75	35.75	0.00	0.00	
5970.0	42.90	246.40	5959.1	-17.2	-39.3	42.9	35.75	35.75	0.00	0.00	
5980.0	46.48	246.40	5966.2	-20.0	-45.7	49.9	35.75	35.75	0.00	0.00	
5990.0	50.05	246.40	5972.9	-23.0	-52.6	57.4	35.75	35.75	0.00	0.00	
6000.0	53.63	246.40	5979.0	-26.1	-59.8	65.2	35.75	35.75	0.00	0.00	
6010.0	57.20	246.40	5984.7	-29.4	-67.3	73.5	35.75	35.75	0.00	0.00	
6020.0	60.78	246.40	5989.9	-32.8	-75.2	82.0	35.75	35.75 35.75	0.00	0.00	
6030.0	64.35	246.40	5994.5	-36.4	-83.3	90.9	35.75	35.75 35.75	0.00		
6040.0	67.93	246.40	5998.5	-40.0	-03.3 -91.7	100.0				0.00	
6050.0	71.50	246.40	6002.0	-40.0 -43.8	-100.3	100.0	35.75 35.75	35.75 25.75	0.00	0.00	
6060.0	75.08	246.40	6004.9				35.75 35.75	35.75 35.75	0.00	0.00	
6070.0	78.65		6007.1	-47.6	-109.0	119.0	35.75 35.75	35.75 25.75	0.00	0.00	
6080.0	82.23	246.40 246.40	6008.8	-51.5 ======	-118.0	128.7	<b>35</b> .75	35.75 35.75	0.00	0.00	
6090.0	85.80			-55.5 -50.5	-127.0	138.6	35.75	35.75	0.00	0.00	
6092.5	86.70	246.40 246.40	6009,8 6010,0	-59.5 -60.5	-136.1 -138.4	148.5 151.0	35.75 35.75	35.75 35.75	0.00 0.00	0.00 0.00	
Section MD	3 : DT5 CH	Tang Part 1	Build 5.98	+N/-S	+E/-W	VS	DLS	Build	Turn	TFO	u kralekini:
ft ft	deg	deg	t	ft	n.	ft	d/100ft	d/100ft	d/100ft	deg	
6093.0	86.73	246.40	6010.0	-60.6	-138.8	151.5	6.00	5.98	0.53	5.09	
Section	4 : DT5 CH	Tang Part 2	Hold						<del>.</del>		
MD	Incl	Azim	TVD	+N/-S	+E/-W	vs	DLS	Build	Turn	TFO	Faller F
ft	deg	deg	ft	ft :	R	ft	d/100ft	d/100ft	d/100ft	deg	
6100.0	86.73	246.40	6010.4	-63.5	-145.3	158.5	0.00	0.00	0.00	180.00	
6200.0	86.73	246.40	6016.1	-103.4	-236.7	258.4	0.00	0.00	0.00	180.00	
6300.0	86.73	246.40	6021.8	-143.4	-328.2	358.2	0.00	0.00	0.00	180.00	
6400.0	86.73	246.40	6027.6	-183.4	-419.7	458.0	0.00	0.00	0.00	180.00	
	86.73	246.40	6033.3	-223.3	-511.2	557.9	0.00	0.00	0.00	180.00	
- 6500 ก	86.73	246.40	6039.0	-263.3	-602.7	657.7	0.00	0.00	0.00	180.00	
6500.0 6600.0	86.73	246.40	6044.7	-303.3	-694.2	757.5	0.00	0.00	0.00	180.00	
6600.0			6050.4	-343.2	-034.2 -785.7	857.4	0.00	0.00	0.00	180.00	
6600.0 6700.0		246 40				957.4 957.2	0.00	0.00	0.00		
6600.0 6700.0 6800.0	86.73	246.40 246.40		_383.J	-8//2						
6600.0 6700.0 6800.0 6900.0	86.73 86.73	246.40	6056.1	-383.2 -423.2	-877.2 968 7					180,00	
6600.0 6700.0 6800.0 6900.0 7000.0	86.73 86.73 86.73	246.40 246.40	6056.1 6061.8	-423.2	-968.7	1057.0	0.00	0.00	0.00	180.00	
6600.0 6700.0 6800.0 6900.0	86.73 86.73	246.40	6056.1								

Inc Azi TVD Part 1 Build 35.75

0

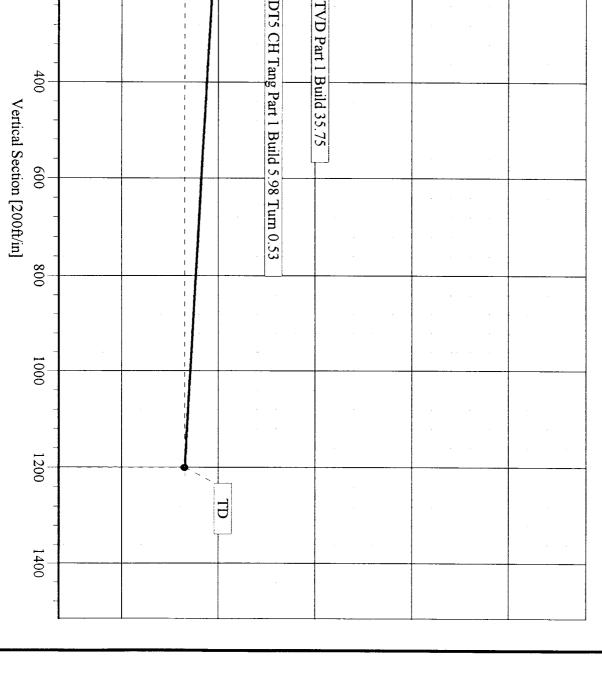
200

400





Texaco E & P, Inc.
Field: Vacuum Glorieta West Unit
Site: Lea County, New Mexico
Well: VGWU #126
Wellpath: West Lateral
Plan: West Lateral





West Lateral

-1400





Field: Site: Well: Wellpath: Plan: Texaco E & P, Inc.

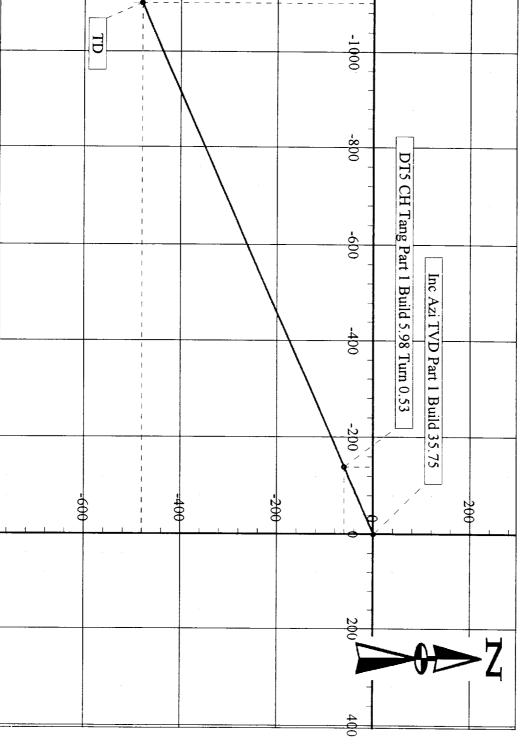
1: Vacuum Glorieta West Unit

3: Lea County, New Mexico

1: VGWU #126

n: West Lateral

n: West Lateral





West(-)/East(+) [200ft/in]

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-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

ľ	API Number 30-025-21031	Pool Code 62160	<sup>3</sup> Pool N VACUUM G	
4 Pro	operty Code 11125		rty Name RIETA WEST UNIT	<sup>6</sup> Well No. 126
	ID Number 2351		ator Name DN & PRODUCTION INC.	9 Elevation

<sup>10</sup> Surface Location

UI or lot no.	Section	Township	Range	Lot.ldn	Feet From The	North/South Line	Feet From The	East/West Line	County
E	6	18S	35E		1660	NORTH	380	WEST	LEA

Bottom Hole Location If Different From Surface

				T						
	ection	Township	Range	Lot.ldn	Feet From	The	North/South Line	Feet From The	East/West Line	County
12/11/1	1.	10.0	200		201-1-	(5)	. 1	10-1	Lust West Line	County
2/A 6	//	183	280		2043/21	40 1	N/N	1820/170	1/2/18.	LEA
12 Dedicated Ad	res	13 Joint of Infill		14 0	· - /	15 0	<del></del>	100/120	10-10	
1	,,,,,	Joint or Infill	1	Consolidation	n Code	' Orde	er No.		,	
120		No								
					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

