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 10,1994
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
TEXACO EXPLORATION & PRODUCTION INC. 205 E. Bender, HOBBS, NM 88240	022351
	3 API Number 30-025-02271

4 Property Code	5 Property Name	6 Well No.
011124	VACUUM GRAYBURG SAN ANDRES UT	24

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
I	2	18S	34E		1980	SOUTH	660	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
J/L	2/1	18 S	34 E		1980/1980	S/S	1776/566	E/W	LEA

9 Proposed Pool 1	10 Proposed Pool 2
Grayburg San Andres	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
E	O	R	S	4002' GR
16 Multiple	**17** Proposed Depth	**18** Formation	**19** Contractor	**20** Spud Date
No	4523 TVD	Grayburg San Andres		09/15/1999

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 zoneand proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Texaco intends to drill **dual horizontal laterals** from the open hole portion of the well, retaining the vertical portion of the well to enhance pump efficiency. The subject laterals will be 1284' lateral at a 270 deg azimuth and a 1319' lateral at a 90 deg azimuth in the Grayburg San Andres formations. The intended procedure is attached.

Expires 1 Year From Approval
Unless Drilling Underway

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 J Denise Leake
Printed Name J. Denise Leake
Title Engineering Assistant
Date 08/31/1999 Telephone 397-0405

OIL CONSERVATION DIVISION

Approved By: Orig. Signed by Paul Kautz Geologist
Title:
Approval Date: SEP 08 1999 Expiration Date:
Conditions of Approval:
Attached ☐

DeSoto Nichols 3-94 ver 1.10

8/17/99

OVERVIEW

The VGSAU # 24 well was drilled in 1940 and potentialed for 1142 BOPD, 0 BWPD and 800 GOR in the Grayburg and San Andres formations. The well has an open hole completion from 4089' to 4710'. It is proposed to drill dual horizontal laterals from the open hole portion of the well, retaining the vertical portion of the well to enhance pump efficiency. The subject laterals will be a +/-1284 foot lateral at a 270 degree azimuth (1116' VS) and a +/-1319 foot lateral at a 90 degree azimuth (1128' VS) in the Grayburg and San Andres formations. The basic well plan is as follows:

a) TOOH with the pump and tubing. RIH with a caliper log across the open hole section from 4089' to 4550'. Whipstock will be set on an open hole packer with one joint of pipe between packer and whipstock. The maximum diameter that a 4.25" open hole packer will set in is 7.5", yielding 1000 psi differential. TIH with a 3 degree whipstock on an open hole packer with a collar separating the two and set at ± 4270' (KOP 4250'). TIH and mill starting hole.

b) Drill a short radius curve using a 4-3/4" bit to a measured depth of +/-4408' (TVD +/-4381'). The final angle will be 56.64 degrees from vertical. Drill +/-1041' horizontal section (azimuth 270 degrees). The end point will be +/-5534' MD, +/-4523' TVD and +/-1116' vertical section with a 108 degree inclination.

c) Retrieve the whipstock. TIH with a 3 degree whipstock on an open hole packer with a collar separating the two and set at ± 4165' (KOP 4145'). TIH and mill starting hole.

d) Drill a short radius curve using a 4-3/4" bit to a measure depth of +/-4303' (TVD +/-4276'). The final angle will be 56.64 degrees from vertical. Drill a +/-1053' horizontal lateral (azimuth 90 degrees). The end point will be +/-5464' MD, +/-4425' TVD and +/-1128' vertical section with a 112 degree inclination.

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.

8/17/99

PROPOSED WORK

PRODUCTION HOLE:

1. TOOH with pump and tubing. RIH with a caliper log and log the open hole section from 4089' to 4550'. The maximum diameter that the 4.25" open hole packer can set in is 7.5" (6.5" is optimal).

2. TIH with retrievable open hole packer, drill collar, whipstock, orientation sub and drill pipe to a top of whipstock depth of 4250' (dependant on caliper profile). Run a gyro. Take a gyro reading to determine the direction of the whipstock face. Rotate the pipe as needed to achieve the required direction (azimuth 270 degrees). Set the open hole packer. Pull the gyro to surface, recording the orientation of the wellbore.

3. Shear off of whipstock and TOOH. TIH with a starting mill and watermelon mill. Pick up the power swivel and begin circulating. Mill to a predetermined depth that will assure the curve assembly will be beyond the whipstock face. TOOH.

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	4381'
Measured Depth	4408'
Final Angle	56.64 degrees
Target Azimuth	270 degrees
Build Rate	38 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 +/-1126' of horizontal hole per the attached Scientific well plan.

5. Continue drilling the horizontal section per the Texaco Asset Team (Mike Raines 915-688-4539 recommendations.

6. Trip out of the hole with the drilling assembly. TIH with drill pipe and run TDT log.

7. TIH and retrieve the whipstock. TOOH. TIH with retrievable open hole packer, drill collar, whipstock, orientation sub and drill pipe to a top of whipstock depth of 4145' (dependant on caliper profile). Run a gyro. Take a gyro reading to determine the direction of the whipstock face. Rotate the pipe as needed to achieve the required direction (azimuth 90 degrees). Set the open hole packer.

8. Shear off of whipstock and TOOH. TIH with a starting mill and watermelon mill. Pick up the power swivel and begin circulating. Mill to a predetermined depth that will assure the curve assembly will be beyond the whipstock face. TOOH.

9. 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.

10. Build curve to estimated target depths and angles as follows:

True Vertical Depth	4276'
Measured Depth	4303'
Final Angle	56.64 degrees
Target Azimuth	90 degrees
Build Rate	38 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.

11. 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.

8/17/99

12. Drill +/-1161' of horizontal hole per the attached Scientific well plan.

13. Continue drilling the horizontal section per the Texaco Asset Team (Mike Raines 915-688-4539 recommendations.

14. Trip out of the hole with the drilling assembly. TIH and run TDT log.

15. Set a wireline set, tubing retrievable bridge plug for 5-1/2", 17#/ft casing at +/- 3900'. Test plug to 1000 psi.

16. Lay down the drill pipe.

17. 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

Company:	Texaco E & P, Inc.	**Date:**	8/16/1999	**Time:**	10:52:15 **Page:** 1
Field:	Vacuum Glorieta San Andres Unit	**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:	VGSAU #24	**Section (VS) Reference:**	Site (0.0E,0.0N,270.0Azi)		
Wellpath:	West Lower Lateral	**Plan:**	Plan #1		

Field: Vacuum Glorieta San Andres Unit

Map Projection & Zone: US State Plane Coordinate System 1927 New Mexico, Eastern Zone

Ellipsoid: Clarke - 1866

Field Datum: Mean Sea Level

Local Coordinate Reference: Site Centre
Location of Field Centre: N/A
Field Centre Map Easting: ft
Field Centre Map Northing: ft
Direction of Local North: True
Local Vertical Reference: Wellpath Datum
Geomagnetic Model: IGRF95

Site: Lea County, New Mexico

Site Centre: ft E, ft N — **Latitude** / **Longitude**

Site Water Depth: 0.0 ft

Magnetic Declination: 0.00 deg
Grid Convergence: 0.00 deg

Measured Depths Referenced To: SITE 0.0 ft above Mean Sea Level

Well: VGSAU #24

Originating From: 0.0 ft +N/-S, 0.0 ft +E/-W — **Map Easting:** 0.00 ft, **Map Northing:** 0.00 ft

Wellpath: West Lower Lateral

Origin of Vertical Section: Site Centre 0.0 ft +N/-S, 0.0 ft +E/-W

Direction of Vertical Section: 270.00 deg

Plan: Plan #1 — **Date Composed:** 8/16/1999, **Version:** 1

Principal: Yes — **Locked:** No

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg	Target
4000.0	0.00	270.00	4000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4250.0	0.00	270.00	4250.0	0.0	0.0	0.00	0.00	0.00	0.00	
4397.4	56.00	270.00	4375.0	0.0	-66.5	38.00	38.00	0.00	0.00	
4408.0	56.64	270.00	4380.9	0.0	-75.3	6.00	6.00	0.00	0.00	
4557.3	56.64	270.00	4463.0	0.0	-200.0	0.00	0.00	0.00	0.00	Target 1
4703.9	56.64	270.00	4543.6	0.0	-322.4	0.00	0.00	0.00	0.00	
5051.0	89.61	270.00	4643.0	0.0	-650.0	9.50	9.50	0.00	0.00	Target 2
5233.7	107.88	270.00	4615.3	0.0	-829.9	10.00	10.00	0.00	0.00	
5534.4	107.88	270.00	4523.0	0.0	-1116.0	0.00	0.00	0.00	0.00	Target 3

Section 1 : Straight MD Part 1 Hold

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
4000.0	0.00	270.00	4000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
4100.0	0.00	270.00	4100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
4200.0	0.00	270.00	4200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
4250.0	0.00	270.00	4250.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Scientific Drilling
Planning Report

Company:	Texaco E & P, Inc.	**Date:** 8/16/1999 **Time:** 10:52:15 **Page:**	2
Field:	Vacuum Glorieta San Andres Unit	**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:	VGSAU #24	**Section (VS) Reference:**	Site (0.0E,0.0N,270.0Azi)
Wellpath:	West Lower Lateral	**Plan:**	Plan #1

Section 2 : Inc Azi TVD Part 1 Build 38.00

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
4260.0	3.80	270.00	4260.0	0.0	-0.3	0.3	38.00	38.00	0.00	0.00
4270.0	7.60	270.00	4269.9	0.0	-1.3	1.3	38.00	38.00	0.00	0.00
4280.0	11.40	270.00	4279.8	0.0	-3.0	3.0	38.00	38.00	0.00	0.00
4290.0	15.20	270.00	4289.5	0.0	-5.3	5.3	38.00	38.00	0.00	0.00
4300.0	19.00	270.00	4299.1	0.0	-8.2	8.2	38.00	38.00	0.00	0.00
4310.0	22.80	270.00	4308.4	0.0	-11.8	11.8	38.00	38.00	0.00	0.00
4320.0	26.60	270.00	4317.5	0.0	-16.0	16.0	38.00	38.00	0.00	0.00
4330.0	30.40	270.00	4326.3	0.0	-20.7	20.7	38.00	38.00	0.00	0.00
4340.0	34.20	270.00	4334.7	0.0	-26.1	26.1	38.00	38.00	0.00	0.00
4350.0	38.00	270.00	4342.8	0.0	-32.0	32.0	38.00	38.00	0.00	0.00
4360.0	41.80	270.00	4350.5	0.0	-38.4	38.4	38.00	38.00	0.00	0.00
4370.0	45.60	270.00	4357.7	0.0	-45.3	45.3	38.00	38.00	0.00	0.00
4380.0	49.40	270.00	4364.5	0.0	-52.7	52.7	38.00	38.00	0.00	0.00
4390.0	53.20	270.00	4370.7	0.0	-60.5	60.5	38.00	38.00	0.00	0.00
4397.4	56.00	270.00	4375.0	0.0	-66.5	66.5	38.00	38.00	0.00	0.00

Section 3 : DT5 CH Tang Part 1 Build 6.00

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
4400.0	56.16	270.00	4376.5	0.0	-68.6	68.6	6.00	6.00	0.00	0.00
4408.0	56.64	270.00	4380.9	0.0	-75.3	75.3	6.00	6.00	0.00	0.00

Section 4 : DT5 CH Tang Part 2 Hold

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
4500.0	56.64	270.00	4431.5	0.0	-152.1	152.1	0.00	0.00	0.00	0.00
4557.3	56.64	270.00	4463.0	0.0	-200.0	200.0	0.00	0.00	0.00	0.00

Section 5 : DT5 HC Tang Part 1 Hold

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
4600.0	56.64	270.00	4486.5	0.0	-235.7	235.7	0.00	0.00	0.00	0.00
4703.9	56.64	270.00	4543.6	0.0	-322.4	322.4	0.00	0.00	0.00	0.00

Section 6 : DT5 HC Tang Part 2 Build 9.50

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
4750.0	61.02	270.00	4567.5	0.0	-361.9	361.9	9.50	9.50	0.00	0.00
4800.0	65.77	270.00	4589.9	0.0	-406.6	406.6	9.50	9.50	0.00	0.00
4850.0	70.52	270.00	4608.5	0.0	-453.0	453.0	9.50	9.50	0.00	0.00
4900.0	75.27	270.00	4623.2	0.0	-500.7	500.7	9.50	9.50	0.00	0.00
4950.0	80.02	270.00	4633.9	0.0	-549.6	549.6	9.50	9.50	0.00	0.00
5000.0	84.77	270.00	4640.5	0.0	-599.1	599.1	9.50	9.50	0.00	0.00
5051.0	89.61	270.00	4643.0	0.0	-650.0	650.0	9.50	9.50	0.00	0.00

Section 7 : DT5 CH Tang Part 1 Build 10.00

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
5100.0	94.51	270.00	4641.2	0.0	-699.0	699.0	10.00	10.00	0.00	0.00
5150.0	99.51	270.00	4635.1	0.0	-748.6	748.6	10.00	10.00	0.00	0.00
5200.0	104.51	270.00	4624.7	0.0	-797.5	797.5	10.00	10.00	0.00	0.00
5233.7	107.86	270.00	4615.3	0.0	-829.9	829.9	10.00	10.00	0.00	0.00

Section 8 : DT5 CH Tang Part 2 Hold

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
5300.0	107.88	270.00	4595.0	0.0	-892.9	892.9	0.00	0.00	0.00	180.00
5400.0	107.88	270.00	4564.3	0.0	-988.1	988.1	0.00	0.00	0.00	180.00

Scientific Drilling
Planning Report

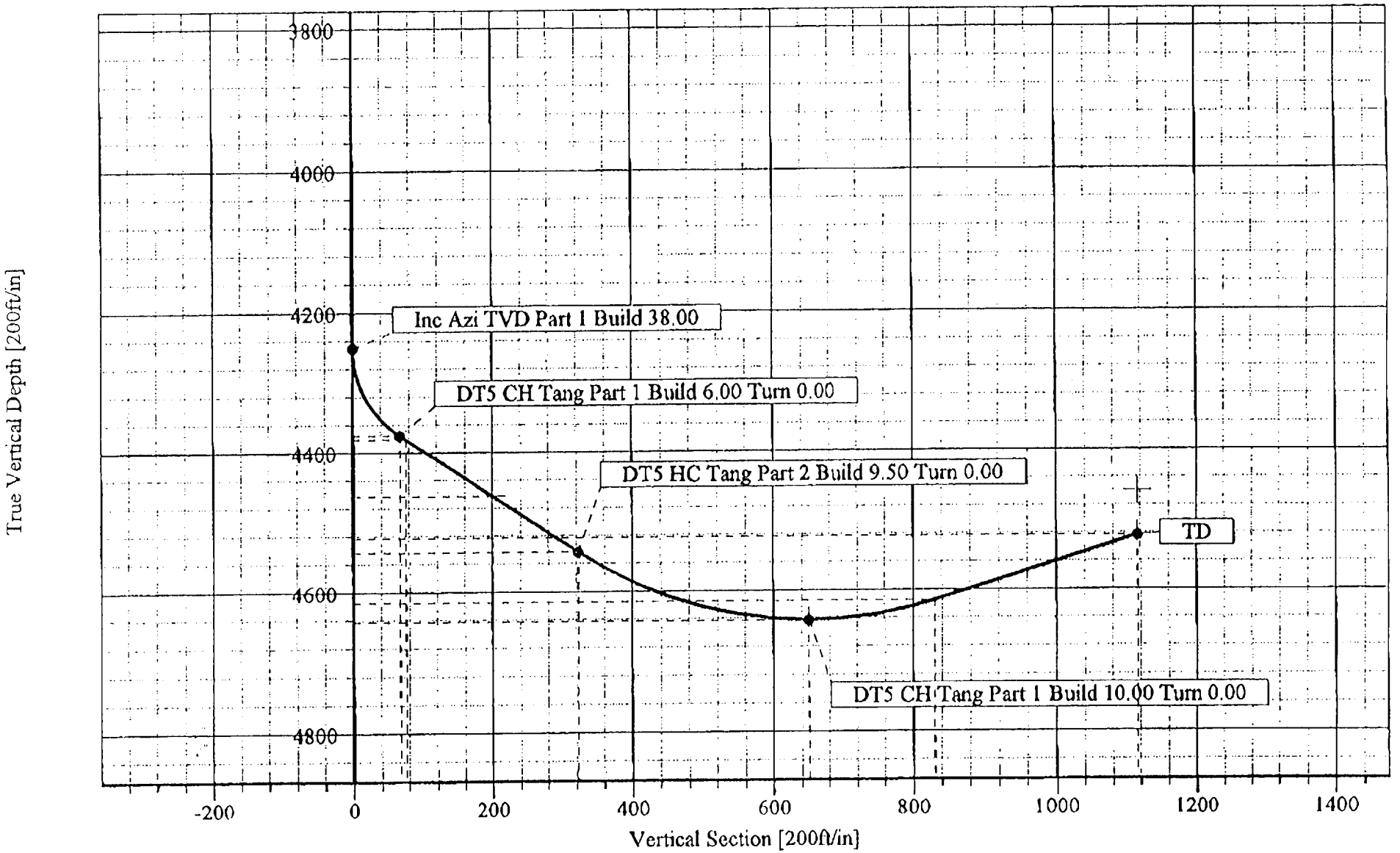
Company:	Texaco E & P, Inc.	**Date:**	8/16/1999	**Time:** 10:52:15	**Page:** 3
Field:	Vacuum Glorieta San Andres Unit	**Co-ordinate(NE) Reference:**	Site: Lea County, New Mexico, True North		
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	VGSAU #24	**Section (VS) Reference:**	Site (0.0E,0.0N,270.0Azi)		
Wellpath:	West Lower Lateral	**Plan:**	Plan #1		

Section 8 : DT5 CH Tang Part 2 Hold

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
5500.0	107.88	270.00	4533.6	0.0	-1083.3	1083.3	0.00	0.00	0.00	180.00
5534.4	107.88	270.00	4523.0	0.0	-1116.0	1116.0	0.00	0.00	0.00	180.00

Scientific Drilling

Texaco E & P, Inc.
Field: Vacuum Glorieta San Andres Unit
Site: Lea County, New Mexico
Well: VGSAU #24
Wellpath: West Lower Lateral
Plan: Plan #1



Scientific Drilling
Planning Report

Company:	Texaco E & P, Inc.	Date: 8/16/1999 Time: 11:04:58	Page: 1
Field:	Vacuum Glorieta San Andres Unit	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:	VGSAU #24	Section (VS) Reference:	Site (0.0E,0.0N,90.0Azi)
Wellpath:	Upper Lateral(east)	Plan:	Upper Lateral

Field: Vacuum Glorieta San Andres 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 New Mexico, Eastern Zone	Direction of Local North:	True
Ellipsoid: Clarke - 1866		Local Vertical Reference:	Wellpath Datum
Field Datum: Mean Sea Level		Geomagnetic Model:	IGRF95

Site: Lea County, New Mexico

Site Centre: ft E, ft N — Latitude, Longitude

Site Water Depth: 0.0 ft

Magnetic Declination: 0.00 deg
Grid Convergence: 0.00 deg

Measured Depths Referenced To: SITE 0.0 ft above Mean Sea Level

Well: VGSAU #24

Originating From: 0.0 ft +N/-S, 0.0 ft +E/-W — Map Easting: 0.00 ft, Map Northing: 0.00 ft

Wellpath: Upper Lateral(east)

Origin of Vertical Section: Site Centre 0.0 ft +N/-S, 0.0 ft +E/-W

Direction of Vertical Section: 90.00 deg

Plan: Upper Lateral — Date Composed: 8/16/1999, Version: 1

Principal: Yes — Locked: No

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS d/100ft	Build d/100ft	Turn d/100ft	TFO deg	Target
4000.0	0.00	90.00	4000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4145.0	0.00	90.00	4145.0	0.0	0.0	0.00	0.00	0.00	0.00	
4292.4	56.00	90.00	4270.0	0.0	66.5	38.00	38.00	0.00	0.00	
4303.0	56.64	90.00	4275.9	0.0	75.3	6.00	6.00	0.00	0.00	
4452.3	56.64	90.00	4358.0	0.0	200.0	0.00	0.00	0.00	0.00	Target4
4720.6	56.64	90.00	4505.6	0.0	424.1	0.00	0.00	0.00	0.00	
4959.8	90.12	90.00	4573.0	0.0	650.0	14.00	14.00	0.00	0.00	Target 5
5177.5	111.89	90.00	4531.7	0.0	862.4	10.00	10.00	0.00	0.00	
5463.7	111.89	90.00	4425.0	0.0	1126.0	0.00	0.00	0.00	0.00	Target 6

Section 1 : Straight MD Part 1 Hold

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
4000.0	0.00	90.00	4000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
4100.0	0.00	90.00	4100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
4145.0	0.00	90.00	4145.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Scientific Drilling
Planning Report

Company:	Texaco E & P, Inc.	Date:	8/16/1999	Time: 11:04:58	Page: 2
Field:	Vacuum Glorieta San Andres Unit	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:	VGSAU #24	Section (VS) Reference:	Site (0.0E,0.0N,90.0Azi)		
Wellpath:	Upper Lateral(east)	Plan:	Upper Lateral		

Section 2 : Inc Azi TVD Part 1 Build 38.00

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
4150.0	1.90	90.00	4150.0	0.0	0.1	0.1	38.00	38.00	0.00	0.00
4160.0	5.70	90.00	4160.0	0.0	0.7	0.7	38.00	38.00	0.00	0.00
4170.0	9.50	90.00	4169.9	0.0	2.1	2.1	38.00	38.00	0.00	0.00
4180.0	13.30	90.00	4179.7	0.0	4.0	4.0	38.00	38.00	0.00	0.00
4190.0	17.10	90.00	4189.3	0.0	6.7	6.7	38.00	38.00	0.00	0.00
4200.0	20.90	90.00	4198.6	0.0	9.9	9.9	38.00	38.00	0.00	0.00
4210.0	24.70	90.00	4208.0	0.0	13.8	13.8	38.00	38.00	0.00	0.00
4220.0	28.50	90.00	4216.9	0.0	18.3	18.3	38.00	38.00	0.00	0.00
4230.0	32.30	90.00	4225.6	0.0	23.3	23.3	38.00	38.00	0.00	0.00
4240.0	36.10	90.00	4233.8	0.0	29.0	29.0	38.00	38.00	0.00	0.00
4250.0	39.90	90.00	4241.7	0.0	35.1	35.1	38.00	38.00	0.00	0.00
4260.0	43.70	90.00	4249.2	0.0	41.8	41.8	38.00	38.00	0.00	0.00
4270.0	47.50	90.00	4256.2	0.0	48.9	48.9	38.00	38.00	0.00	0.00
4280.0	51.30	90.00	4262.7	0.0	56.5	56.5	38.00	38.00	0.00	0.00
4290.0	55.10	90.00	4268.7	0.0	64.5	64.5	38.00	38.00	0.00	0.00
4292.4	56.00	90.00	4270.0	0.0	66.5	66.5	38.00	38.00	0.00	0.00

Section 3 : DT5 CH Tang Part 1 Build 6.00

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
4303.0	56.64	90.00	4275.9	0.0	75.3	75.3	6.00	6.00	0.00	0.00

Section 4 : DT5 CH Tang Part 2 Hold

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
4400.0	56.64	90.00	4329.2	0.0	156.3	156.3	0.00	0.00	0.00	0.00
4452.3	56.64	90.00	4358.0	0.0	200.0	200.0	0.00	0.00	0.00	0.00

Section 5 : DT5 HC Tang Part 1 Hold

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
4500.0	56.64	90.00	4384.2	0.0	239.8	239.8	0.00	0.00	0.00	0.00
4600.0	56.64	90.00	4439.2	0.0	323.4	323.4	0.00	0.00	0.00	0.00
4700.0	56.64	90.00	4494.2	0.0	406.9	406.9	0.00	0.00	0.00	0.00
4720.6	56.64	90.00	4505.6	0.0	424.1	424.1	0.00	0.00	0.00	0.00

Section 6 : DT5 HC Tang Part 2 Build 14.00

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
4725.0	57.25	90.00	4508.0	0.0	427.8	427.8	14.00	14.00	0.00	0.00
4750.0	60.75	90.00	4520.8	0.0	449.2	449.2	14.00	14.00	0.00	0.00
4775.0	64.25	90.00	4532.4	0.0	471.4	471.4	14.00	14.00	0.00	0.00
4800.0	67.75	90.00	4542.5	0.0	494.2	494.2	14.00	14.00	0.00	0.00
4825.0	71.25	90.00	4551.3	0.0	517.6	517.6	14.00	14.00	0.00	0.00
4850.0	74.75	90.00	4558.6	0.0	541.5	541.5	14.00	14.00	0.00	0.00
4875.0	78.25	90.00	4564.4	0.0	565.8	565.8	14.00	14.00	0.00	0.00
4900.0	81.75	90.00	4568.8	0.0	590.5	590.5	14.00	14.00	0.00	0.00
4925.0	85.25	90.00	4571.6	0.0	615.3	615.3	14.00	14.00	0.00	0.00
4950.0	88.75	90.00	4572.9	0.0	640.2	640.2	14.00	14.00	0.00	0.00
4959.8	90.12	90.00	4573.0	0.0	650.0	650.0	14.00	14.00	0.00	0.00

Section 7 : DT5 CH Tang Part 1 Build 10.00

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
5000.0	94.14	90.00	4571.5	0.0	690.2	690.2	10.00	10.00	0.00	0.00
5050.0	99.14	90.00	4565.7	0.0	739.9	739.9	10.00	10.00	0.00	0.00
5100.0	104.14	90.00	4555.6	0.0	788.8	788.8	10.00	10.00	0.00	0.00
5150.0	109.14	90.00	4541.3	0.0	836.7	836.7	10.00	10.00	0.00	0.00
5177.5	111.89	90.00	4531.7	0.0	862.4	862.4	10.00	10.00	0.00	0.00

Scientific Drilling
Planning Report

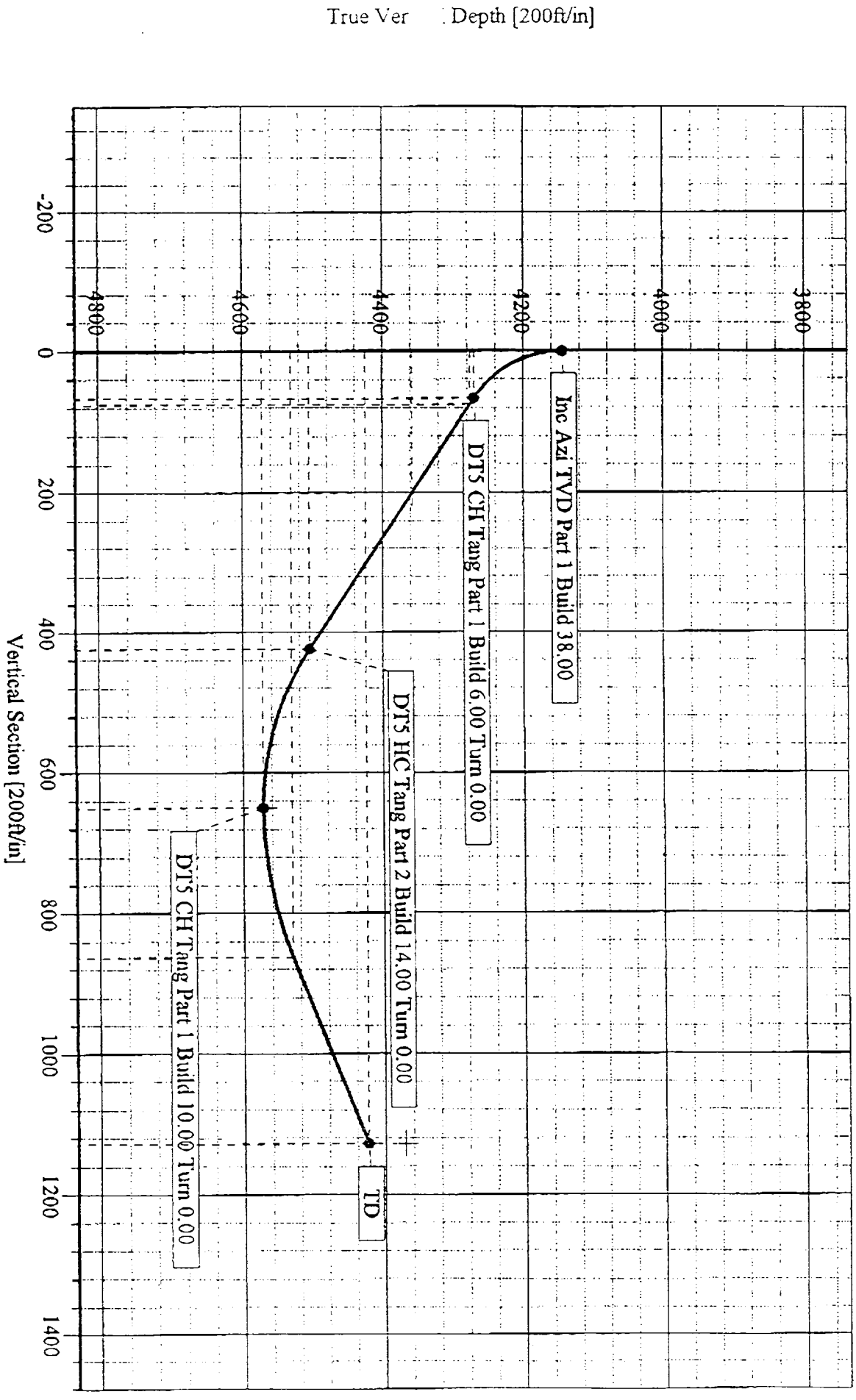
Company:	Texaco E & P, Inc.	Date: 8/16/1999	Time: 11:04:58 Page: 3
Field:	Vacuum Glorieta San Andres Unit	Co-ordinate(NE) Reference:	Site: Lea County, New Mexico, True North
Site:	Lea County, New Mexico	Vertical (TVD) Reference:	SITE 0.0 above Mean Sea Level
Well:	VGSAU #24	Section (VS) Reference:	Site (0.0E,0.0N,90.0Azi)
Wellpath:	Upper Lateral(east)	Plan:	Upper Lateral

Section 7 : DT5 CH Tang Part 1 Build 10.00

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	TFO

Section 8 : DT5 CH Tang Part 2 Hold

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
5200.0	111.89	90.00	4523.3	0.0	883.3	883.3	0.00	0.00	0.00	180.00
5300.0	111.89	90.00	4486.0	0.0	976.1	976.1	0.00	0.00	0.00	180.00
5400.0	111.89	90.00	4448.7	0.0	1068.9	1068.9	0.00	0.00	0.00	180.00
5463.7	111.89	90.00	4425.0	0.0	1128.0	1128.0	0.00	0.00	0.00	180.00


True Ver . Depth [200ft/in]
Scientific Drilling
Texaco E & P, Inc.
Field: Vacuum Glorieta San Andres Unit
Site: Lea County, New Mexico
Well: VGSAU #24
Wellpath: Upper Lateral(east)
Plan: Upper Lateral
Inc Azi TVD Part 1 Build 38.00
DT5 CH Tang Part 1 Build 6.00 Turn 0.00
DT5 HC Tang Part 2 Build 14.00 Turn 0.00
DT5 CH Tang Part 1 Build 10.00 Turn 0.00
TD
Vertical Section [200ft/in]
-200
0
200
400
600
800
1000
1200
1400
3800
4000
4200
4400
4600
4800

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-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

1 API Number	2 Pool Code	3 Pool Name
30-025-02271	62180	VACUUM GRAYBURG SAN ANDRES

4 Property Code	5 Property Name	6 Well No.
011124	VACUUM GRAYBURG SAN ANDRES UT	24

7 OGRID Number	8 Operator Name	9 Elevation
022351	TEXACO EXPLORATION & PRODUCTION INC.	4002' GR

10 Surface Location

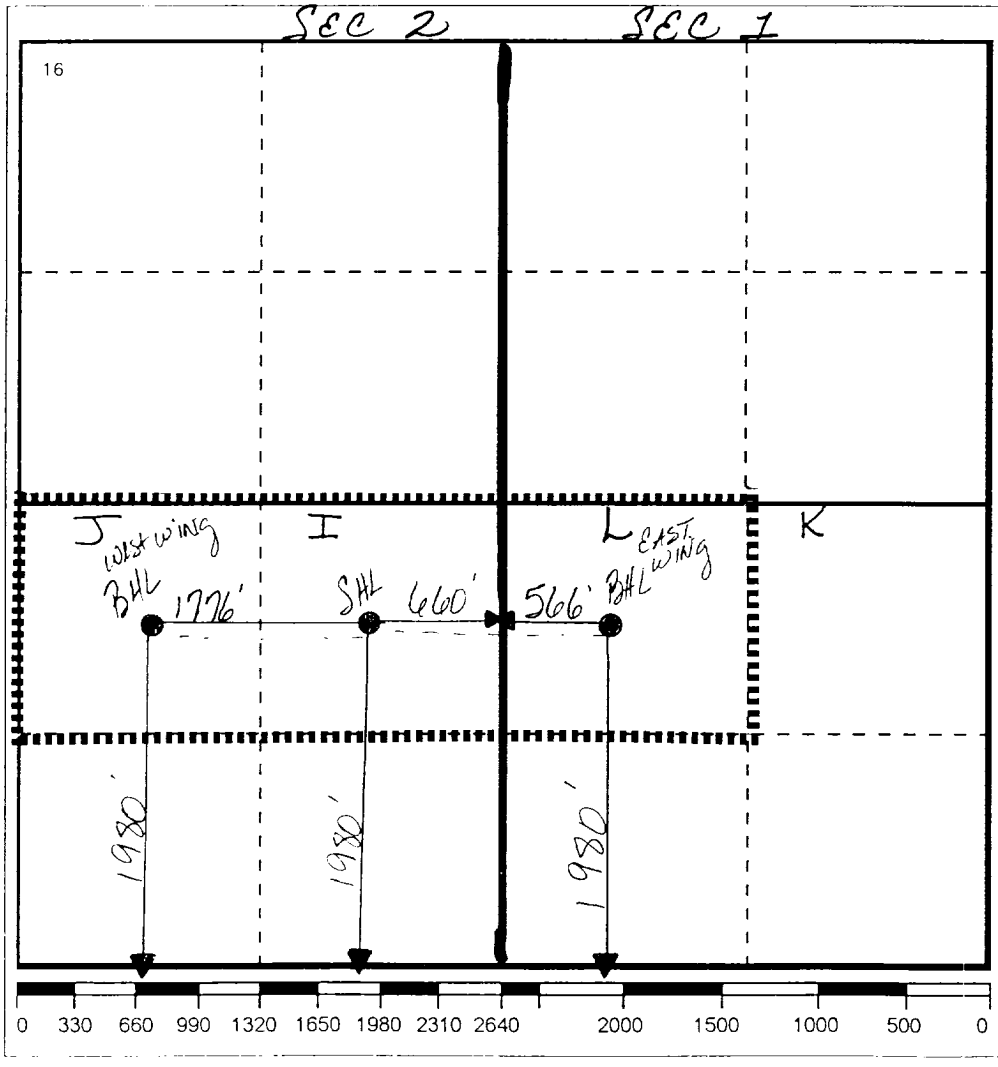
Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
I	2	18S	34E		1980	SOUTH	660	EAST	LEA

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
J/L	2/1	18S	34E		1980/1980	S/S	1776/566	E/W	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
120	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



17 OPERATOR CERTIFICATION

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

Signature: Dr. Denise Leake

Printed Name: J. Denise Leake

Position: Engineering Assistant

Date: 08/31/1999

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 knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

DeSoto/Nichols 3-94 ver 1.10