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-10/
Revised February 10,199
Instructions on back
Submit to Appropriate District Offic
State Lease - 6 Copie
Fee Lease - 5 Copie
☐ 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 3002531876

4 Property Code	5 Property Name	6 Well No.
011125	VACUUM GLORIETA WEST UNIT	121

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
A	1	18-SO	34-EA		964	NORTH	90	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
A/D	1/6	18S	34E/35E		1138/834	NORTH/NORTH	1075/671 6449	East/East	LEA

9 Proposed Pool 1	10 Proposed Pool 2
VACUUM GLORIETA	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
E P	O	ROTARY	S	GR-3986', KB-4000'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6060 MD	GLORIETA		5/1/00

21 Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11	8 5/8	24#	1500'	CL-C 650 SX, CIRC. 9	
7 7/8	5 1/2	15.5#	6250'	CL-H 1600 SX, CIRC.	

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 A DUAL HORIZONTAL ~~RE-ENTRY~~ ON THE SUBJECT WELL. THE PROPOSED WORK IS ATTACHED.

Permit Expires 1 Year From Approval Date Unless Drilling Underway

Horizontal

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 3/20/00 Telephone 397-0405

OIL CONSERVATION DIVISION

ORIGINAL SIGNED BY CHRIS WILLIAMS
DISTRICT SUPERVISOR

Approved By:

Title:

Approval Date: MAY 11 2000 Expiration Date:

Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

OVERVIEW

The Vacuum Glorieta West Unit # 121 well was drilled in 1993 as an injection well in the Glorieta formation. The well is currently perforated from 5998'-6044'. PBTD is 6074'. It is proposed to drill a +/-750 foot lateral at 80 degrees and a +/-1000 foot lateral at 260 degrees in the Glorieta formation. The basic well plan is as follows:

a) TOOH with the pump and tubing. Run a casing scraper to 6000'. Set a 5-1/2" cement retainer at 5970' collars at 5958' and 5916'). Squeeze existing perforations. Set a 5-1/2", 15.5 #/ft TIW or Smith full bore SS-WB-BB permanent packer at +/-5949' (bottom of packer). TIH with latch (1.0'), debris sub (2.55') and a 3 degree multi-lateral selective/reentry whipstock (top of window +/-5928', bottom of window +/-5935'). 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 +/-6060' (TVD +/-6015'). The final angle will be 89.15 degrees from vertical. Drill +/-671' horizontal section (azimuth 80 degrees). The end point will be +/-6731' MD, +/-6025' TVD and +/-750' vertical section.

c) Retrieve the whipstock. TIH with a latch (1'), +/-35' space out assembly (drill collars and a stabilizer), debris sub (2.55') and another 3 degree whipstock (top of window +/-5893', bottom of window +/-5900').

d) Drill a short radius curve using a 4-3/4" bit to a measure depth of +/-6073' (TVD +/-6010'). The final angle will be 90 degrees from vertical. Drill a +/-890' horizontal lateral (azimuth 260 degrees). The end point will be +/-6963' MD, +/-6010' TVD and +/-1000' 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. TIH with casing scraper to 6000'. Set a 5-1/2" cement retainer at 5970'. Establish injection rate. Squeeze Glorieta perforations 5998'–6044' with 150 sacks of Class "H" cement containing 0.3% D156 fluid loss and 0.4% D65 dispersant followed by 100 sacks of Class "H" neat cement (15.6 ppg). Pump at less than 2 BPM, slowing to 0.5 BPM at the end of the job (no hesitation). TOOH. TIH and polish off cement top to ±5955'. Pressure test the squeeze to 1000 psi. TOOH. TIH with a 5-1/2", 15.5#/ft Smith full bore packer on wireline and set the packer above the cement retainer at +/-5945'. Correlate the casing collars with the production logs (casing collar at 5958' & 5916'). 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 (80 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	6060'
Final Angle	89.15 degrees
Target Azimuth	80 degrees
Build Rate	71.61 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 +/-671' 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, +/-35' space out assembly (drill collars and stabilizer), debris sub and another retrievable 3 degree whipstock (top of window at +/-5893', bottom of window at +/-5900'). 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	6073'
Final Angle	90 degrees
Target Azimuth	260 degrees
Build Rate	52.09 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.

POTENTIAL PROBLEMS:

Horizontal Production hole:

a) Loss circulation material and/or other plugging agents are not to be used in this portion of the hole.

b) The horizontal lateral will be drilled with fresh water from the Vacuum fresh water supply well.

c) No hydrogen sulfide is expected, but H2S detection equipment is to be installed.

MUD PROGRAM:

Interval	Type	Weight	Viscosity	Remarks
Curve	Fresh Water	8.4 ppg	35	Raise visc. with starch and gel
Horizontal	Fresh Water	8.4-9.0 ppg	28-29	Circulate reserve

EVALUATION PROGRAM

Coring:

No cores are anticipated.

Mud Loggers:

A mud logger will be rigged from the start of the curve to total depth. Contact Kevin Hickey at (915) 688-2950 for the name of the mud logger.

Open Hole Logs:

The following open hole logs will be run in the vertical section of the well:

Run 1: Gyro from 5950'- surface for determination of bottom hole location (Scientific Drilling responsibility).

The guidance system in the curve and horizontal sections of the hole will consist of a MWD system.

Horizontal Hole Logs:

No logs are anticipated.

CASING PROPERTIES

	DEPTH	BURST Rated	BURST (75%)	COLLAPSE Rated	COLLAPSE (75%)	TEST PRESSURE
8-5/8",24#,J55	0'-1500'	2950	2212	1370	1027	1000
5-1/2",15.5#,J55	0'-6250'	4810	3600	4040	3030	1000

EAST

Scientific Drilling
Planning Report

Company:	Texaco E & P, Inc.	**Date:** 12/20/1999	**Time:** 14:58:35	**Page:**	1
Field:	Vacuum Glorieta West Unit	**Co-ordinate(NE) Reference:**	Site: Lea County, New Mexico, Grid North		
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	VGWU #121	**Section (VS) Reference:**	Site (0.0E,0.0N,80.0Azi)		
Wellpath:	Original Cased hole	**Plan:**	Plan #1		

Field: Vacuum Glorieta West 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: Grid
Local Vertical Reference: Wellpath Datum
Geomagnetic Model: IGRF95

Site: Lea County, New Mexico

Site Centre: 750286.00 ft E, 653219.00 ft N
32 47 35.293 N **Latitude**
103 31 7.940 W **Longitude**

Site Water Depth: 0.0 ft

Magnetic Declination: 8.99 deg
Grid Convergence: 0.44 deg

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

Well: VGWU #121

Originating From: 0.0 ft +N/-S, 0.0 ft +E/-W
Map Easting : 750286.00 ft
Map Northing: 653219.00 ft

Wellpath: Original Cased hole

Origin of Vertical Section: Site Centre 0.0 ft +N/-S, 0.0 ft +E/-W
Direction of Vertical Section: 80.00 deg

Survey

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	Tool/Comment
5500.0	0.00	80.00	5500.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5600.0	0.00	80.00	5600.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5700.0	0.00	80.00	5700.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5800.0	0.00	80.00	5800.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5900.0	0.00	80.00	5900.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5935.0	0.00	80.00	5935.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5940.0	3.58	80.00	5940.0	0.0	0.2	0.2	71.61	71.61	0.00	Gyro
5945.0	7.16	80.00	5945.0	0.1	0.6	0.6	71.61	71.61	0.00	Gyro
5950.0	10.74	80.00	5949.9	0.2	1.4	1.4	71.61	71.61	0.00	Gyro
5955.0	14.32	80.00	5954.8	0.4	2.4	2.5	71.61	71.61	0.00	Gyro
5960.0	17.90	80.00	5959.6	0.7	3.8	3.9	71.61	71.61	0.00	Gyro
5965.0	21.48	80.00	5964.3	1.0	5.5	5.6	71.61	71.61	0.00	Gyro
5970.0	25.06	80.00	5968.9	1.3	7.4	7.5	71.61	71.61	0.00	Gyro
5975.0	28.64	80.00	5973.4	1.7	9.6	9.8	71.61	71.61	0.00	Gyro
5980.0	32.23	80.00	5977.7	2.1	12.1	12.3	71.61	71.61	0.00	Gyro
5985.0	35.81	80.00	5981.8	2.6	14.9	15.1	71.61	71.61	0.00	Gyro
5990.0	39.39	80.00	5985.8	3.2	17.9	18.2	71.61	71.61	0.00	Gyro
5995.0	42.97	80.00	5989.5	3.7	21.1	21.5	71.61	71.61	0.00	Gyro
6000.0	46.55	80.00	5993.1	4.3	24.6	25.0	71.61	71.61	0.00	Gyro
6005.0	50.13	80.00	5996.4	5.0	28.3	28.7	71.61	71.61	0.00	Gyro
6010.0	53.71	80.00	5999.5	5.7	32.2	32.7	71.61	71.61	0.00	Gyro
6015.0	57.29	80.00	6002.3	6.4	36.2	36.8	71.61	71.61	0.00	Gyro
6020.0	60.87	80.00	6004.9	7.1	40.4	41.1	71.61	71.61	0.00	Gyro

Scientific Drilling
Planning Report

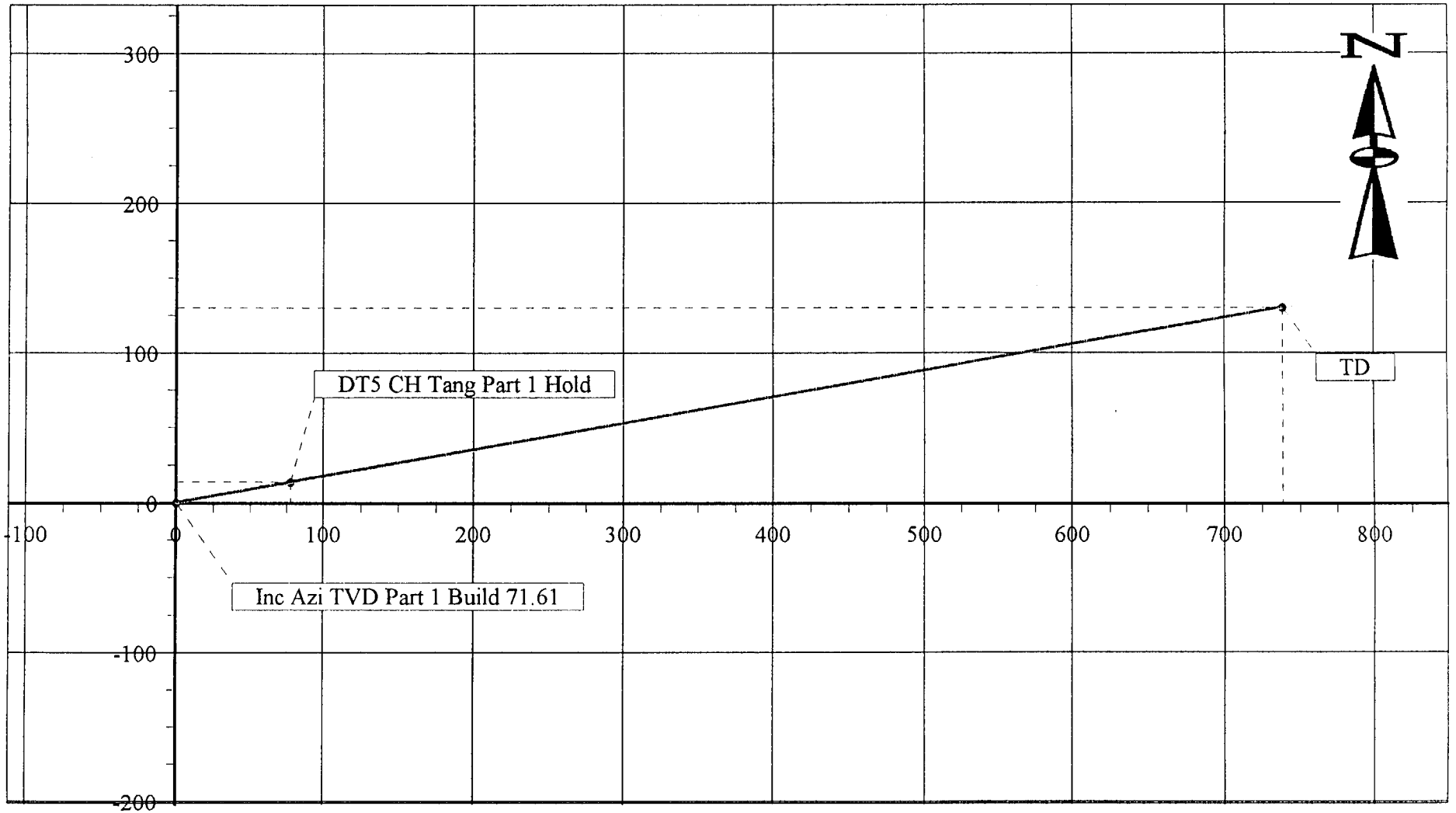
Company:	Texaco E & P, Inc.	**Date:**	12/20/1999	**Time:** 14:58:35	**Page:** 2
Field:	Vacuum Glorieta West Unit	**Co-ordinate(NE) Reference:**	Site: Lea County, New Mexico, Grid North		
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	VGWU #121	**Section (VS) Reference:**	Site (0.0E,0.0N,80.0Azi)		
Wellpath:	Original Cased hole	**Plan:**	Plan #1		

Survey

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	Tool/Comment
6025.0	64.45	80.00	6007.2	7.9	44.8	45.5	71.61	71.61	0.00	Gyro
6030.0	68.03	80.00	6009.2	8.7	49.3	50.1	71.61	71.61	0.00	Gyro
6035.0	71.61	80.00	6010.9	9.5	53.9	54.8	71.61	71.61	0.00	Gyro
6040.0	75.19	80.00	6012.4	10.3	58.7	59.6	71.61	71.61	0.00	Gyro
6045.0	78.77	80.00	6013.5	11.2	63.5	64.4	71.61	71.61	0.00	Gyro
6050.0	82.35	80.00	6014.3	12.0	68.3	69.4	71.61	71.61	0.00	Gyro
6055.0	85.93	80.00	6014.8	12.9	73.2	74.3	71.61	71.61	0.00	Gyro
6059.5	89.15	80.00	6015.0	13.7	77.6	78.8	71.61	71.61	0.00	Gyro
6059.6	89.15	80.00	6015.0	13.7	77.7	78.9	0.00	0.00	0.00	Gyro
6100.0	89.15	80.00	6015.6	20.7	117.5	119.3	0.00	0.00	0.00	Gyro
6200.0	89.15	80.00	6017.1	38.1	216.0	219.3	0.00	0.00	0.00	Gyro
6300.0	89.15	80.00	6018.6	55.4	314.5	319.3	0.00	0.00	0.00	Gyro
6400.0	89.15	80.00	6020.1	72.8	412.9	419.3	0.00	0.00	0.00	Gyro
6500.0	89.15	80.00	6021.5	90.2	511.4	519.3	0.00	0.00	0.00	Gyro
6600.0	89.15	80.00	6023.0	107.5	609.9	619.3	0.00	0.00	0.00	Gyro
6700.0	89.15	80.00	6024.5	124.9	708.3	719.3	0.00	0.00	0.00	Gyro
6730.7	89.15	80.00	6025.0	130.2	738.6	750.0	0.00	0.00	0.00	Gyro

Scientific Drilling

Texaco E & P, Inc.
Field: Vacuum Glorieta West Unit
Site: Lea County, New Mexico
Well: VGWU #121
Wellpath: Original Cased hole
Plan: Plan #1



Scientific Drilling
Planning Report

West

Company:	Texaco E & P, Inc.	**Date:** 12/20/1999 **Time:** 15:04:43 **Page:** 1	
Field:	Vacuum Glorieta West Unit	**Co-ordinate(NE) Reference:**	Site: Lea County, New Mexico, Grid North
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level
Well:	VGWU #121	**Section (VS) Reference:**	Site (0.0E,0.0N,260.0Azi)
Wellpath:	West(top) Lateral	**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 New Mexico, Eastern Zone	**Direction of Local North:**	Grid
Ellipsoid: Clarke - 1866		**Local Vertical Reference:**	Wellpath Datum
Field Datum: Mean Sea Level		**Geomagnetic Model:**	IGRF95

Site: Lea County, New Mexico

Site Centre:	750286.00 ft E	32	47	35.293 N	**Latitude**
	653219.00 ft N	103	31	7.940 W	**Longitude**

Site Water Depth: 0.0 ft

Magnetic Declination: 8.99 deg
Grid Convergence: 0.44 deg

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

Well: VGWU #121

Originating From:	0.0 ft +N/-S	**Map Easting :**	750286.00 ft
	0.0 ft +E/-W	**Map Northing:**	653219.00 ft

Wellpath: West(top) Lateral

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

Direction of Vertical Section: 260.00 deg

Survey

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	Tool/Comment
5500.0	0.00	260.00	5500.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5600.0	0.00	260.00	5600.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5700.0	0.00	260.00	5700.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5800.0	0.00	260.00	5800.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5900.0	0.00	260.00	5900.0	0.0	0.0	0.0	0.00	0.00	0.00	Gyro
5910.0	5.21	260.00	5910.0	-0.1	-0.4	0.5	52.09	52.09	0.00	Gyro
5920.0	10.42	260.00	5919.9	-0.3	-1.8	1.8	52.09	52.09	0.00	Gyro
5930.0	15.63	260.00	5929.6	-0.7	-4.0	4.1	52.09	52.09	0.00	Gyro
5940.0	20.83	260.00	5939.1	-1.2	-7.1	7.2	52.09	52.09	0.00	Gyro
5950.0	26.04	260.00	5948.3	-1.9	-11.0	11.2	52.09	52.09	0.00	Gyro
5960.0	31.25	260.00	5957.1	-2.8	-15.7	16.0	52.09	52.09	0.00	Gyro
5970.0	36.46	260.00	5965.4	-3.7	-21.2	21.5	52.09	52.09	0.00	Gyro
5980.0	41.67	260.00	5973.1	-4.8	-27.4	27.8	52.09	52.09	0.00	Gyro
5990.0	46.88	260.00	5980.3	-6.0	-34.3	34.8	52.09	52.09	0.00	Gyro
6000.0	52.09	260.00	5986.8	-7.4	-41.8	42.4	52.09	52.09	0.00	Gyro
6010.0	57.30	260.00	5992.6	-8.8	-49.8	50.6	52.09	52.09	0.00	Gyro
6020.0	62.50	260.00	5997.6	-10.3	-58.3	59.2	52.09	52.09	0.00	Gyro
6030.0	67.71	260.00	6001.8	-11.9	-67.2	68.3	52.09	52.09	0.00	Gyro
6040.0	72.92	260.00	6005.1	-13.5	-76.5	77.7	52.09	52.09	0.00	Gyro
6050.0	78.13	260.00	6007.6	-15.2	-86.0	87.4	52.09	52.09	0.00	Gyro
6060.0	83.34	260.00	6009.3	-16.9	-95.8	97.2	52.09	52.09	0.00	Gyro
6070.0	88.55	260.00	6010.0	-18.6	-105.6	107.2	52.09	52.09	0.00	Gyro
6072.8	90.00	260.00	6010.0	-19.1	-108.3	110.0	52.09	52.09	0.00	Gyro

Scientific Drilling
Planning Report

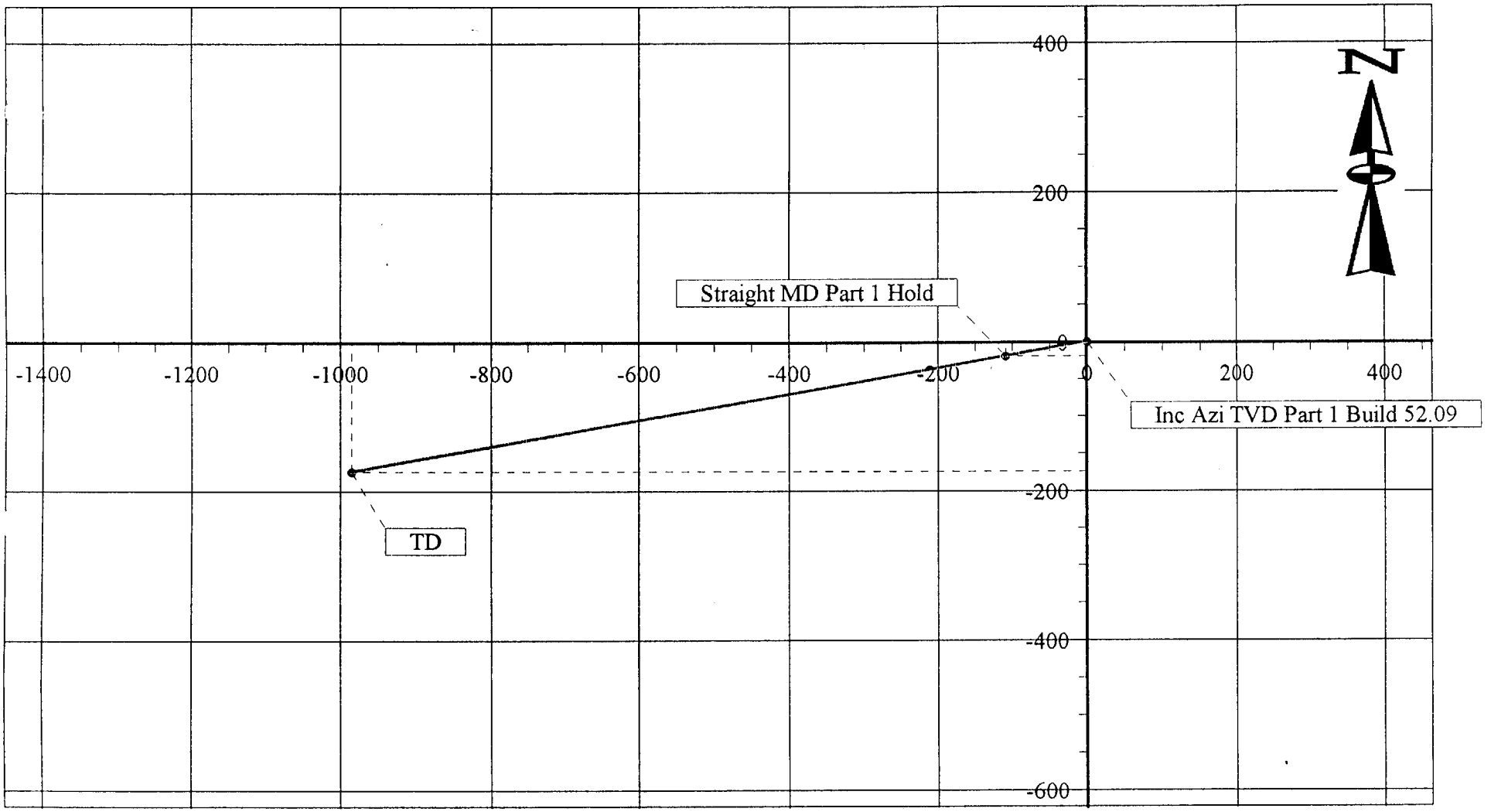
Company:	Texaco E & P, Inc.	**Date:** 12/20/1999	**Time:** 15:04:43	**Page:**	2
Field:	Vacuum Glorieta West Unit	**Co-ordinate(NE) Reference:**	Site: Lea County, New Mexico, Grid North		
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	VGWU #121	**Section (VS) Reference:**	Site (0.0E,0.0N,260.0Azi)		
Wellpath:	West(top) Lateral	**Plan:**	Plan #1		

Survey

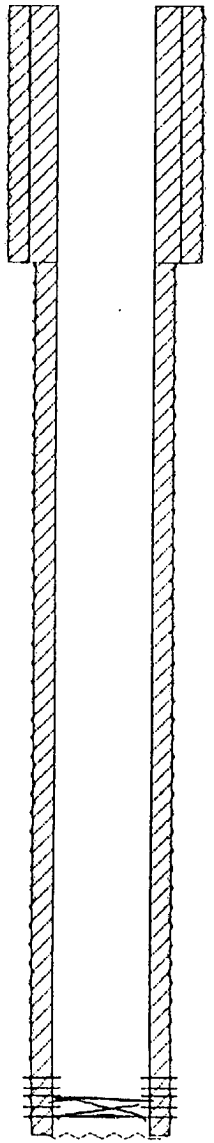
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS d/100ft	Build d/100ft	Turn d/100ft	Tool/Comment
6100.0	90.00	260.00	6010.0	-23.8	-135.1	137.2	0.00	0.00	0.00	Gyro
6200.0	90.00	260.00	6010.0	-41.2	-233.6	237.2	0.00	0.00	0.00	Gyro
6300.0	90.00	260.00	6010.0	-58.6	-332.1	337.2	0.00	0.00	0.00	Gyro
6400.0	90.00	260.00	6010.0	-75.9	-430.6	437.2	0.00	0.00	0.00	Gyro
6500.0	90.00	260.00	6010.0	-93.3	-529.1	537.2	0.00	0.00	0.00	Gyro
6600.0	90.00	260.00	6010.0	-110.7	-627.5	637.2	0.00	0.00	0.00	Gyro
6700.0	90.00	260.00	6010.0	-128.0	-726.0	737.2	0.00	0.00	0.00	Gyro
6800.0	90.00	260.00	6010.0	-145.4	-824.5	837.2	0.00	0.00	0.00	Gyro
6900.0	90.00	260.00	6010.0	-162.7	-923.0	937.2	0.00	0.00	0.00	Gyro
6962.8	90.00	260.00	6010.0	-173.7	-984.8	1000.0	0.00	0.00	0.00	Gyro

Scientific Drilling

Texaco E & P, Inc.
Field: Vacuum Glorieta West Unit
Site: Lea County, New Mexico
Well: VGWU #121
Wellpath: West(top) Lateral
Plan: Plan #1



TEXACO EXPL & PROD
VGWU NO. WI-121
API# 3002531876



0.0 - 1450.0' CEMENT

0.0 - 1450.0' 8.625" OD 24.00#/ft WC-50 SURF CSG

0.0 - 1450.0' 11 " OD HOLE

0.0 - 6343.0' CEMENT

964 FNLL & 90 FELL
SEC 1 , TWN 18 S, RANGE 34 E
ELEVATION: 4000 KB
COMPLETION DATE: 08-08-93
****
NOT COMPLETED AS A PRODUCER
****

6170.0 - 6238.0' PERFS
6024.0 - 6082.0' PERFS
5996.0 - 6019.0' PERFS

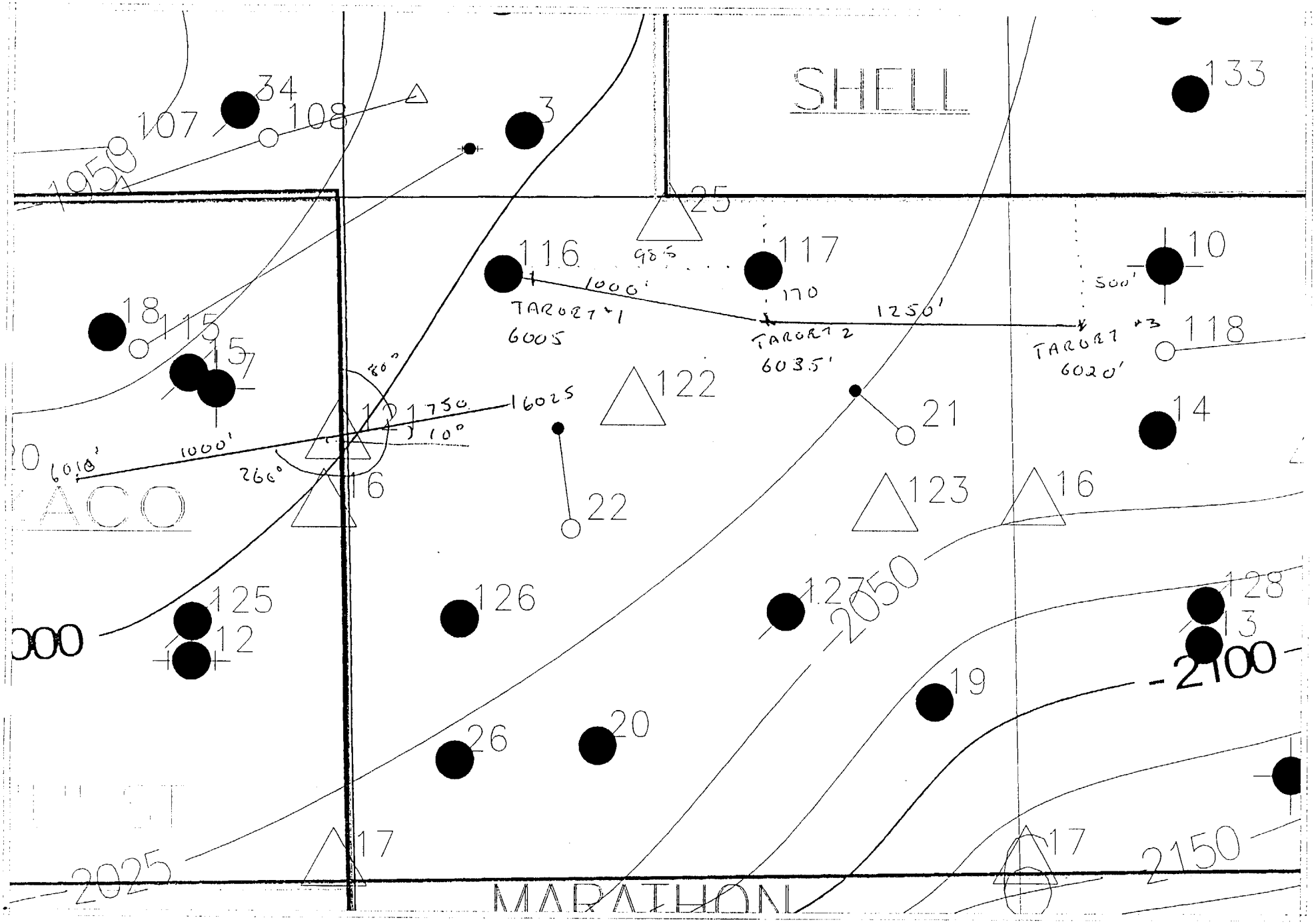
0.0 - 6343.0' 5.5" OD 15.50#/ft WC-50 PROD CSG

1450.0 - 6343.0' 7.875 " OD HOLE

PBTO 6074 cmt

6094.0 - 6126.0' PERFS

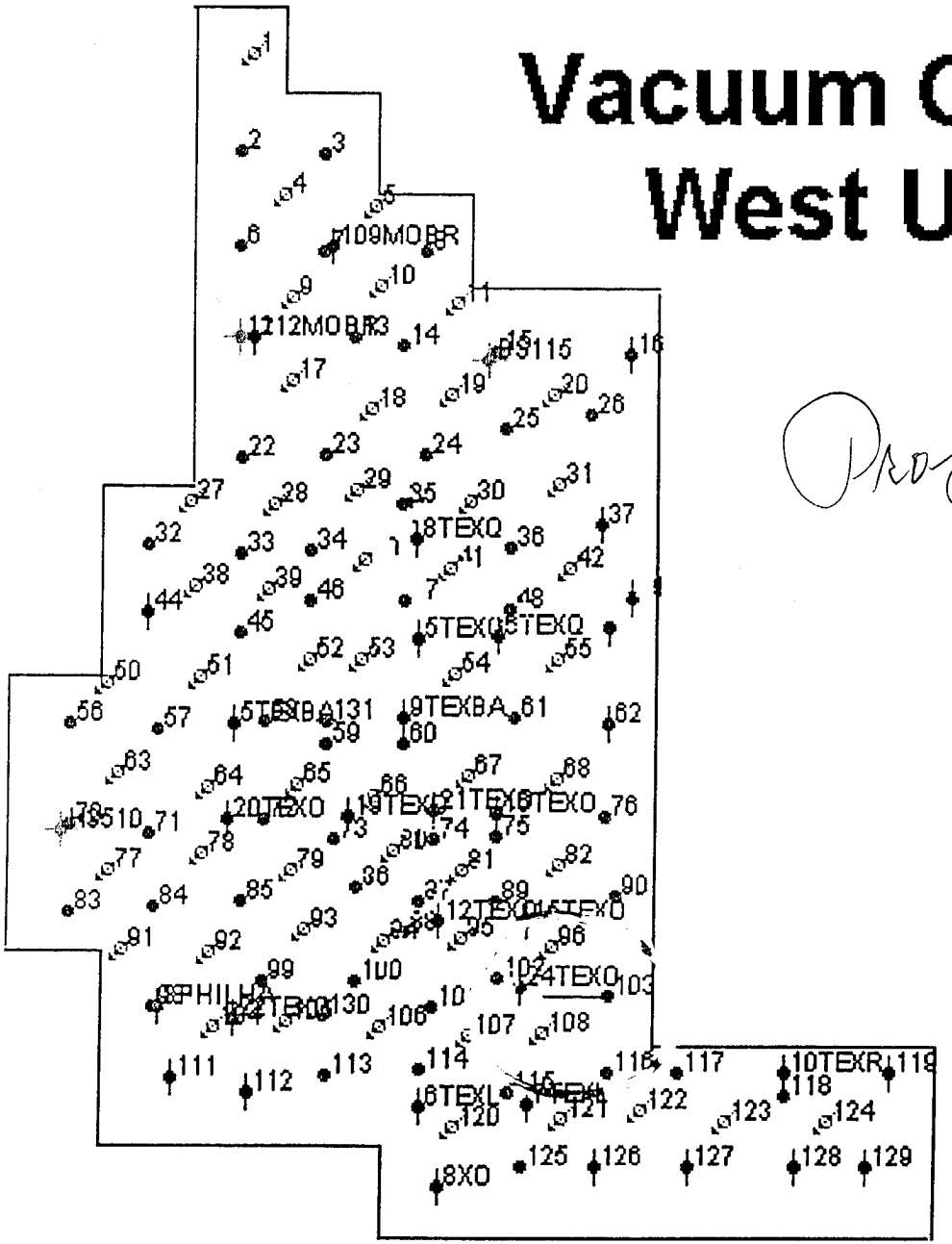
KB ELEV: 3993'
TD: 6343'



Scale 1:6000.

300. 0. 200. 400. 600. 800. 1000. feet

Vacuum Glorieta West Unit



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-10
Revised February 10,199
Instructions on back
Submit to Appropriate District Offic
State Lease - 4 Copie
Fee Lease - 3 Copie
X AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
3002531876	62160	VACUUM GLORIETA

4 Property Code	5 Property Name	6 Well No.
011125	VACUUM GLORIETA WEST UNIT	121

7 OGRID Number	8 Operator Name	9 Elevation
022351	TEXACO EXPLORATION & PRODUCTION INC.	GR-3986', KB-4000'

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
A	1	18-SO	34-EA		964	NORTH	90	EAST	LEA

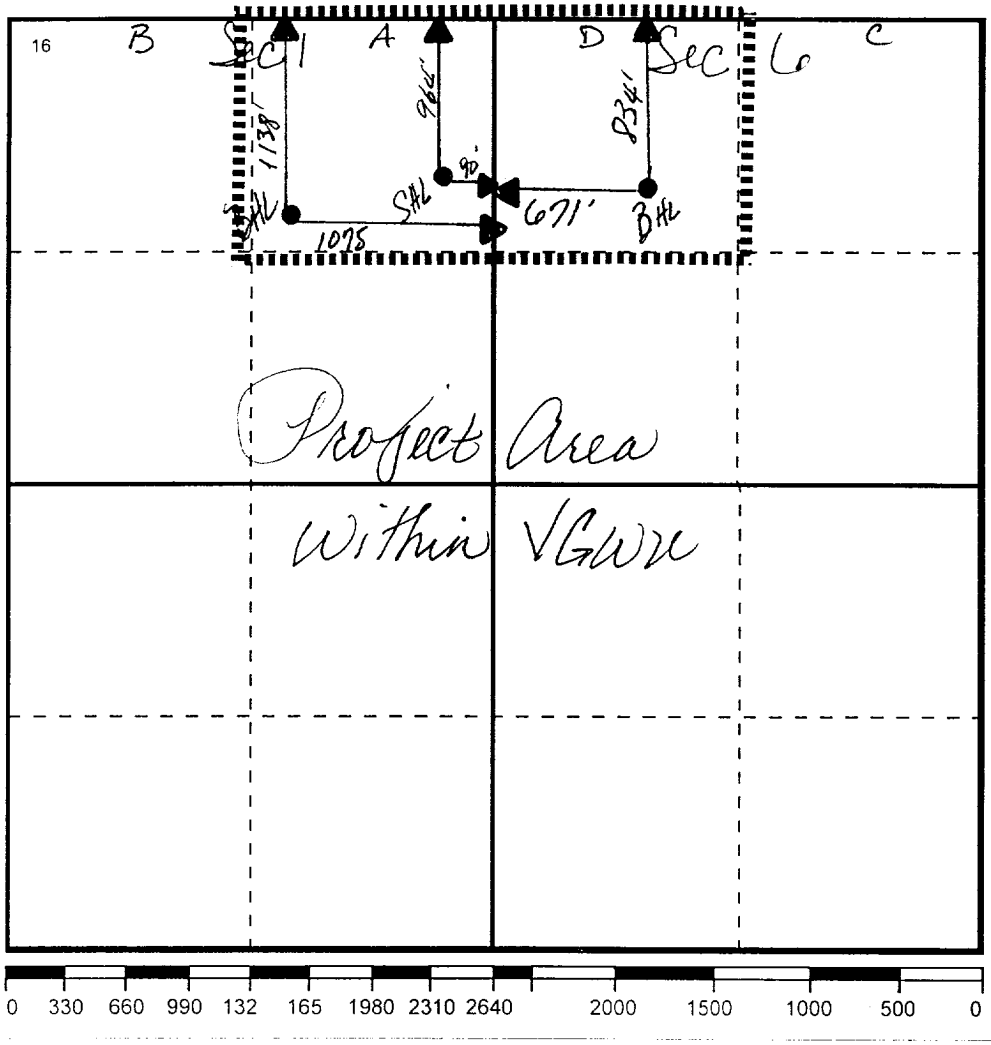
11 Bottom Hole Location If Different From Surface

Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
A/D	1/6	18 S	34E/35E		1138' / 834'	NORTH/NORTH	1075'/671'	EAST/WEST	LEA

12 Dedicated Acre	13 Joint or Infill	14 Consolidation Code	15 Order No.
80	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

16



17 OPERATOR CERTIFICATION

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

Signature: J. Denise Leake
Printed Name: J. Denise Leake
Positio: Engineering Assistant
Date: 5/5/00

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