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 29207

4 Property Code	5 Property Name	6 Well No.
011131	WEIR, C. H. -A-	16

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
J	12	20S	37E		2310	SOUTH	1650	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
K	12	20S	37E		2500	SOUTH	2142'	WEST	LEA

9 Proposed Pool 1	10 Proposed Pool 2
WEIR BLINEBRY EAST	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
P	O	Rotary	S	3557'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	TVD 5791	Blinebry		4/10/99

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.

The C.H. Weir 'A' #16 was drilled in mid 1985 as a conventional test of the Blinebry formation.
Texaco intends to drill a 1500' horizontal lateral in the Blinebry formation. The intended procedure 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 3/31/99 Telephone 397-0405

OIL CONSERVATION DIVISION

Approved By: ORIGINAL SIGNED BY CHRIS WILLIAMS
DISTRICT I SUPERVISOR

Title:

Approval Date: APR 05 1999 Expiration Date:

Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
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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 29207	63800	WEIR BLINEBRY EAST

4 Property Code	5 Property Name	6 Well No.
011131	WEIR, C. H. -A-	16

7 OGRID Number	8 Operator Name	9 Elevation
022351	TEXACO EXPLORATION & PRODUCTION INC.	3557'

10 Surface Location

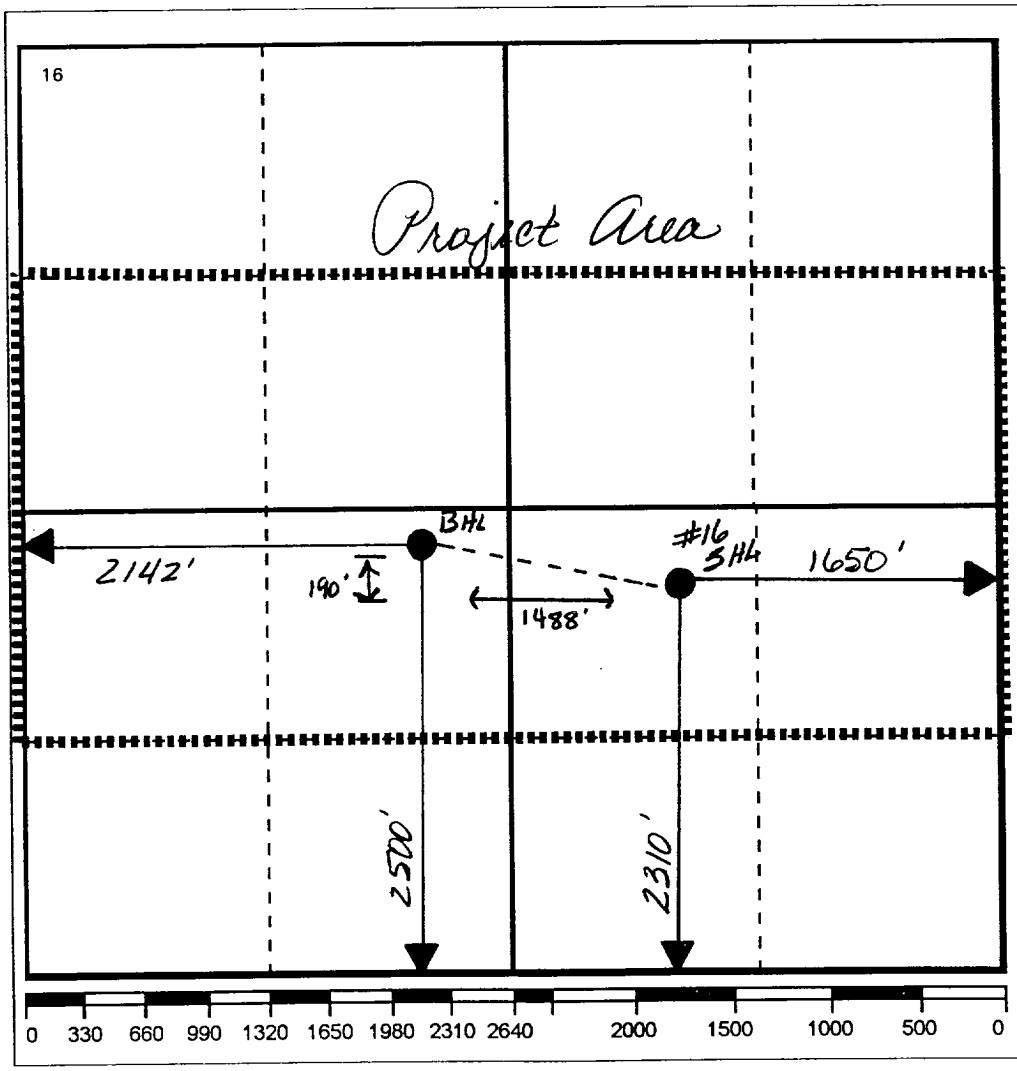
Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
J	12	20S	37E		2310	SOUTH	1650	EAST	LEA

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
K	12	20S	37E		2500	SOUTH	2142'	WEST	LEA

12 ~~Dedicated Acres~~	13 Joint or Infill	14 Consolidation Code	15 Order No.
320 PROJECT AREA	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: J. Denise Leake

Printed Name: J. Denise Leake

Position: Engineering Assistant

Date: 3/31/99

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

OVERVIEW

The C. H. Weir "A" # 16 well was drilled in mid 1985 as a conventional test of the Blinebry formation. The well potentialed for 115 BOPD, 15 BWPD and 616 MCFD from perforations between 6613' and 6867' (6613, 40, 63, 80, 88, 95, 99, 6701, 03, 05, 24, 29, 34, 44, 52, 61, 81, 85, 92, 97, 6801, 25, 32, 49, 53, 60, 67). It is proposed to drill a +/- 1500 foot horizontal lateral in the Blinebry formation. The basic well plan is as follows:

a) Lay down the rods, pump and tubing. Run a mill to the bottom of the perforated interval at 6867'. Set a CIBP at +/- 5617'. Set a 3 degree bottom set whipstock on top of the CIBP (top of window +/- 5627', bottom of window +/- 5631').

b) Drill a short radius curve using an 4-3/4" bit to a measured depth of +/- 5880' (TVD +/- 5791'). The final angle will be 90 degrees from vertical.

c) Drill +/- 1350' horizontal section per attached Scientific Drilling well plan (azimuth of 277.26 degrees).

d) Acid frac the horizontal portion of the well. Place well on pump.

PARTIAL 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 the rods, pump and tubing. TIH with a mill to the bottom of the perforated interval at 6867'. TOOH. TIH with a CIBP and set at ±5617'. TOOH. TIH with drill pipe and circulate the hole with fresh water. Pressure test the casing and CIBP to 1000 psi. TOOH. TIH with a Smith 3 degree bottom set retrievable whipstock, starting mill, orienting sub and drill pipe. Stop at a point 5-10' above the CIBP, reciprocate the pipe and rig up wireline to run the gyro. Take a gyro reading and determine the direction of the whipstock face. Rotate the pipe as needed to achieve the desired direction. Reciprocate and lower the pipe to within one foot of the CIBP and take another gyro reading. Rotate pipe again, if necessary, to achieve the required direction (277 degees). This step may need to be repeated several times until confident the whipstock is oriented in the correct direction.

2. Lower drill pipe to set the whipstock. The weight indicator will jump indicating lower plunger shear pin is sheared (3600#) and the whipstock is set. Continue setting down to shear the starting mill bolt (15,000#). The weight indicator will jump again indicating the bolt is sheared. Commence milling operations.

3. 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 suggests 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 cutout in the casing has been initiated. TOOH.

4. TIH with the metal muncher window mill, string mill and the watermelon 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.

5. 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. 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	5791'
Measured Depth	5881'
Final Angle	90.00 degrees
Initial Target Azimuth	277.27 degrees
Build Rate	36.49 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" insert or PDC bit, 3-3/4" motor, float sub/orienting combo, 2 - flexible monel collars and 2-7/8" AOH drill pipe.

4. Drill +/- 1320' of horizontal hole per the attached Scientific Drilling well plan.

5. Continue drilling the horizontal section per the Texaco Engineer/Geologist recommendations.

6. Trip out of the hole with the drilling assembly. TIH to TD and pump down a TDT log. Log horizontal section. TOOH. TIH with drill pipe and set a retrievable bridge plug for 5-1/2", 15.5 #/ft casing at +/-4500'. Test the plug to 1000 psi.

7. Lay down the drill pipe. Nipple down the BOP stack. Install a manual 3000 psig BOP equipped with blind rams, 3-1/2" 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 3-1/2" tubing. Retrieve the plug. Trip out of the hole and lay down the plug.

4. Rig up Dowell. Acid frac (with scale inhibitor) the horizontal lateral. The acid frac will be done down 3-1/2" tubing in the vertical portion with a packer set 100' above the window. Below the packer, the string will consist of 2-7/8" PH-6 tubing and ported subs. Scale inhibitor to prevent future scaling tendencies will be placed in the pad portions of the job.

5. Flow back immediately. Flow/swab test for 12 hours. TOOH with frac string. TIH with production string.

6. Place on pump.

Scientific Drilling
Planning Report

Company: Texaco E & P Inc.		Date: 3/20/1998	Time: 08:50:11 Page: 1
Field: Weir (Blinebry East)		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: C. H. Weir "A" #16H		Section (VS) Reference:	Site (0.0N,0.0E,277.27Azi)
Wellpath: Lateral #1		Plan:	Plan #2

Field: Weir (Blinebry East)

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 1983 Texas, Central Zone
Direction of Local North: Grid

Ellipsoid: GRS 1980
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: C. H. Weir "A" #16H

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

Wellpath: Lateral #1

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

Direction of Vertical Section: 277.27 deg

Plan: Plan #2
Date Composed: 3/17/1998
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
5500.0	0.00	277.27	5500.0	0.0	0.0	0.00	0.00	0.00	0.00	
5634.0	0.00	277.27	5634.0	0.0	0.0	0.00	0.00	0.00	0.00	
5880.6	90.00	277.27	5791.0	19.9	-155.7	36.49	36.49	0.00	0.00	landing
6129.1	90.00	277.27	5791.0	51.3	-402.2	0.00	36.49	0.00	0.00	
6274.2	81.30	277.26	5802.0	69.6	-545.6	6.00	-6.00	-0.01	-179.93	Target 2
6288.4	79.02	277.28	5804.4	71.4	-559.5	16.00	-16.00	0.11	179.60	
6364.9	79.02	277.28	5819.0	80.9	-634.0	0.00	0.00	0.00	0.00	
6476.3	96.84	277.27	5823.0	94.9	-744.0	16.00	16.00	-0.01	-0.02	Target 3
6677.4	95.15	277.27	5802.0	120.2	-942.4	0.84	-0.84	0.00	-180.00	Target 4
6928.4	94.91	277.27	5780.0	151.8	-1190.3	0.09	-0.09	0.00	-179.13	Target 5
7229.9	96.51	277.28	5750.0	189.8	-1487.9	0.53	0.53	0.00	0.31	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
5500.0	0.00	277.27	5500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
5600.0	0.00	277.27	5600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
5634.0	0.00	277.27	5634.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

Scientific Drilling
Planning Report

Company:	Texaco E & P, Inc.	Date:	3/20/1998	Time:	08:50:11	Page:	1
Field:	Wolf (Bilberry East)	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:	C.H. Weir A- #10H	Section (VS) Reference:		Well (0.0E,0.0N,177.36Azi)			
Wellpath:	Plan#2	Plan:		Plan#2			

Section 2 : HZ Lunding Part 1 Build 36.49

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
5700.0	24.09	277.27	5698.1	1.7	-13.6	13.7	36.49	36.49	0.00	0.00
5800.0	60.58	277.27	5770.8	10.1	-79.2	79.9	36.49	36.49	0.00	0.00
5880.6	90.00	277.27	5791.0	19.9	-155.7	157.0	36.49	36.49	0.00	0.00

Section 3 : 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
5900.0	90.00	277.27	5791.0	22.3	-175.0	176.4	0.00	0.00	0.00	0.00
6000.0	90.00	277.27	5791.0	35.0	-274.2	276.4	0.00	0.00	0.00	0.00
6100.0	90.00	277.27	5791.0	47.6	-373.4	376.4	0.00	0.00	0.00	0.00
6129.1	90.00	277.27	5791.0	51.3	-402.2	405.5	0.00	0.00	0.00	0.00

Section 4 : DT5 HC Tang Part 2 Drop -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
6200.0	85.75	277.27	5793.6	60.3	-472.5	476.3	6.00	-6.00	-0.01	-179.93
6274.2	81.30	277.26	5802.0	69.6	-545.6	550.0	6.00	-6.00	-0.01	-179.93

Section 5 : OPT AL DLS Part 1 Drop -16.00

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
6286.4	79.02	277.28	5804.4	71.4	-559.5	564.0	16.00	-16.00	0.11	179.60

Section 6 : OPT AL DLS 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
6300.0	79.02	277.28	5806.6	72.8	-570.8	575.4	0.00	0.00	0.00	0.00
6364.9	79.02	277.28	5819.0	80.9	-634.0	639.2	0.00	0.00	0.00	0.00

Section 7 : OPT AL DLS Part 3 Build 16.00

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
6400.0	84.63	277.27	5824.0	85.3	-666.4	673.8	16.00	16.00	-0.01	-0.02
6476.3	96.84	277.27	5823.0	94.9	-744.0	750.0	16.00	16.00	-0.01	-0.02

Section 8 : DT6 Curve Part 1 Drop 0.84 Tur

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
6500.0	96.64	277.27	5820.2	97.9	-767.3	773.5	0.84	-0.84	0.00	180.00
6600.0	95.80	277.27	5809.4	110.5	-865.9	872.9	0.84	-0.84	0.00	-180.00
6677.4	95.15	277.27	5802.0	120.2	-942.4	950.0	0.84	-0.84	0.00	-180.00

Section 9 : DT6 Curve Part 1 Drop 0.09 Tur

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
6700.0	95.12	277.27	6800.0	123.1	-964.7	972.5	0.09	-0.09	0.00	-179.13
6800.0	95.03	277.27	5791.1	135.7	-1063.5	1072.1	0.09	-0.09	0.00	-179.13
6900.0	94.94	277.27	5782.4	148.3	-1162.3	1171.7	0.09	-0.09	0.00	-179.13
6928.4	94.91	277.27	5780.0	151.8	-1190.3	1200.0	0.09	-0.09	0.00	-179.13

Section 10 : DT6 Curve Part 1 Build 0.53 Tu

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
7000.0	95.29	277.27	5773.6	160.9	-1261.1	1271.3	0.53	0.53	0.00	0.31
7100.0	95.82	277.27	5763.9	173.5	-1359.8	1370.9	0.53	0.53	0.00	0.31
7200.0	96.35	277.27	5753.3	186.1	-1458.5	1470.3	0.53	0.53	0.00	0.31

Scientific Drilling
Planning Report

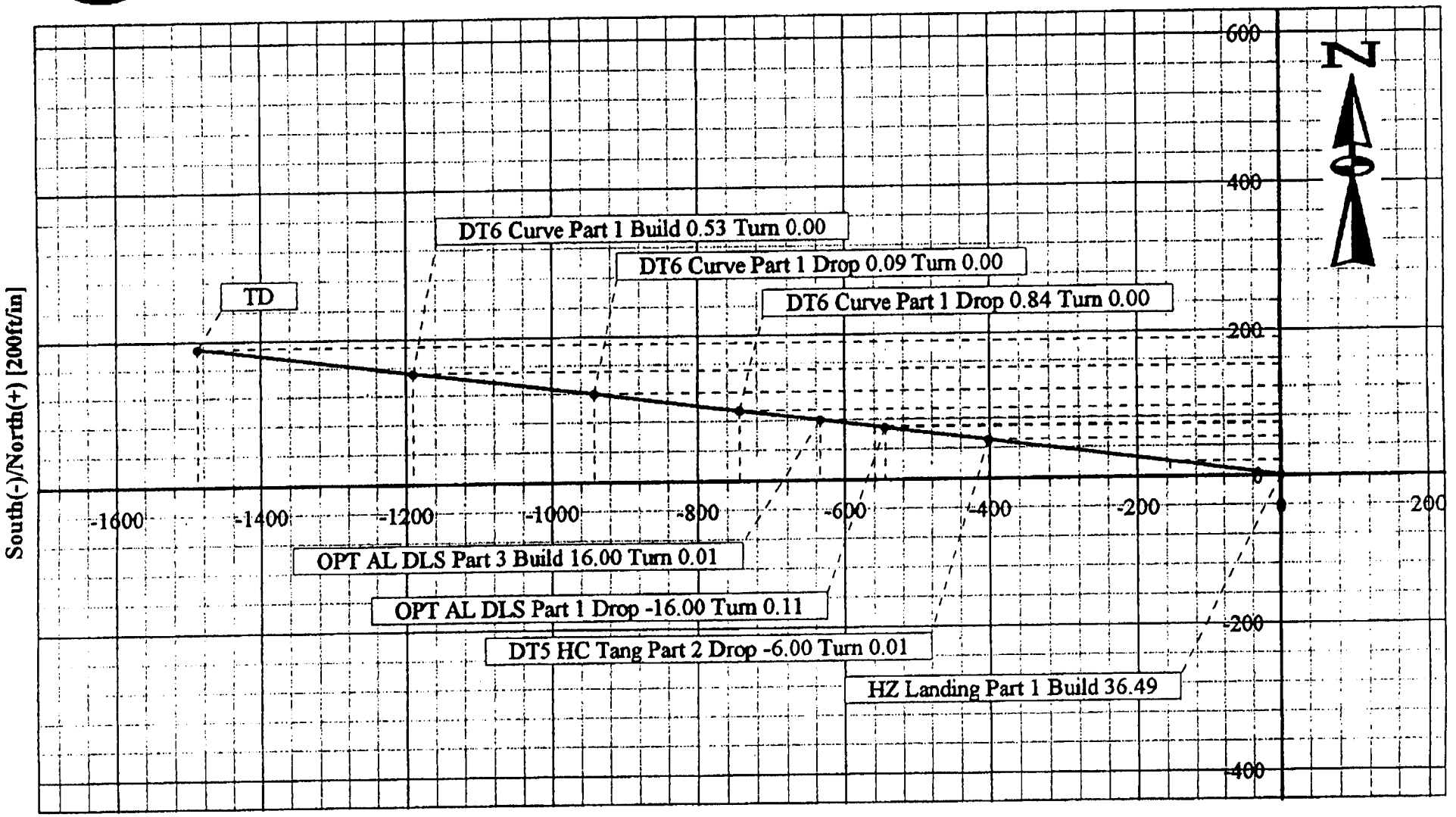
Company: Texaco E & P Inc.	Date: [illegible]	Time: 08:50:11	Page: 3
Field: [illegible]	Co-ordinate(NE) Reference:	Site: Lea County, New Mexico, Grid North	
Site: Lea County, New Mexico	Vertical (TVD) Reference:	SITE 0.0 above Mean Sea Level	
Well: [illegible]	Section (VS) Reference:	[illegible]	
Wellpath: [illegible]	Plan:	[illegible]	

Section 10 : DT6 Curve Part 1 Build 0.53 Tu

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
7229.9	96.51	277.28	5750.0	189.8	-1487.9	1500.0	0.53	0.53	0.00	0.31

Scientific Drilling

Texaco E & P, Inc.
Field: Weir (Blinebry East)
Site: Lea County, New Mexico
Well: C. H. Weir "A" #16H
Wellpath: Lateral #1
Plan: Plan #2



Scientific Drilling

Texaco E & P, Inc.
Field: Weir (Blinebry East)
Site: Lea County, New Mexico
Well: C. H. Weir "A" #16H
Wellpath: Lateral #1
Plan: Plan #2