

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

DISTRICT II

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

DISTRICT III

1060 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 Office

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 TEXACO EXPLORATION & PRODUCTION INC. 205 E. Bender, HOBBS, NM 88240		² OGRID Number 022351
⁴ Property Code 11125	⁵ Property Name VACUUM GLORIETA WEST UNIT	³ API Number 30-025-21292
		⁶ Well No. 127

⁷ Surface Location

UI or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
F	6	18S	35E		1650	NORTH	1650	WEST	LEA

⁸ Proposed Bottom Hole Location If Different From Surface

UI or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	6	18S	35E		1350	NORTH	2430	EAST	LEA
⁹ Proposed Pool 1 VACUUM GLORIETA					¹⁰ Proposed Pool 2				

¹¹ Work Type Code P	¹² WellType Code O	¹³ Rotary or C.T.	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3976' GL
¹⁶ Multiple No	¹⁷ Proposed Depth 6160 MD	¹⁸ Formation GLORIETA	¹⁹ Contractor	²⁰ Spud Date 8/15/00

²¹ Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone.
Describe the blowout prevention program, if any. Use additional sheets if necessary.

TEXACO INTENDS TO DRILL A HORIZONTAL RE-ENTRY IN THE SUBJECT WELL. PROPOSED WORK PROCEDURE IS ATTACHED.

Permit Expires 1 Year From Approval
Date Unless ~~Drilling~~ Underway
Plug-Back

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.		OIL CONSERVATION DIVISION	
Signature <i>J. Denise Leake</i>		Approved By:	
Printed Name J. Denise Leake		Title:	
Title Engineering Assistant		Approval Date: AUG 15 2000 Expiration Date:	
Date 7/25/00	Telephone 397-0405	Conditions of Approval: Attached	

OVERVIEW

The Vacuum Glorieta West Unit #127 is currently producing in the Glorieta formation from perforations from 5906'-6018'. It has 4-1/2" 9.5# casing. It is proposed to drill a +/-1338 foot (1237 foot VS) lateral at 86 degrees in the Glorieta formation. The basic well plan is as follows:

- a) TOOH with the pump and tubing. Run a bit and casing scraper to 5900' (possible CIBP at 5850'). Run a CCL for correlations. Set a 4-1/2" cement retainer at +/-5895'. Squeeze existing perforations, cap with 5' of cement and pressure test to 800 psi. TIH with a 3 degree bottom trip whipstock (top of window +/-5877', bottom of window +/-5883').
- b) Drill a short radius curve using a 3-7/8" bit to a measured depth of +/-6160' (TVD +/-6055') with a 86 degree azimuth. The final angle will be 92.03 degrees from vertical. Drill +/-1059' horizontal section. The end point will be +/-7221' MD, +/-5990' TVD and +/-1237' vertical section.
- d) Stimulate with ported subs using 60 gallons/foot 20% HCl. 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 bit and casing scraper to 5900' (possible CIBP at 5850'). Run a Casing collar correlation log. Set a 4-1/2" cement retainer at 5895'. Establish injection rate. Squeeze Glorieta perforations 5906'–6018' 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 $\pm 5890'$. Pressure test the squeeze to 800 psi. TOOH.
2. 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 wire line measurement. TOOH.
3. TIH with bottom set retrievable whipstock, starting mill, orientation sub and drill pipe. Stop at a point 5-10' above the RBP and 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 86 degrees). Lower the pipe to within one foot of the RBP and take another gyro reading. Rotate pipe again, if necessary, to obtain the required direction. This step may need to be made several times until confident the whipstock is oriented in the proper direction. Pull the gyro to surface, recording the orientation of the wellbore.
4. Lower the drill pipe to set the whipstock. The weight indicator will jump indicating the plunger shear pin is sheared and the whipstock is set. Continue setting down to shear the starting mill bolt. The weight indicator will jump, indicating the bolt is sheared.
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 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.

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 3-7/8" insert bit, 2-7/8" PDM, float sub/orienter combo, 2-flexible monel collars and 2-7/8" drill pipe.

Drill pipe to consist of 2-7/8", X-95, 10.4 ppf (vertical) and 2-7/8", S-135, 10.4 ppf (horizontal).

Connections to consist of 2-3/8" HTSLH90 with 1.85" drift.

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

True Vertical Depth	6055'
Measured Depth	6160'
Final Angle	92.03 degrees
Target Azimuth	86 degrees
Build Rate	33.29 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 3-7/8" bit, 2-7/8" articulated motor, float sub/orienter combo, 2 - flexible monel collars and 2-7/8" drill pipe.
4. Drill +/-1059' 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. Set a wireline set, tubing retrievable bridge plug for 4-1/2" casing at +/- 5800'. Test plug to 800 psi.
8. Lay down the drill pipe.

9. 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.
4. TIH with ported subs and a packer. Set packer at +/-5800'. Acidize using 60 gallons/ foot of 20% HCl.
5. Flow back immediately.
6. 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:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Remarks</u>
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 5880' - 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

<u>DEPTH</u>	<u>BURST</u>		<u>COLLAPSE</u>		<u>TEST</u>	
	<u>Rated (75%)</u>		<u>Rated (75%)</u>		<u>PRESSURE</u>	
4-1/2", 9.5#, ??-??	0-6283'	4380	3285	3310	2482	800

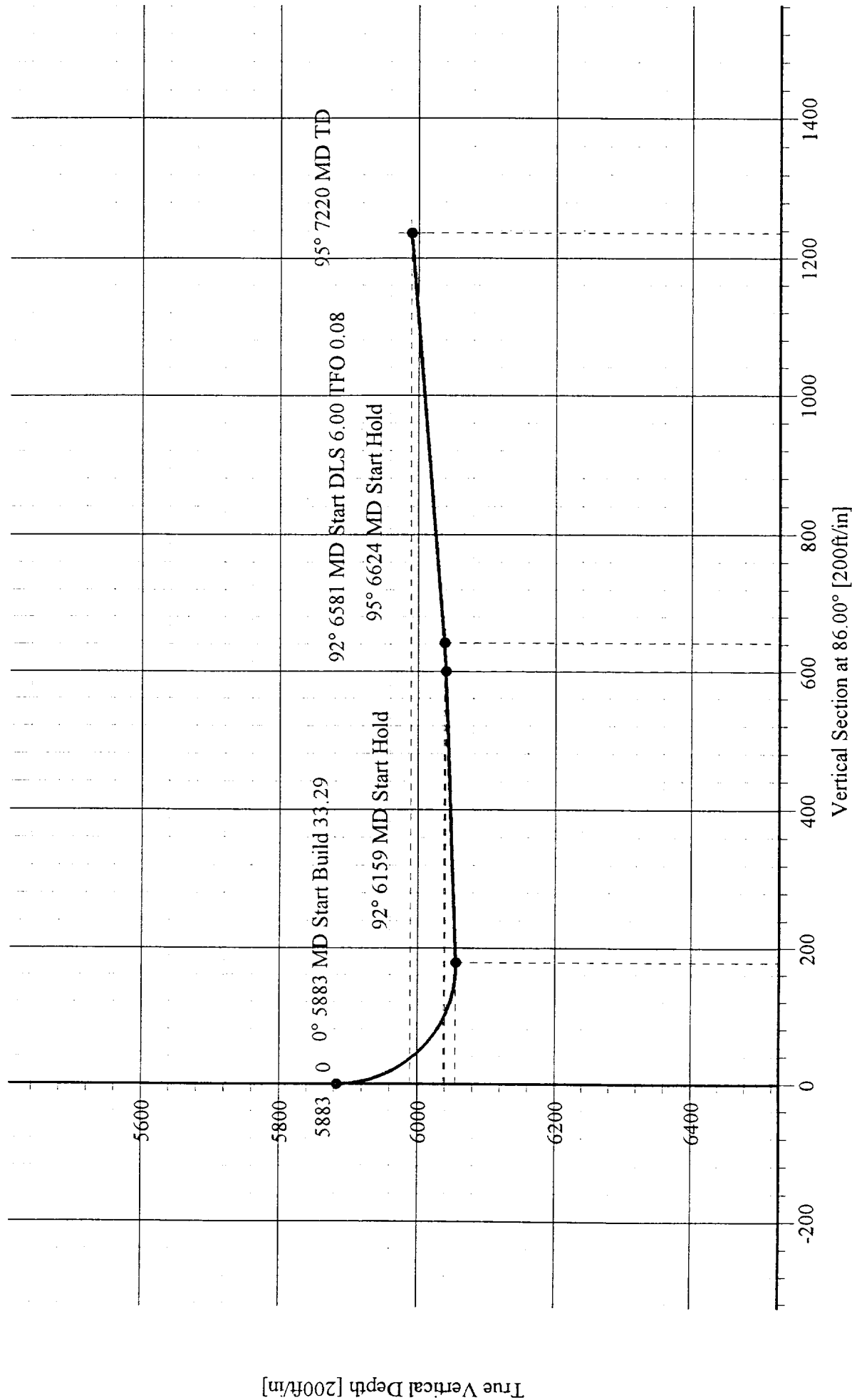
Grade unknown, assume J-55. Notes show both 9.5# and 11.6#, assume 9.5#.
Current PBTD is 6033'.

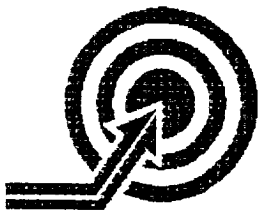


Scientific
Drilling

Texaco E & P, Inc.

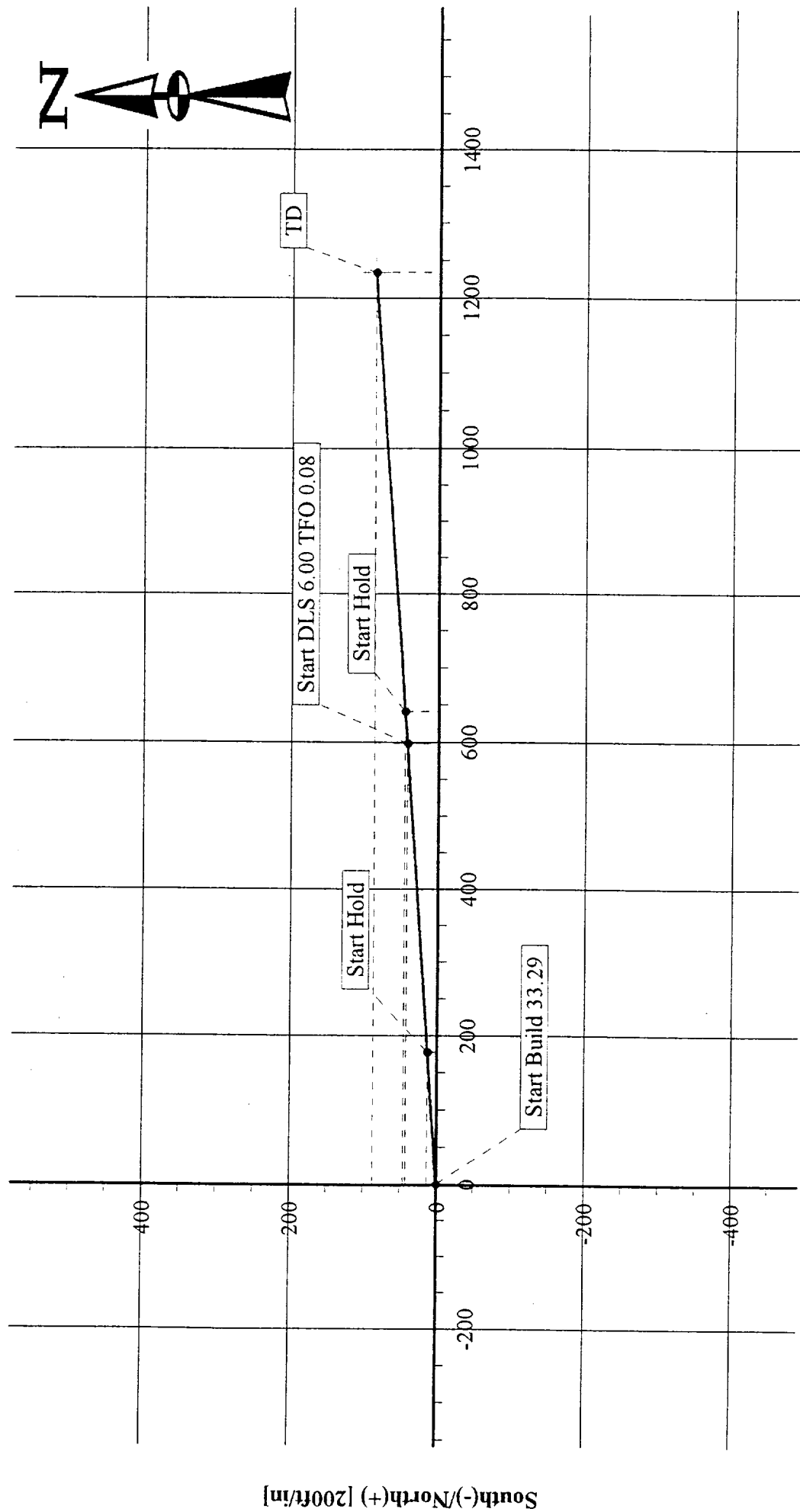
Field: Vacuum Glorieta West Unit
Site: Lea County, New Mexico
Well: VGWU #127
Wellpath: OH Original hole
Plan: Plan #1

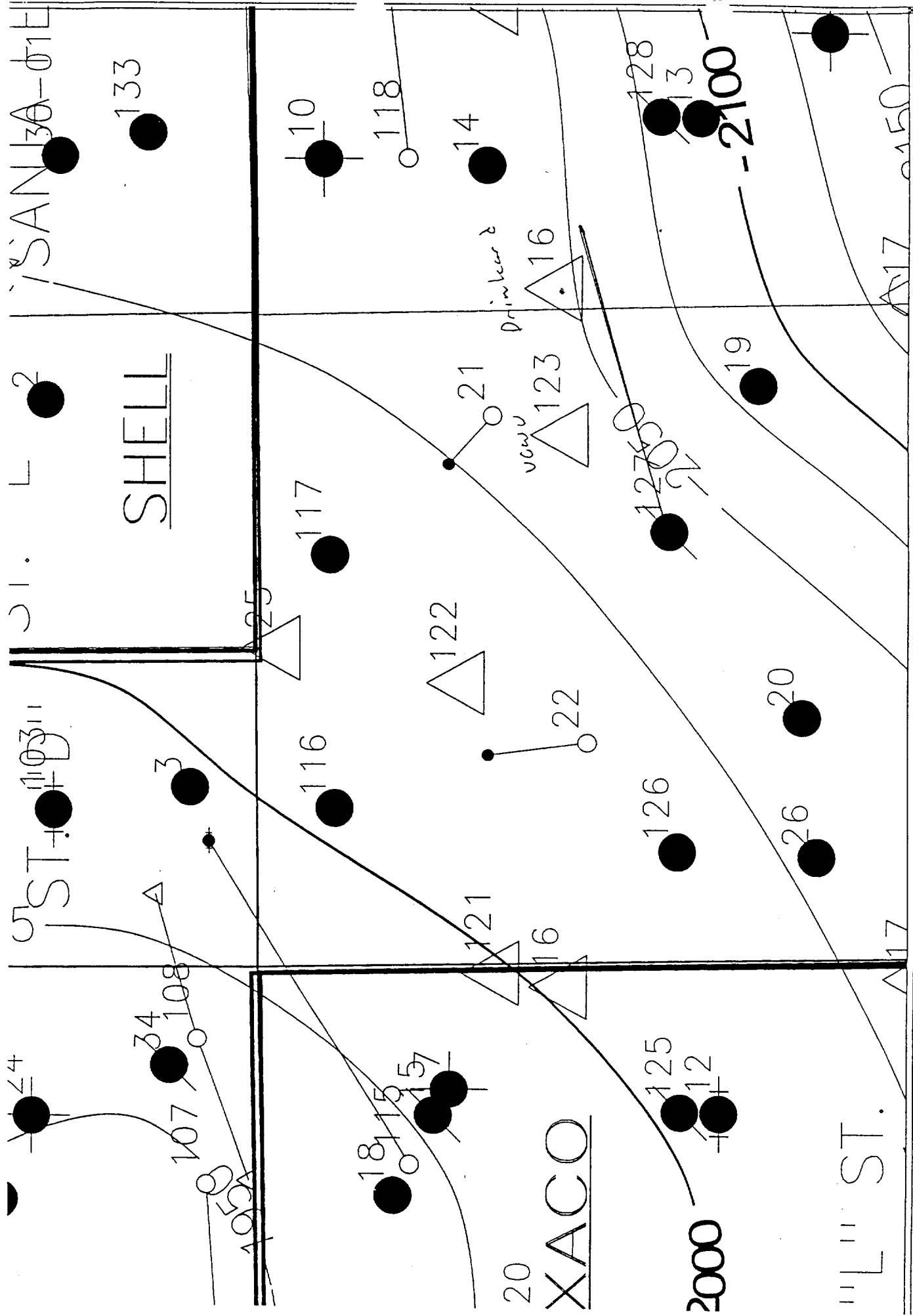




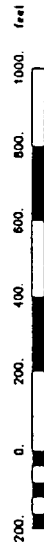
Scientific
Drilling

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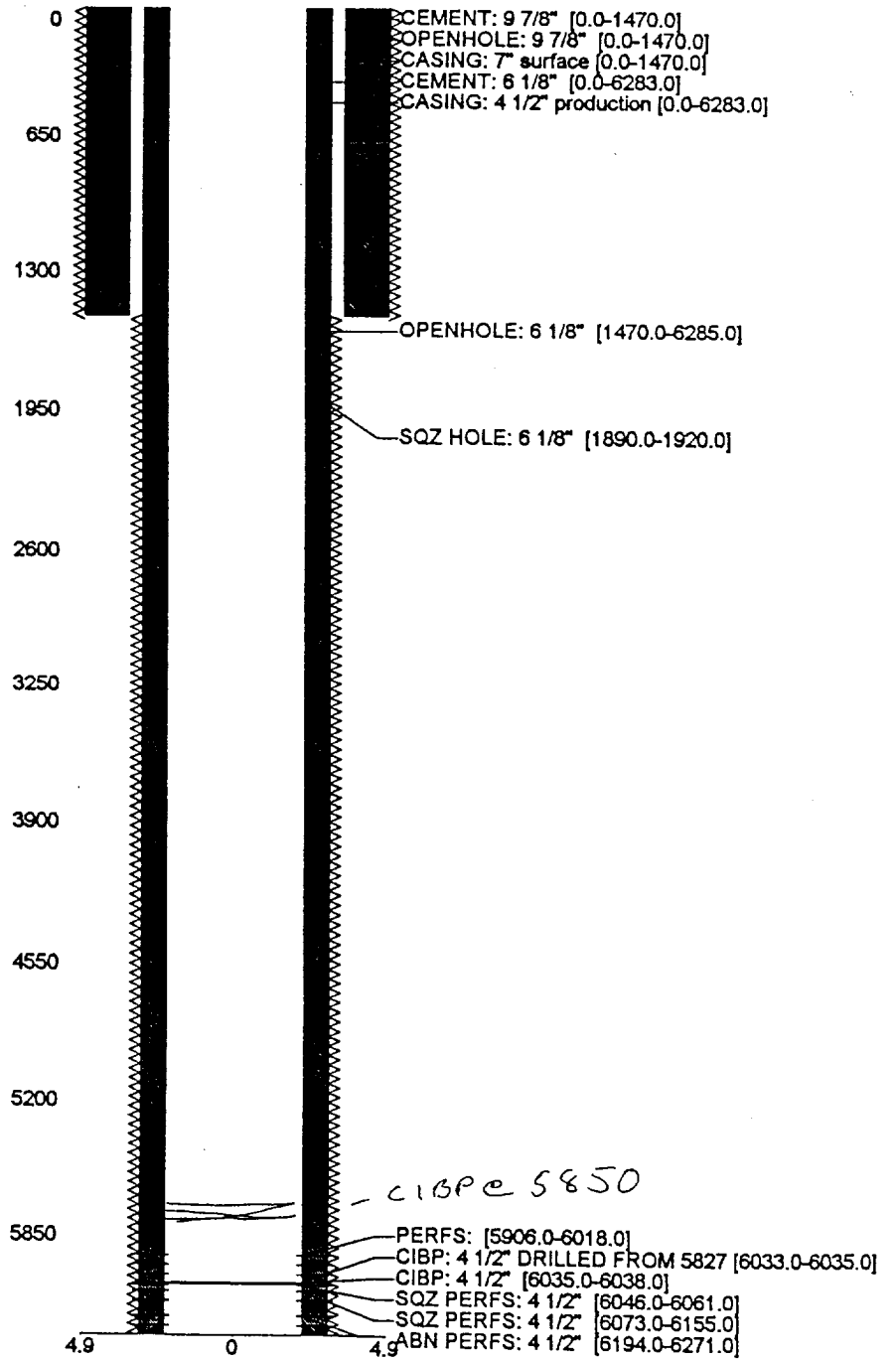




Scale 1:6000.



Name: 127 ID: 3002521292 Type: Oil Date: 1/19/00



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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-21292	2 Pool Code 62160	3 Pool Name VACUUM GLORIETA
4 Property Code 11125	5 Property Name VACUUM GLORIETA WEST UNIT	6 Well No. 127
7 OGRID Number 022351	8 Operator Name TEXACO EXPLORATION & PRODUCTION INC.	9 Elevation 3976' GL

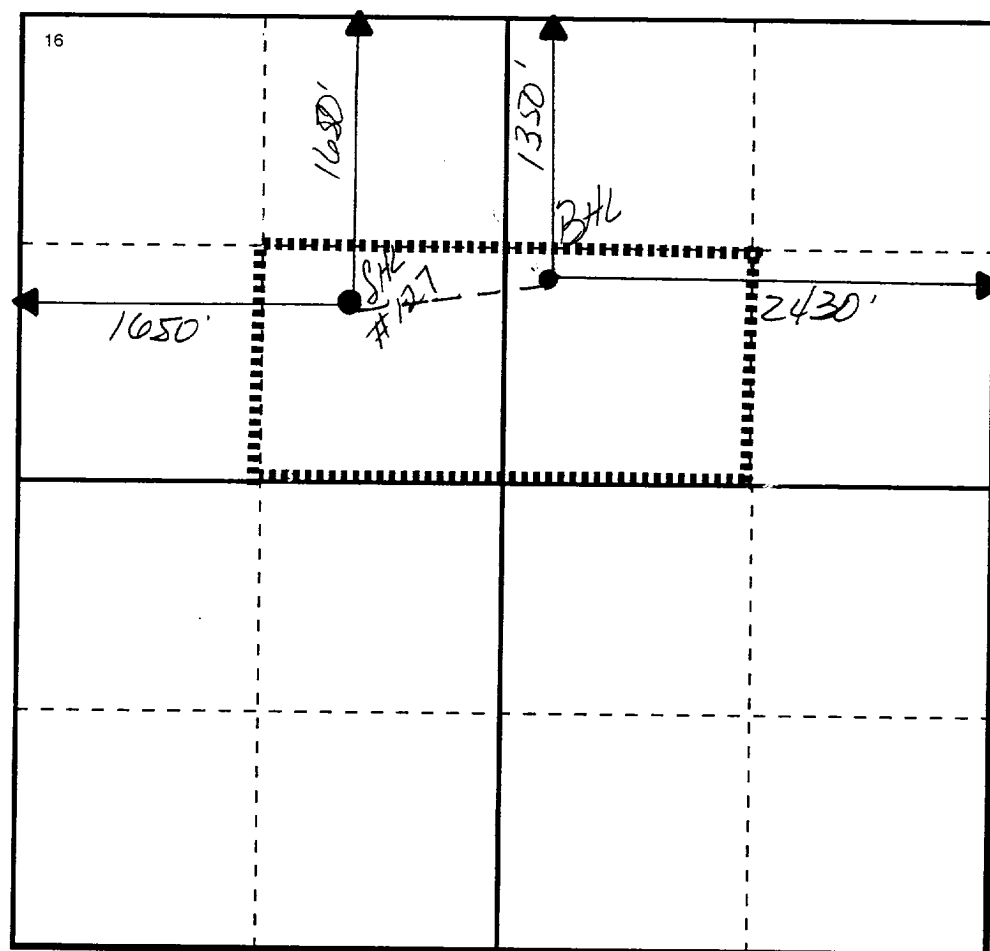
10 Surface Location

Ul or lot no F	Section 6	Township 18S	Range 35E	Lot.Idn	Feet From The 1650	North/South Line NORTH	Feet From The 1650	East/West Line WEST	County LEA
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11 Bottom Hole Location If Different From Surface

Ul or lot no G	Section 6	Township 18S	Range 35E	Lot.Idn	Feet From The 1350	North/South Line NORTH	Feet From The 2430	East/West Line EAST	County LEA
12 Dedicated Acre 80	13 Joint or Infill No	14 Consolidation Code	15 Order 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

Positio
Engineering Assistant

Date
7/25/00

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.