Form 3160-4
(October 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
Budget Bureau No. 1004-0137
Expires: December 31, 1991

5

SUBMIT ORIGINAL WITH 5 COPIES

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. Lease Designation and Serial No.: NM 0556590

6. If Indian, Alottee or Tribe Name: N/A

7. If Unit or CA, Agreement Designation:

1a. Type of Well: OIL WELL ☐ GAS WELL ☑ DRY ☐ OTHER

1b. Type of Completion: NEW WELL ☑ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER

8. Well Name and Number: FEDERAL 33 GAS COM 3

2. Name of Operator: CHEVRON USA INC

3. Address and Telephone No.: 15 SMITH ROAD, MIDLAND, TX 79705 915-687-7137

9. API Well No.: 30-015-32180 SI

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At Surface
Unit Letter K : 1980 Feet From The SOUTH Line and 2080 Feet From The WEST Line
At proposed prod. zone

10. Field and Pool, Exploaratory Area: LOAFER DRAW MORROW SE

11. SEC., T., R., M., or BLK. and Survey or Area: Sec. 33, Township 21-S, Range 23-E

At Total Depth ~~SAME~~ R 1808 S / 1742' W

14. Permit No.	Date Issued	12. County or Parish	13. State
		EDDY	NM

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (Show whether DF,RT, GR, etc.)	19. Elev. Casinhead
11/6/2002	12/14/2002	1/16/2003		

20. Total Depth, MD & TVD	21. Plug Back T.D., MD & TVD	22. If Multiple Compl., How Many*	23. Intervals Drilled By -->	Rotary Tools	CableTools
9150'	9063'				

24. Producing Interval(s), Of This Completion -- Top, Bottom, Name (MD and TVD)*
MORROW - 8676-8688, 8721-8801, 8890-8897'

25. Was Directional Survey Made: YES

26. Type Electric and Other Logs Run
PLATFORM EXPRESS FMI, RAL/GR/CL

27. Was Well Cored: NO

28. CASING RECORD (Report all Strings set in well)

CASING SIZE & GRADE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENT RECORD	AMOUNT PULLED
9 5/8"	36#	1518'		2420 SX	
7"	23#	7726'		1125 SX	

29. LINER RECORD

SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
4 1/2"	7387'	9147'	232 SX	

30. TUBING RECORD

SIZE	DEPTH SET	PACKER SET
2 7/8"	8605'	

ACCEPTED FOR RECORD
FEB 26 2003
ALEXIS C. SWOBODA
PETROLEUM ENGINEER

31. Perforation record (interval, size, and number)
8676-8897'

32. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
8890-97'	ACIDIZE W/1000 GALS 7 1/2% GAS ACID
8721-8801	ACIDIZE W/2000 GALS 7 1/2% GAS ACID
8784-8801	ACIDIZE W/750 GALS 7 1/2% GAS ACID
8676-8688'	ACIDIZE W/600 GALS 7 1/2% GAS ACID

33. PRODUCTION

Date First Production	Production Method (Flowing, gas lift, pumping - size and type pump)	Well Status (Prod. or Shut-in)
2/18/2003	FLOWING	PROD

Date of Test	Hours tested	Choke Size	Prod'n For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
2-18-03	24 HRS			0	940	83	

Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API -(Corr.)

34. Disposition of Gas (Sold, used for fuel, vented, etc.)
SOLD

Test Witnessed By

35. List of Attachments
SURVEYS

36. I hereby certify that the foregoing is true and correct

SIGNATURE Denise Leake TITLE Regulatory Specialist DATE 2/24/2003

TYPE OR PRINT NAME Denise Leake

DeSoto/Nichols 12-93 ver 1.0

Federal Com 33 #3

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents therof; cored intervals; and all drill-stem, tests including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS,ETC.
SAN ANDRES	402	1873	DOLOMITE
YESO	1874	3199	DOLOMITE, SAND
BONE SPRINGS	3200	5874	LIMESTONE, SAND
WOLFCAMP	5875	6985	LIME, DOLOMITE, SHALE
CISCO	6986	7417	DOLOMITE
CANYON	7418	7670	DOLOMITE
STRAWN	7671	8163	LIME, SAND, SHALE
ATOKA	8164	8495	LIME, SAND, SHALE
MORROW	8496	8919	LIME, SAND, SHALE
MISSISSIPPIAN	8920	TD 9150	LIME, SHALE

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

Scientific Drilling

CHEVRONTEXACO

Field: Indian Basin
Site: Eddy County, NM
Well: Federal 33 Com. #3
Wellpath: VH - Job #32K1102427
Survey: 11/29/02

This survey is correct to the best of my knowledge
and is supported by actual field data.

.....Company Representative

Notorized this date 5th of December, 2002.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas

DEBORAH S BYNUM
Notary Public, State of Texas
My Commission Expires
05-09-2004

Scientific Drilling International
Survey Report

Company:	CHEVRONTEXACO	**Date:** 12/4/2002	**Time:** 09:25:41	**Page:**	1
Field:	Indian Basin	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, True North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	Federal 33 Com. #3	**Section (VS) Reference:**	Well (0.0E,0.0N,246.2Azi)		
Wellpath:	VH - Job #32K1102427	**Survey Calculation Method:**	Minimum Curvature		

Survey:	11/29/02 KSRG 0'-7681'	**Start Date:**	12/4/2002
Company:	Scientific Drilling Internatio	**Engineer:**	Angel Geubara
Tool:	Keeper		

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.00
69.0	0.30	108.17	69.0	-0.1	-0.1	0.2	0.2	108.17	0.43
161.0	0.38	106.61	161.0	-0.5	-0.2	0.7	0.7	107.51	0.09
253.0	0.83	108.33	253.0	-1.3	-0.5	1.6	1.7	107.67	0.49
345.0	0.94	111.67	345.0	-2.3	-1.0	3.0	3.1	108.78	0.13
437.0	0.85	102.42	437.0	-3.4	-1.4	4.3	4.5	108.31	0.18
529.0	0.99	118.66	529.0	-4.4	-2.0	5.7	6.0	109.00	0.32
620.0	0.99	117.60	619.9	-5.4	-2.7	7.1	7.6	110.89	0.02
712.0	1.31	107.58	711.9	-6.7	-3.4	8.8	9.4	111.09	0.41
804.0	1.57	116.86	803.9	-8.3	-4.3	10.9	11.7	111.39	0.38
896.0	1.57	116.72	895.9	-9.9	-5.4	13.2	14.2	112.35	0.00
988.0	1.00	150.29	987.8	-10.7	-6.7	14.7	16.1	114.44	1.00
1082.0	0.99	151.29	1081.8	-10.9	-8.1	15.5	17.5	117.62	0.02
1177.0	0.95	225.10	1176.8	-10.2	-9.4	15.3	18.0	121.47	1.23
1271.0	1.19	238.62	1270.8	-8.5	-10.4	13.9	17.4	126.83	0.37
1365.0	1.64	248.51	1364.8	-6.2	-11.4	11.8	16.5	133.99	0.54
1459.0	2.18	255.64	1458.7	-3.1	-12.4	8.9	15.2	144.39	0.63
1554.0	2.18	255.05	1553.6	0.5	-13.3	5.4	14.3	158.02	0.02
1648.0	2.50	259.02	1647.6	4.2	-14.1	1.6	14.2	173.46	0.38
1742.0	2.60	261.00	1741.5	8.3	-14.9	-2.5	15.1	189.54	0.14
1836.0	2.70	332.92	1835.4	10.5	-13.2	-5.6	14.4	203.01	3.31
1931.0	2.66	263.57	1930.3	12.7	-11.5	-8.8	14.5	217.56	3.21
2025.0	2.68	262.59	2024.2	16.9	-12.0	-13.2	17.8	227.66	0.05
2119.0	2.69	262.83	2118.1	21.1	-12.6	-17.5	21.6	234.39	0.02
2214.0	2.72	262.75	2213.0	25.4	-13.1	-22.0	25.6	239.17	0.03
2308.0	2.72	264.29	2306.9	29.7	-13.6	-26.4	29.7	242.72	0.08
2402.0	2.66	263.40	2400.8	33.9	-14.1	-30.8	33.9	245.41	0.08
2496.0	2.68	263.32	2494.7	38.1	-14.6	-35.2	38.1	247.44	0.02
2591.0	2.62	260.64	2589.6	42.3	-15.2	-39.5	42.3	248.93	0.14
2605.0	2.61	262.06	2603.6	42.9	-15.3	-40.1	43.0	249.12	0.47
2779.0	2.60	261.78	2777.4	50.5	-16.4	-48.0	50.7	251.10	0.01
2873.0	2.59	261.15	2871.3	54.6	-17.1	-52.2	54.9	251.90	0.03
2968.0	2.57	261.06	2966.2	58.7	-17.7	-56.4	59.1	252.56	0.02
3062.0	2.55	261.45	3060.1	62.8	-18.4	-60.5	63.3	253.13	0.03
3156.0	2.55	262.65	3154.0	66.8	-18.9	-64.7	67.4	253.69	0.06
3250.0	2.54	262.79	3247.9	70.8	-19.5	-68.8	71.5	254.21	0.01
3345.0	2.48	261.86	3342.8	74.8	-20.0	-73.0	75.6	254.66	0.08
3439.0	2.31	262.89	3436.8	78.6	-20.5	-76.8	79.5	255.03	0.19
3533.0	2.32	260.80	3530.7	82.3	-21.1	-80.6	83.3	255.34	0.09
3628.0	2.27	261.74	3625.6	85.9	-21.7	-84.4	87.1	255.60	0.07
3722.0	2.23	262.24	3719.5	89.5	-22.2	-88.0	90.8	255.86	0.05
3816.0	2.24	262.28	3813.5	93.0	-22.7	-91.6	94.4	256.11	0.01
3910.0	2.19	263.34	3907.4	96.5	-23.1	-95.3	98.0	256.36	0.07
4005.0	2.22	261.66	4002.3	100.0	-23.6	-98.9	101.7	256.58	0.08
4099.0	2.27	260.61	4096.2	103.5	-24.2	-102.5	105.3	256.74	0.07
4193.0	2.41	263.88	4190.2	107.2	-24.7	-106.3	109.1	256.93	0.21
4287.0	2.44	261.24	4284.1	111.0	-25.2	-110.3	113.1	257.13	0.12
4382.0	2.52	261.62	4379.0	115.0	-25.8	-114.3	117.2	257.28	0.09

Scientific Drilling International
Survey Report

Company:	CHEVRONTEXACO	**Date:**	12/4/2002	**Time:** 09:25:41	**Page:** 2
Field:	Indian Basin	**Co-ordinate(NE) Reference:**	Site: Eddy County, NM, True North		
Site:	Eddy County, NM	**Vertical (TVD) Reference:**	SITE 0.0 above Mean Sea Level		
Well:	Federal 33 Com. #3	**Section (VS) Reference:**	Well (0.0E,0.0N,246.2Azi)		
Wellpath:	VH - Job #32K1102427	**Survey Calculation Method:**	Minimum Curvature		

Survey

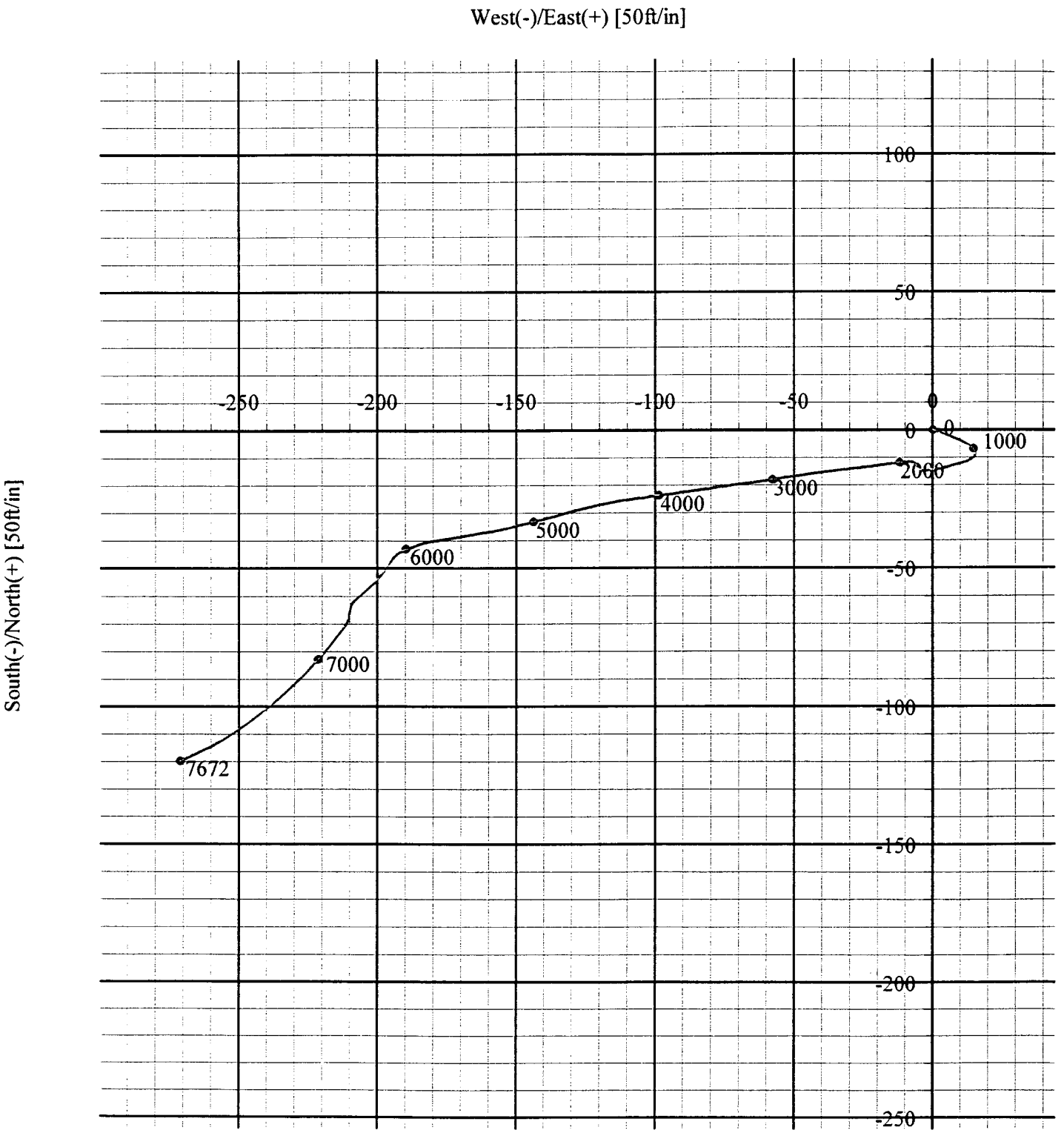
MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg	DLS deg/100ft
4476.0	2.70	257.00	4472.9	119.2	-26.6	-118.5	121.5	257.35	0.29
4570.0	2.67	257.22	4566.8	123.5	-27.6	-122.8	125.9	257.34	0.03
4664.0	2.74	256.11	4660.7	127.9	-28.6	-127.1	130.3	257.32	0.09
4759.0	2.88	254.11	4755.6	132.5	-29.8	-131.6	135.0	257.24	0.18
4853.0	2.96	254.72	4849.5	137.2	-31.1	-136.2	139.7	257.14	0.09
4947.0	3.03	255.14	4943.3	142.1	-32.4	-141.0	144.7	257.07	0.08
5042.0	3.17	256.25	5038.2	147.1	-33.6	-146.0	149.8	257.02	0.16
5136.0	3.22	256.80	5132.0	152.3	-34.9	-151.1	155.0	257.00	0.06
5230.0	3.01	258.69	5225.9	157.3	-35.9	-156.1	160.1	257.03	0.25
5324.0	2.95	260.46	5319.8	162.0	-36.8	-160.9	165.0	257.10	0.12
5419.0	2.89	260.28	5414.6	166.7	-37.6	-165.6	169.9	257.20	0.06
5513.0	2.74	260.79	5508.5	171.2	-38.4	-170.2	174.5	257.28	0.16
5607.0	2.62	261.38	5602.4	175.5	-39.1	-174.5	178.8	257.38	0.13
5701.0	2.36	260.18	5696.3	179.4	-39.7	-178.6	182.9	257.45	0.28
5796.0	2.26	257.27	5791.3	183.1	-40.5	-182.3	186.8	257.48	0.16
5890.0	2.17	250.30	5885.2	186.7	-41.5	-185.8	190.4	257.41	0.30
5984.0	2.14	248.32	5979.1	190.3	-42.7	-189.1	193.9	257.26	0.09
6078.0	2.03	240.34	6073.1	193.7	-44.2	-192.2	197.2	257.04	0.33
6173.0	2.50	215.41	6168.0	197.1	-46.7	-194.8	200.4	256.51	1.14
6267.0	3.28	213.63	6261.9	201.2	-50.6	-197.5	203.9	255.62	0.84
6361.0	2.98	225.16	6355.7	205.7	-54.6	-200.7	208.0	254.78	0.74
6456.0	2.95	229.57	6450.6	210.4	-57.9	-204.4	212.4	254.17	0.24
6550.0	2.74	228.22	6544.5	214.8	-61.0	-207.9	216.6	253.65	0.23
6644.0	2.24	191.90	6638.4	218.0	-64.3	-209.9	219.5	252.97	1.73
6738.0	1.84	187.93	6732.3	219.9	-67.6	-210.5	221.1	252.20	0.45
6833.0	2.76	217.14	6827.3	222.7	-70.9	-212.1	223.6	251.51	1.54
6927.0	5.82	217.19	6921.0	228.8	-76.5	-216.3	229.5	250.52	3.26
7021.0	5.90	222.56	7014.5	237.4	-83.9	-222.5	237.8	249.34	0.59
7115.0	6.25	225.75	7108.0	246.6	-91.0	-229.4	246.8	248.36	0.52
7210.0	6.28	229.08	7202.4	256.5	-98.0	-237.1	256.5	247.54	0.38
7304.0	5.66	233.07	7295.9	265.9	-104.2	-244.7	265.9	246.94	0.79
7398.0	5.24	235.54	7389.5	274.6	-109.4	-251.9	274.6	246.53	0.51
7497.0	4.51	242.42	7488.1	282.9	-113.7	-259.1	282.9	246.30	0.94
7587.0	4.27	244.56	7577.9	289.8	-116.8	-265.2	289.8	246.23	0.32
7681.0	3.89	242.50	7671.6	296.5	-119.8	-271.2	296.5	246.17	0.43

Scientific Drilling

Field: Indian Basin Penn.
Site: Eddy County, NM
Well: Federal 33 Com. #3
Wellpath: VH - Job #32K1102427
Survey: 11/29/02

All Angles Relative To True North

True North: 0.00
Magnetic North: 0.00



Schlumberger Oilfield Services
U.S. Land Central
500 W. Texas Ave., Suite 500
Midland, Texas 79701
915-571-4600

Schlumberger

Dec. 18, 2002

Re: Chevron USA, Inc.
Federal '33' Com #3
Indian Basin
Eddy, NM
Api No.: 30-015-32180

Enclosed please find the original and one copy of the Continuous Survey performed by Schlumberger Oilfield Services a division of Schlumberger Technology Corporation. The Continuous Directional Survey was calculated from FMI data acquired in Eddy County, NM and processed or supervised by Tom Hanson in Midland, Texas. Information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Tom Hanson DS Manager	No. 1	7713'- 8953'	13-Dec-2002	FMI data processing

Gyro data for 0.0' to 7681' (measured depth) was provided by Chevron USA, Inc.. If any other information is required, please contact the undersigned at the letterhead address and phone number.

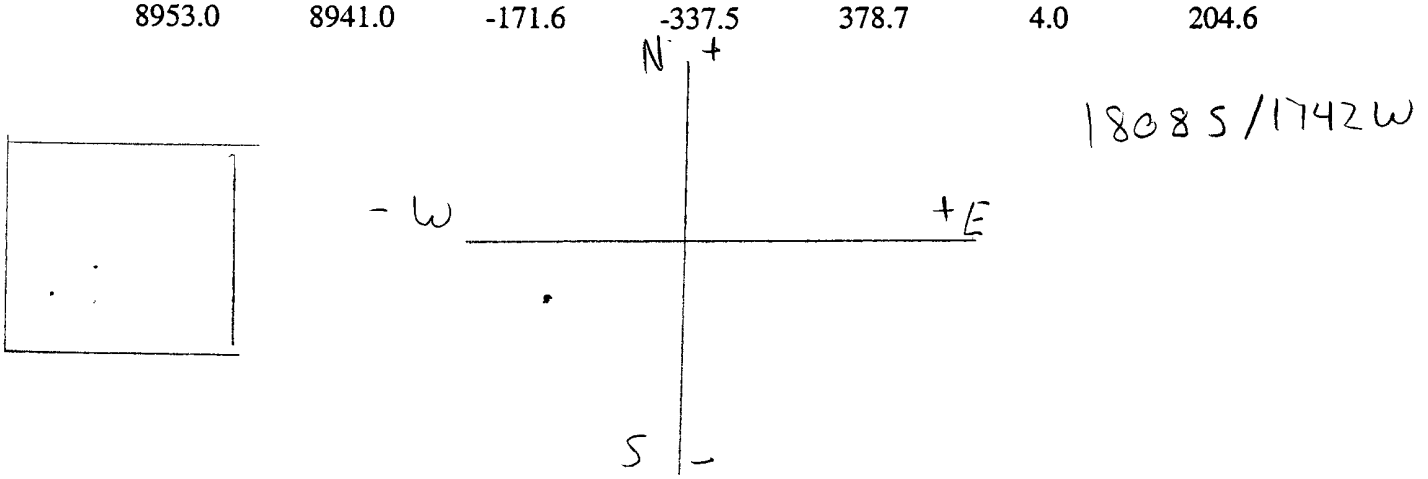
I, **Tom Hanson**, certify that; I am employed by Schlumberger Technology Corporation; that on the day(s) of 13-Dec-2002 I did conduct or supervise the processing of a Continuous Directional Survey **from a depth of 7713' feet to a depth of 8953 feet**; that the data is true, correct, complete and within the limitations of the tool as set forth by Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Chevron USA, Inc., for the Federal '33' Com #3 well, Api No. 30-015-32180, in Eddy County, NM and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Schlumberger Technology Corporation.

Tom Hanson

Tom Hanson
DS Manager

Enclosures
cc:

Measured Depth (ft)	True Vertical Depth (ft)	Coordinates +North -South (ft)	Coordinates +East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
7850.0	7840.0	-122.4	-281.4	306.9	4.1	241.3
7900.0	7890.0	-124.2	-284.4	310.3	3.9	239.3
7950.0	7940.0	-125.9	-287.3	313.7	3.9	241.0
8000.0	7990.0	-127.6	-290.3	317.1	3.9	240.3
8050.0	8040.0	-129.3	-293.2	320.5	4.0	239.2
8100.0	8090.0	-131.1	-296.2	323.9	3.9	237.3
8150.0	8139.0	-132.9	-299.1	327.3	3.9	237.6
8200.0	8189.0	-134.7	-302.0	330.7	3.9	236.9
8250.0	8239.0	-136.6	-304.8	334.0	3.9	236.5
8300.0	8289.0	-138.4	-307.6	337.3	3.9	236.8
8350.0	8339.0	-140.3	-310.4	340.6	3.8	233.6
8400.0	8389.0	-142.2	-313.1	343.9	3.9	237.1
8450.0	8439.0	-144.2	-316.0	347.3	4.1	233.2
8500.0	8489.0	-146.4	-318.8	350.8	4.1	229.3
8550.0	8539.0	-148.9	-321.5	354.3	4.3	227.2
8600.0	8588.0	-151.6	-324.0	357.7	4.1	223.4
8650.0	8638.0	-154.3	-326.3	360.9	4.1	219.5
8700.0	8688.0	-157.0	-328.5	364.1	3.9	218.6
8750.0	8738.0	-159.7	-330.6	367.2	4.0	217.2
8800.0	8788.0	-162.4	-332.4	370.0	3.8	212.2
8850.0	8838.0	-165.2	-334.2	372.9	4.0	210.0
8900.0	8888.0	-168.3	-335.9	375.7	3.9	206.3
8950.0	8938.0	-171.4	-337.5	378.5	4.0	204.2
8953.0	8941.0	-171.6	-337.5	378.7	4.0	204.6



Measured Depth (ft)	True Vertical Depth (ft)	Coordinates +North -South (ft)	Coordinates +East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
6200.0	6195.0	-47.6	-196.7	202.3	2.7	214.9
6250.0	6245.0	-49.7	-198.1	204.2	3.1	214.0
6300.0	6295.0	-52.0	-199.7	206.4	3.2	217.7
6350.0	6345.0	-54.0	-201.5	208.6	3.0	223.8
6400.0	6395.0	-55.8	-203.3	210.9	3.0	227.0
6450.0	6445.0	-57.5	-205.3	213.2	3.0	229.3
6500.0	6495.0	-59.2	-207.2	215.5	2.9	228.9
6550.0	6544.0	-60.8	-209.0	217.7	2.7	228.2
6600.0	6594.0	-62.6	-210.4	219.5	2.5	208.9
6650.0	6644.0	-64.5	-211.1	220.7	2.2	191.6
6700.0	6694.0	-66.3	-211.4	221.6	2.0	189.5
6750.0	6744.0	-68.0	-211.7	222.3	2.0	191.6
6800.0	6794.0	-69.8	-212.3	223.5	2.4	207.0
6850.0	6844.0	-71.7	-213.7	225.4	3.3	217.1
6900.0	6894.0	-74.6	-215.9	228.4	4.9	217.2
6950.0	6944.0	-78.5	-218.8	232.5	5.8	218.5
7000.0	6994.0	-82.4	-222.1	236.9	5.9	221.4
7050.0	7043.0	-86.2	-225.6	241.5	6.0	223.5
7100.0	7093.0	-90.0	-229.3	246.3	6.2	225.2
7150.0	7143.0	-93.8	-233.2	251.4	6.3	227.0
7200.0	7192.0	-97.4	-237.3	256.5	6.3	228.7
7250.0	7242.0	-100.9	-241.4	261.6	6.0	230.8
7300.0	7292.0	-104.0	-245.4	266.5	5.7	232.9
7350.0	7342.0	-106.9	-249.3	271.3	5.5	234.3
7400.0	7391.0	-109.6	-253.1	275.8	5.2	235.7
7450.0	7441.0	-112.0	-256.8	280.1	4.9	239.2
7500.0	7491.0	-113.9	-260.4	284.2	4.5	242.5
7550.0	7541.0	-115.7	-263.8	288.1	4.4	243.7
7600.0	7591.0	-117.3	-267.2	291.8	4.2	244.3
7650.0	7641.0	-118.9	-270.4	295.4	4.0	243.2
7700.0	7691.0	-120.0	-273.5	298.6	3.3	286.6
7750.0	7740.0	-119.0	-275.3	299.9	4.0	242.7
7800.0	7790.0	-120.7	-278.3	303.4	4.1	241.3

Measured Depth (ft)	True Vertical Depth (ft)	Coordinates +North -South (ft)	Coordinates +East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
4550.0	4547.0	-27.2	-122.9	125.9	2.7	257.2
4600.0	4597.0	-27.7	-125.2	128.2	2.7	256.9
4650.0	4647.0	-28.3	-127.5	130.6	2.7	256.3
4700.0	4697.0	-28.8	-129.8	133.0	2.8	255.4
4750.0	4747.0	-29.5	-132.2	135.5	2.9	254.3
4800.0	4796.0	-30.2	-134.6	138.0	2.9	254.4
4850.0	4846.0	-30.9	-137.1	140.5	3.0	254.7
4900.0	4896.0	-31.5	-139.6	143.1	3.0	254.9
4950.0	4946.0	-32.2	-142.2	145.8	3.0	255.2
5000.0	4996.0	-32.9	-144.8	148.4	3.1	255.8
5050.0	5046.0	-33.6	-147.4	151.2	3.2	256.3
5100.0	5096.0	-34.2	-150.1	154.0	3.2	256.6
5150.0	5146.0	-34.8	-152.8	156.8	3.2	257.1
5200.0	5196.0	-35.4	-155.5	159.5	3.1	258.1
5250.0	5246.0	-36.0	-158.1	162.1	3.0	259.1
5300.0	5296.0	-36.4	-160.7	164.7	3.0	260.0
5350.0	5346.0	-36.9	-163.2	167.3	2.9	260.4
5400.0	5396.0	-37.3	-165.7	169.8	2.9	260.3
5450.0	5446.0	-37.7	-168.2	172.4	2.8	260.4
5500.0	5496.0	-38.1	-170.6	174.8	2.8	260.7
5550.0	5545.0	-38.5	-172.9	177.2	2.7	261.0
5600.0	5595.0	-38.8	-175.2	179.5	2.6	261.3
5650.0	5645.0	-39.2	-177.4	181.7	2.5	260.8
5700.0	5695.0	-39.5	-179.5	183.8	2.4	260.2
5750.0	5745.0	-39.9	-181.5	185.9	2.3	258.7
5800.0	5795.0	-40.3	-183.5	187.9	2.3	257.0
5850.0	5845.0	-40.8	-185.4	189.8	2.2	253.3
5900.0	5895.0	-41.4	-187.2	191.7	2.2	250.1
5950.0	5945.0	-42.1	-188.9	193.6	2.2	249.0
6000.0	5995.0	-42.8	-190.7	195.4	2.1	247.0
6050.0	6045.0	-43.6	-192.3	197.2	2.1	242.7
6100.0	6095.0	-44.5	-193.9	198.9	2.1	234.6
6150.0	6145.0	-45.8	-195.3	200.6	2.4	221.4

Measured Depth (ft)	True Vertical Depth (ft)	Coordinates +North -South (ft)	Coordinates +East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
2900.0	2898.0	-17.1	-54.4	57.0	2.6	261.1
2950.0	2948.0	-17.4	-56.6	59.2	2.6	261.1
3000.0	2998.0	-17.7	-58.8	61.4	2.6	261.2
3050.0	3048.0	-18.1	-61.0	63.7	2.6	261.4
3100.0	3098.0	-18.4	-63.2	65.9	2.5	261.9
3150.0	3148.0	-18.7	-65.4	68.1	2.5	262.6
3200.0	3198.0	-19.0	-67.6	70.3	2.5	262.7
3250.0	3248.0	-19.3	-69.8	72.4	2.5	262.8
3300.0	3298.0	-19.6	-72.0	74.6	2.5	262.3
3350.0	3348.0	-19.9	-74.2	76.8	2.5	261.9
3400.0	3398.0	-20.1	-76.3	78.9	2.4	262.5
3450.0	3448.0	-20.4	-78.3	80.9	2.3	262.6
3500.0	3498.0	-20.7	-80.3	82.9	2.3	261.5
3550.0	3548.0	-21.0	-82.3	84.9	2.3	261.0
3600.0	3598.0	-21.3	-84.3	86.9	2.3	261.5
3650.0	3648.0	-21.6	-86.2	88.9	2.3	261.9
3700.0	3697.0	-21.9	-88.2	90.8	2.2	262.1
3750.0	3747.0	-22.1	-90.1	92.8	2.2	262.3
3800.0	3797.0	-22.4	-92.0	94.7	2.2	262.3
3850.0	3847.0	-22.6	-94.0	96.7	2.2	262.7
3900.0	3897.0	-22.9	-95.9	98.6	2.2	263.2
3950.0	3947.0	-23.1	-97.8	100.5	2.2	262.6
4000.0	3997.0	-23.4	-99.7	102.4	2.2	261.7
4050.0	4047.0	-23.7	-101.6	104.3	2.2	261.2
4100.0	4097.0	-24.0	-103.6	106.3	2.3	260.6
4150.0	4147.0	-24.3	-105.6	108.3	2.3	262.4
4200.0	4197.0	-24.5	-107.6	110.4	2.4	263.7
4250.0	4247.0	-24.8	-109.7	112.5	2.4	262.3
4300.0	4297.0	-25.1	-111.8	114.6	2.5	261.3
4350.0	4347.0	-25.4	-114.0	116.8	2.5	261.5
4400.0	4397.0	-25.7	-116.1	118.9	2.6	260.7
4450.0	4447.0	-26.2	-118.4	121.2	2.7	258.3
4500.0	4497.0	-26.7	-120.6	123.6	2.7	257.1

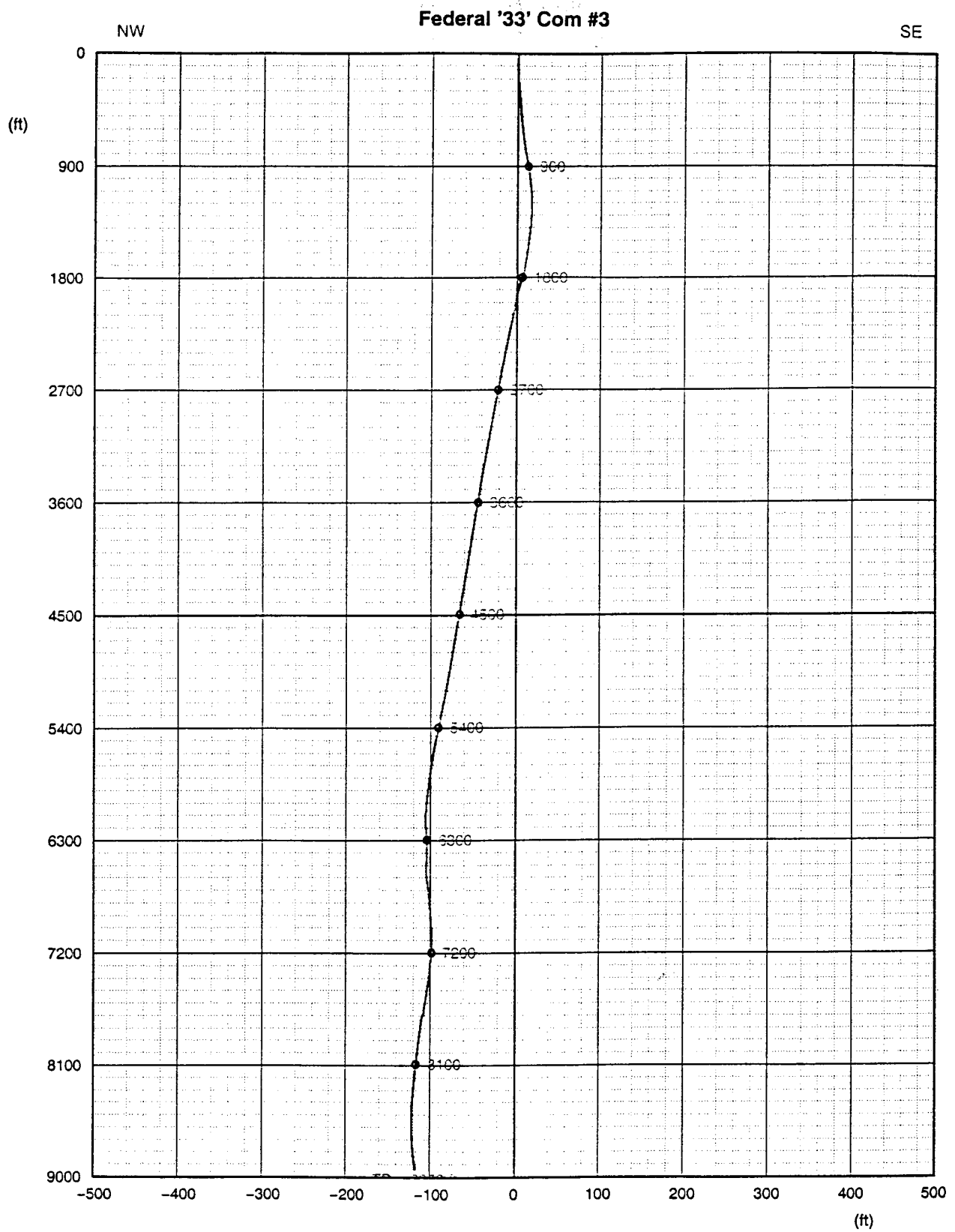
Measured Depth (ft)	True Vertical Depth (ft)	Coordinates +North -South (ft)	Coordinates +East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
1250.0	1250.0	-10.4	14.2	17.6	1.1	235.6
1300.0	1300.0	-11.0	13.3	17.3	1.3	241.7
1350.0	1350.0	-11.5	12.2	16.8	1.6	246.9
1400.0	1400.0	-12.0	10.8	16.2	1.8	251.2
1450.0	1450.0	-12.5	9.1	15.5	2.1	255.0
1500.0	1500.0	-13.0	7.3	14.9	2.2	255.4
1550.0	1550.0	-13.5	5.5	14.6	2.2	255.1
1600.0	1600.0	-14.0	3.6	14.4	2.3	257.0
1650.0	1650.0	-14.4	1.5	14.5	2.5	259.1
1700.0	1700.0	-14.8	-0.7	14.8	2.6	260.1
1750.0	1749.0	-15.2	-2.9	15.4	2.6	267.1
1800.0	1799.0	-14.5	-5.1	15.4	2.7	305.4
1850.0	1849.0	-12.7	-6.5	14.3	2.7	322.7
1900.0	1899.0	-11.4	-8.4	14.2	2.7	286.2
1950.0	1949.0	-11.4	-10.7	15.6	2.7	263.4
2000.0	1999.0	-11.7	-13.0	17.5	2.7	262.9
2050.0	2049.0	-12.0	-15.3	19.5	2.7	262.7
2100.0	2099.0	-12.3	-17.7	21.5	2.7	262.8
2150.0	2149.0	-12.6	-20.0	23.6	2.7	262.8
2200.0	2199.0	-12.8	-22.3	25.8	2.7	262.8
2250.0	2249.0	-13.1	-24.7	28.0	2.7	263.3
2300.0	2299.0	-13.4	-27.0	30.2	2.7	264.2
2350.0	2349.0	-13.6	-29.4	32.4	2.7	263.9
2400.0	2399.0	-13.9	-31.7	34.6	2.7	263.4
2450.0	2449.0	-14.2	-34.0	36.9	2.7	263.4
2500.0	2499.0	-14.4	-36.3	39.1	2.7	263.2
2550.0	2549.0	-14.7	-38.7	41.4	2.6	261.8
2600.0	2599.0	-15.1	-40.9	43.6	2.6	261.6
2650.0	2648.0	-15.4	-43.2	45.8	2.6	262.0
2700.0	2698.0	-15.7	-45.4	48.1	2.6	261.9
2750.0	2748.0	-16.0	-47.7	50.3	2.6	261.8
2800.0	2798.0	-16.4	-49.9	52.5	2.6	261.6
2850.0	2848.0	-16.7	-52.2	54.8	2.6	261.3

Tie Point Parameters for Directional Survey

Measured Depth	True Vertical Depth	+East -West Well Departure	+North -South Well Departure	Deviation	Azimuth
0.0	0.0	0.0	0.0	0.000	0.0

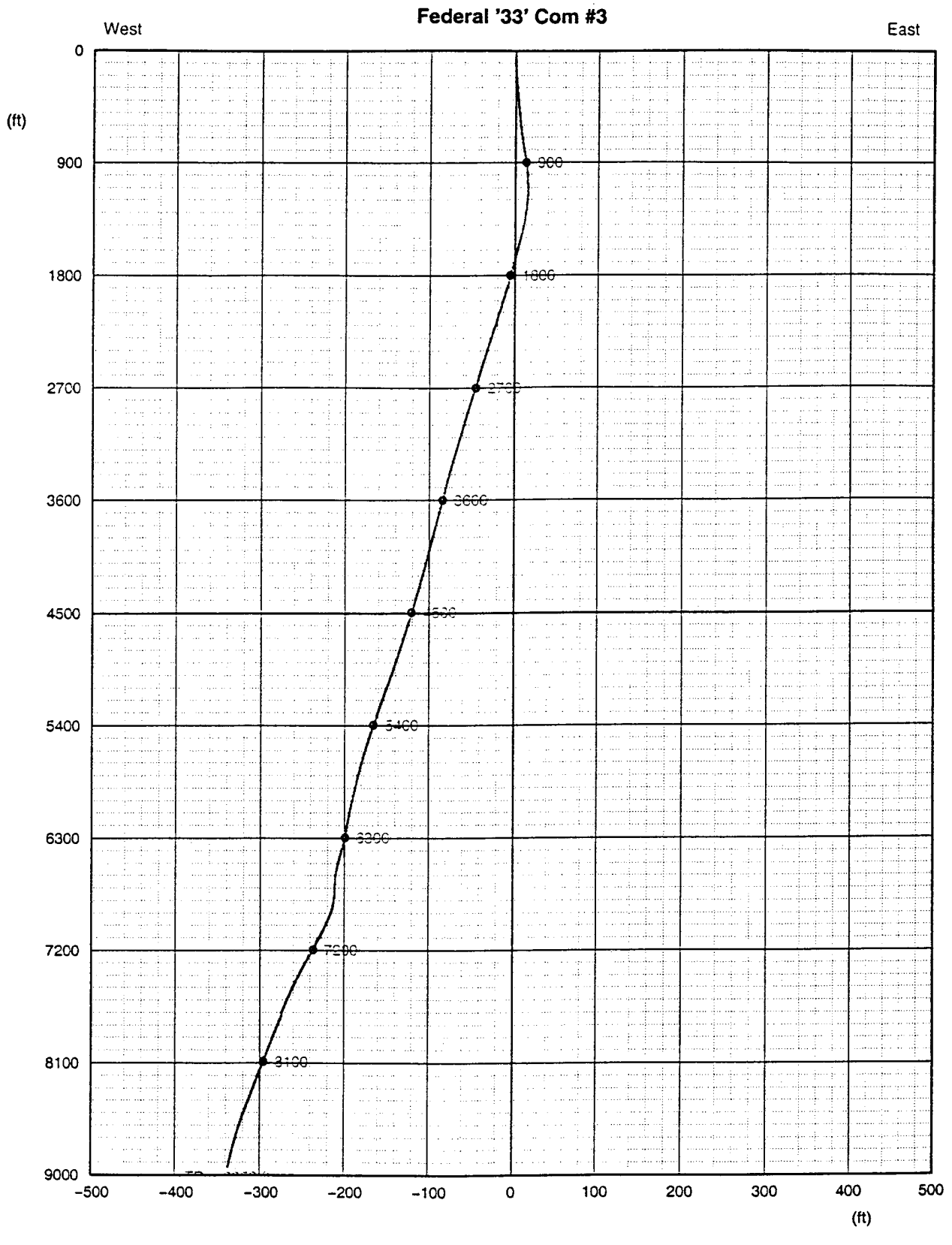
Coordinates

Measured Depth (ft)	True Vertical Depth (ft)	+North -South (ft)	+East -West (ft)	Course Length (ft)	Wellbore Deviation (deg)	Wellbore Azimuth (deg)
0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	50.0	0.1	0.1	0.1	0.2	78.4
100.0	100.0	-0.0	0.3	0.3	0.3	107.6
150.0	150.0	-0.1	0.6	0.6	0.4	106.8
200.0	200.0	-0.2	1.0	1.0	0.6	107.3
250.0	250.0	-0.4	1.6	1.6	0.8	108.3
300.0	300.0	-0.6	2.3	2.4	0.9	110.0
350.0	350.0	-0.9	3.0	3.2	0.9	111.2
400.0	400.0	-1.2	3.8	3.9	0.9	106.1
450.0	450.0	-1.4	4.5	4.7	0.9	104.7
500.0	500.0	-1.6	5.2	5.5	0.9	113.5
550.0	550.0	-2.0	6.0	6.3	1.0	118.4
600.0	600.0	-2.4	6.8	7.2	1.0	117.8
650.0	650.0	-2.8	7.6	8.1	1.1	114.3
700.0	700.0	-3.2	8.5	9.1	1.3	108.9
750.0	750.0	-3.6	9.6	10.3	1.4	111.4
800.0	800.0	-4.1	10.8	11.6	1.6	116.5
850.0	850.0	-4.7	12.0	12.9	1.6	116.8
900.0	900.0	-5.3	13.3	14.3	1.5	118.2
950.0	950.0	-6.1	14.2	15.5	1.2	136.4
1000.0	1000.0	-6.8	14.8	16.3	1.0	150.4
1050.0	1050.0	-7.6	15.2	17.0	1.0	150.9
1100.0	1100.0	-8.4	15.6	17.7	1.0	165.3
1150.0	1150.0	-9.2	15.5	18.0	1.0	204.1
1200.0	1200.0	-9.8	15.0	17.9	1.0	228.4



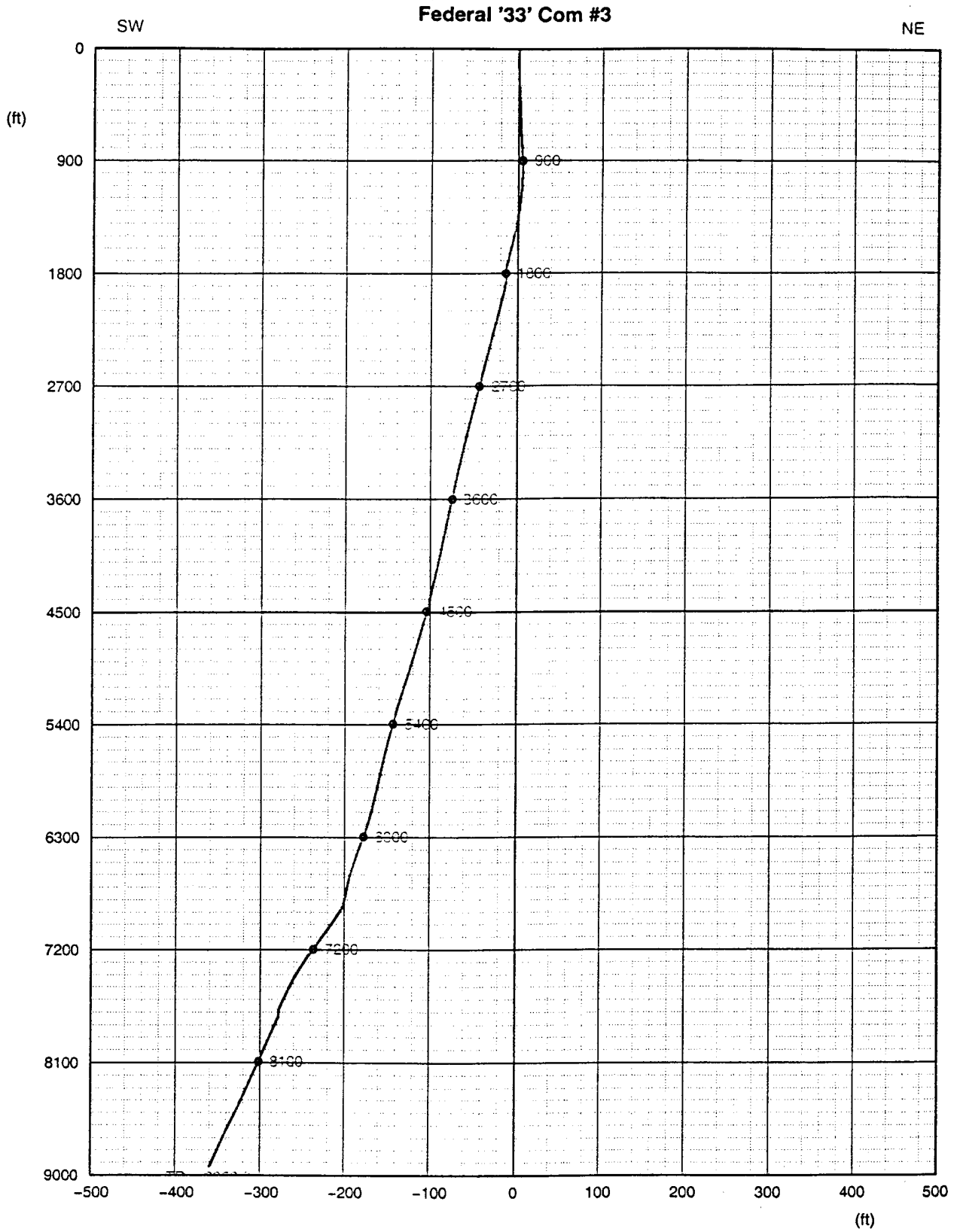
Projection on Vertical Plane

Vertical scale 1 in : 1125 , Horizontal scale 1 in : 166 ft



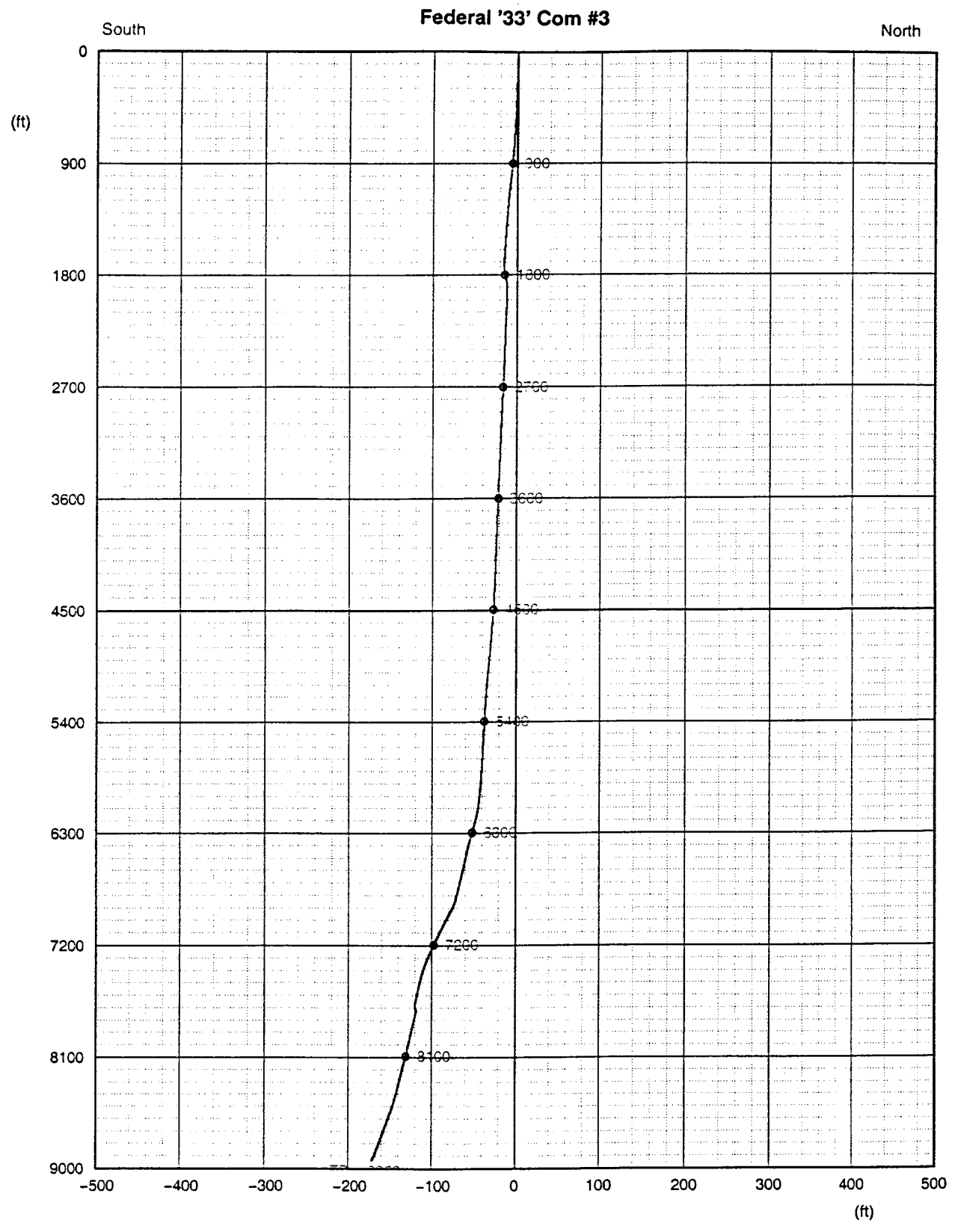
Projection on Vertical Plane

Vertical scale 1 in : 1125 , Horizontal scale 1 in : 166 ft



Projection on Vertical Plane

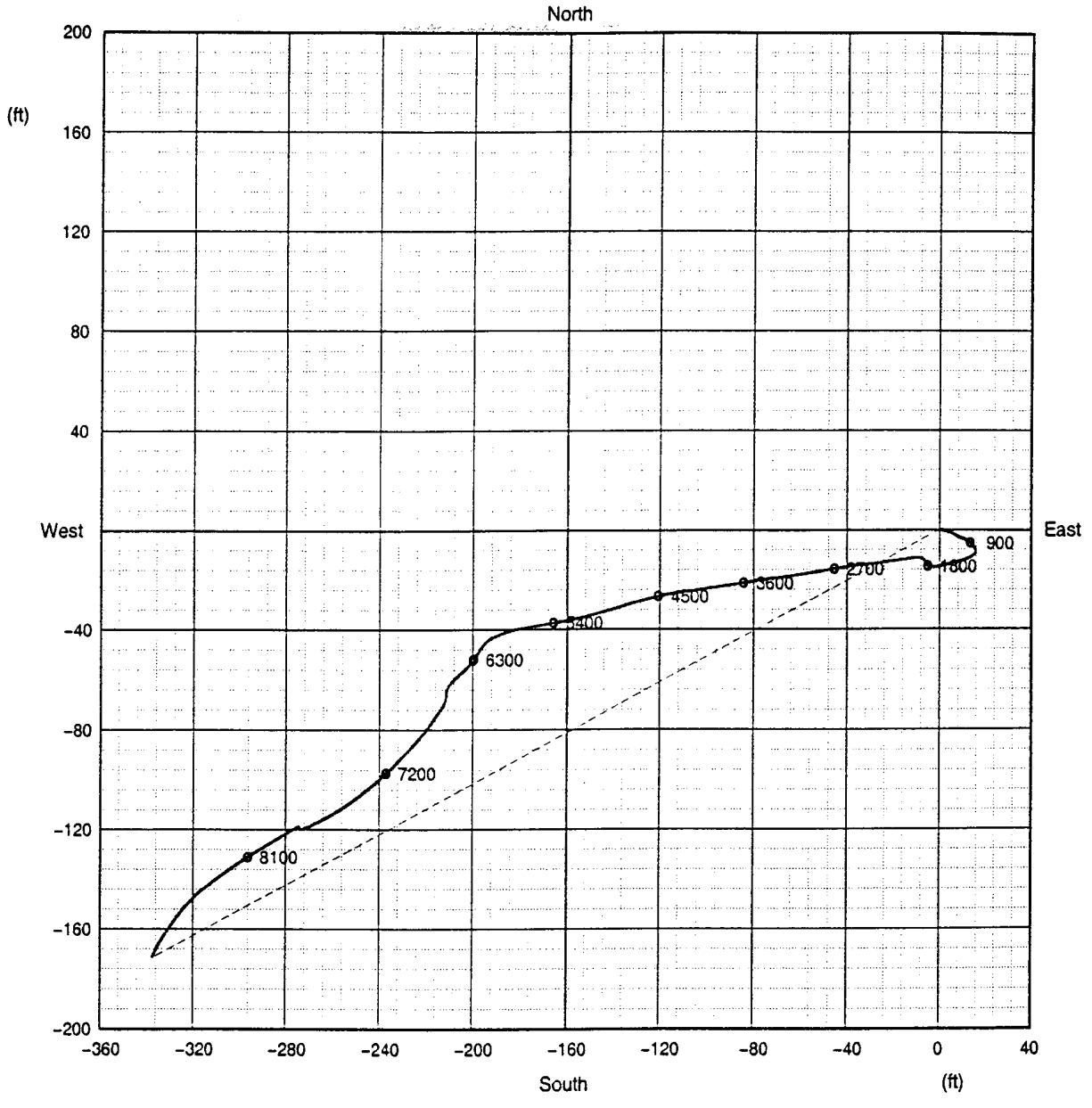
Vertical scale 1 in : 1125 , Horizontal scale 1 in : 166 ft



Projection on Vertical Plane

Vertical scale 1 in : 1125 , Horizontal scale 1 in : 166 ft

Federal '33' Com #3



Projection on Horizontal Plane

Horizontal scale 1 in : 66 ft

Minimum Curvature Method Method

Tie In Location			Bottom Hole Location		
Measured Depth	0.00	ft	Measured Depth	8953.00	ft
True Vertical Depth	0.00	ft	True Vertical Depth	8941.00	ft
Distance North	0.00	ft	Distance North	-171.58	ft
Distance East	0.00	ft	Distance East	-337.54	ft
			Course Length	378.65	ft
			Course Azimuth	243.05	deg

TVD Parameters

Method of Computation:	Minimum Curvature Method
Type of Input Data:	Log Inputs Only
Stations Input File:	
Station Data Output Sample Type?:	Continuous
Magnetic Decl. Corr.?:	No

Tie Point Parameters

Measured Depth:	0.0 ft
True Vertical Depth:	0.0 ft
Azimuth:	0.0 deg
Deviation:	0.000 deg
North/South Drift:	0.0 ft
East/West Drift:	0.0 ft

Input Parameters:

General Parameters

Top Depth:	0.000 ft
Bottom Depth:	8953.000 ft
Sample Rate:	-0.500 ft

DIRECTIONAL SURVEY

Federal '33' Com #3

General Information:

Company Name:	Chevron U.S.A., Inc.
Field:	Indian Basin
Well:	Federal '33' Com #3
County:	Eddy
State:	New Mexico
Field Location:	1980' FSL & 2080' FWL
API Number:	30-015-32180
Logging Engineer:	Miguel Saade /F. Peacock
Processed By:	Pete Martini
Service Order Number:	9167572
Job Number:	846239
Date Logged:	13-Dec-2002
Date Processed:	16-Dec-2002

Bottom Hole Location:

Measured Depth ft	True Vertical Depth ft	+North -South Drift ft	+East -West Drift ft	Course Length ft	Course Azimuth Degrees
8953.0	8941.0	-171.6	-337.5	378.6	63.1