

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 PO Drawer DD, Artesia, NM 88211-0719
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 PO Box 2088
 Santa Fe, NM 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

Operator Name and Address: SAGE ENERGY COMPANY P.O. Drawer 3068 Midland, Texas		' OGRID Number 20054
' Property Code 9867	' Property Name North Vacuum ABO North Unit "16"	' API Number 30-025-34356
		' Well No. #3163

7 Surface Location									
UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
M	36	16S	34E		660'	South	660'	West	Lea

8 Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
C A	1 2	17 S 17 S	34E 34E		660' 660'	North North	1980' 660'	West East	Lea Lea
' Proposed Pool 1 North Vacuum (Abo)					' Proposed Pool 2 North Vacuum (Abo)				

' Work Type Code "N"	' Well Type Code "O"	' Cable/Rotary Rotary	' Lease Type Code State	' Ground Level Elevation 4044
' Multiple NO	' Proposed Depth 8800'	' Formation Abo	' Contractor	' Spud Date 5-1-98

21 Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400'+-	400	Surface
11"	8-5/8"	24# & 32#	4600'+-	1800	Surface
7-7/8"	5-1/2"	15.5# & 17#	8800'+-	500	7800'

Describe the proposed program. If this application is to DEE.PEN 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.

Drill to TD of 8800'. Run 5-1/2" Casing. Move Rig off. Rig up Pulling Unit. Cut Window at 8650' KOP, Set Whipstock at 140° azimuth, drill short radius to top of Abo at 8729'. Drill 2000' Southeast lateral. Repeat for Southwest lateral (220° azimuth). Acidize laterals. Put on pump.
 Blow Out Prevention System: 4-1/2" Drill Pipe Rams. Set of blanks. Hydrill clamped around Kelly.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Jay H. Hardy*
 Printed name: Jay H. Hardy
 Title: VP Engineering
 Date: 2-23-98
 Phone: (915) 633-5271

OIL CONSERVATION DIVISION	
Approved ORIGINAL SIGNED BY CHRIS WILLIAMS DISTRICT I SUPERVISOR	
Title:	
Approval Date: APR 08 1998	Expiration Date:
Conditions of Approval: Attached <input type="checkbox"/>	

SE 1/2
 SW 2/2

Approved by District I Supervisor
 Date: 2/23/98

5
 C
 5

8

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-34356	Pool Code 61760	Pool Name North Vacuum Abo
Property Code 9867	Property Name NORTH VACUUM ABO NORTH UNIT TRACT 16	Well Number 3-163
OGRID No. 20054	Operator Name SAGE ENERGY COMPANY	Elevation 4044

Surface Location

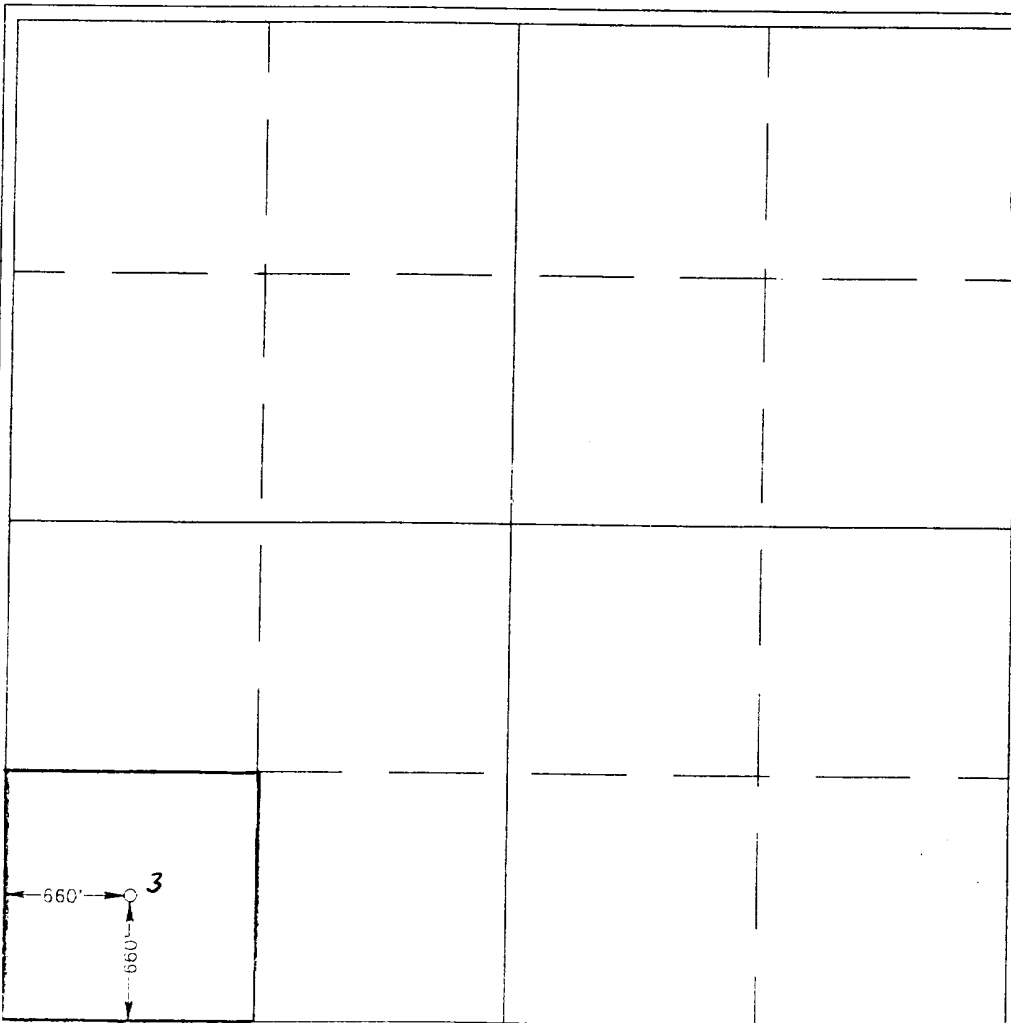
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	16 S	34 E		660	SOUTH	660	WEST	LEA

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

Dedicated Acres 40	Joint or Infill	Consolidation Code	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



OPERATOR CERTIFICATION

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

Jay H. Hardy
Signature
Jay H. Hardy
Printed Name
VP Engineer
Title
March 3, 1998
Date

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 belief.

FEBRUARY 11, 1998

Date Surveyed
Signature & Seal of Professional Surveyor
Ronald J. Eidson
Professional Surveyor
NEW MEXICO
2-13-98
98-11-0238

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
PROFESSIONAL SURVEYOR 12641

DISTRICT II
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1000 Rio Brazos Rd., Aztec, NM 87410

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OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code	Pool Name	
		61760	North Vacuum Abo	
Property Code	Property Name		Well Number	
9867	NORTH VACUUM ABO NORTH UNIT TRACT 1B		2-163	
OGRID No.	Operator Name		Elevation	
20054	SAGE ENERGY COMPANY		4044	

Surface Location

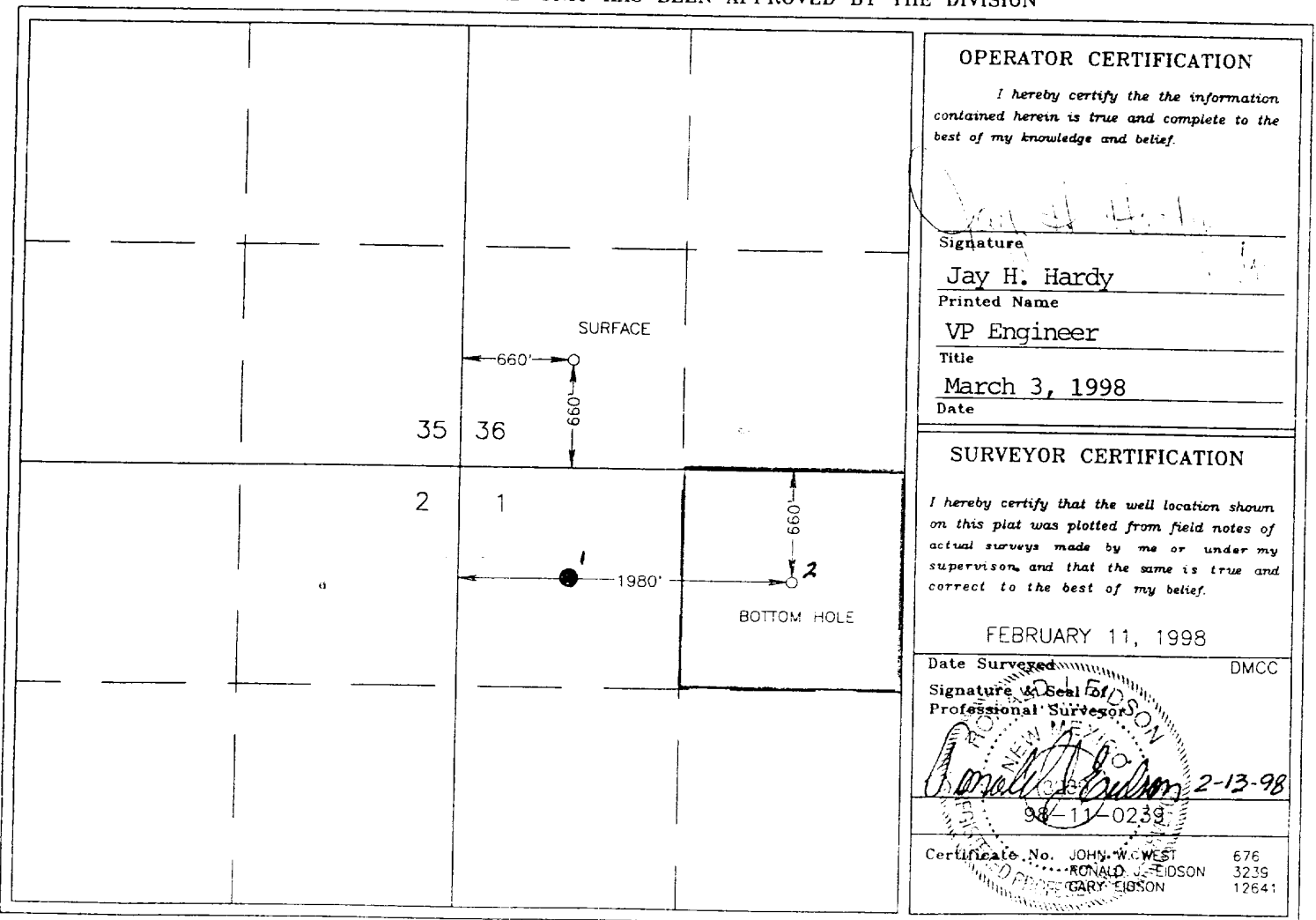
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	16 S	34 E		660	SOUTH	660	WEST	LEA

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
8C	1	17 S	34 E		660	NORTH	1980	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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Signature

Jay H. Hardy

Printed Name

VP Engineer

Title

March 3, 1998

Date

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FEBRUARY 11, 1998

Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

Ronald J. Edson
2-13-98
98-11-0239

Certificate No. JOHNS WEST 676
RONALD J. EDSON 3239
GARY EIDSON 12641

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

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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	61760	North Vacuum Abo
Property Code	Property Name	Well Number
9867	NORTH VACUUM ABO NORTH UNIT TRACT 13	2-163
OGRID No.	Operator Name	Elevation
20054	SAGE ENERGY COMPANY	4044

Surface Location

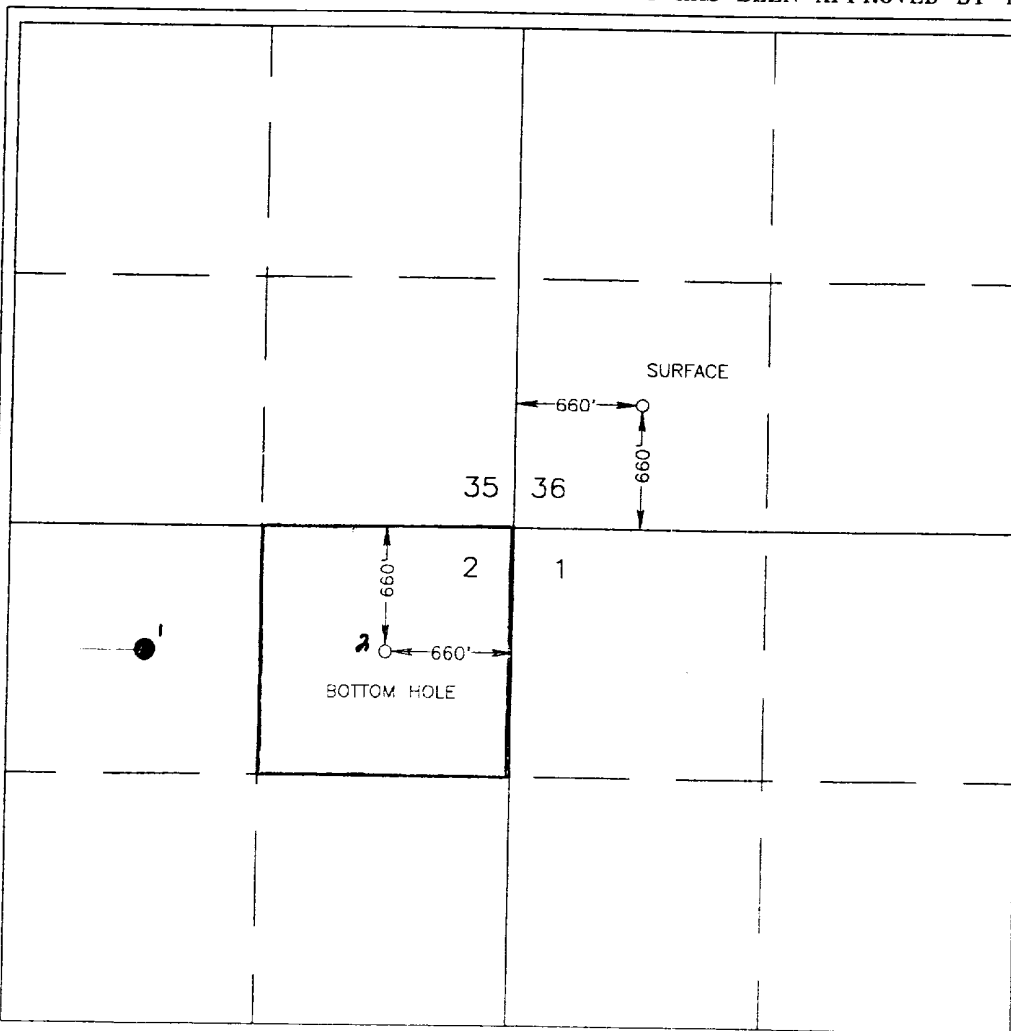
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	16 S	34 E		660	SOUTH	660	WEST	LEA

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	2	17 S	34 E		660	NORTH	660	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

Jay H. Hardy
Signature
Jay H. Hardy
Printed Name
VP Engineer
Title
March 3, 1998
Date

SURVEYOR CERTIFICATION

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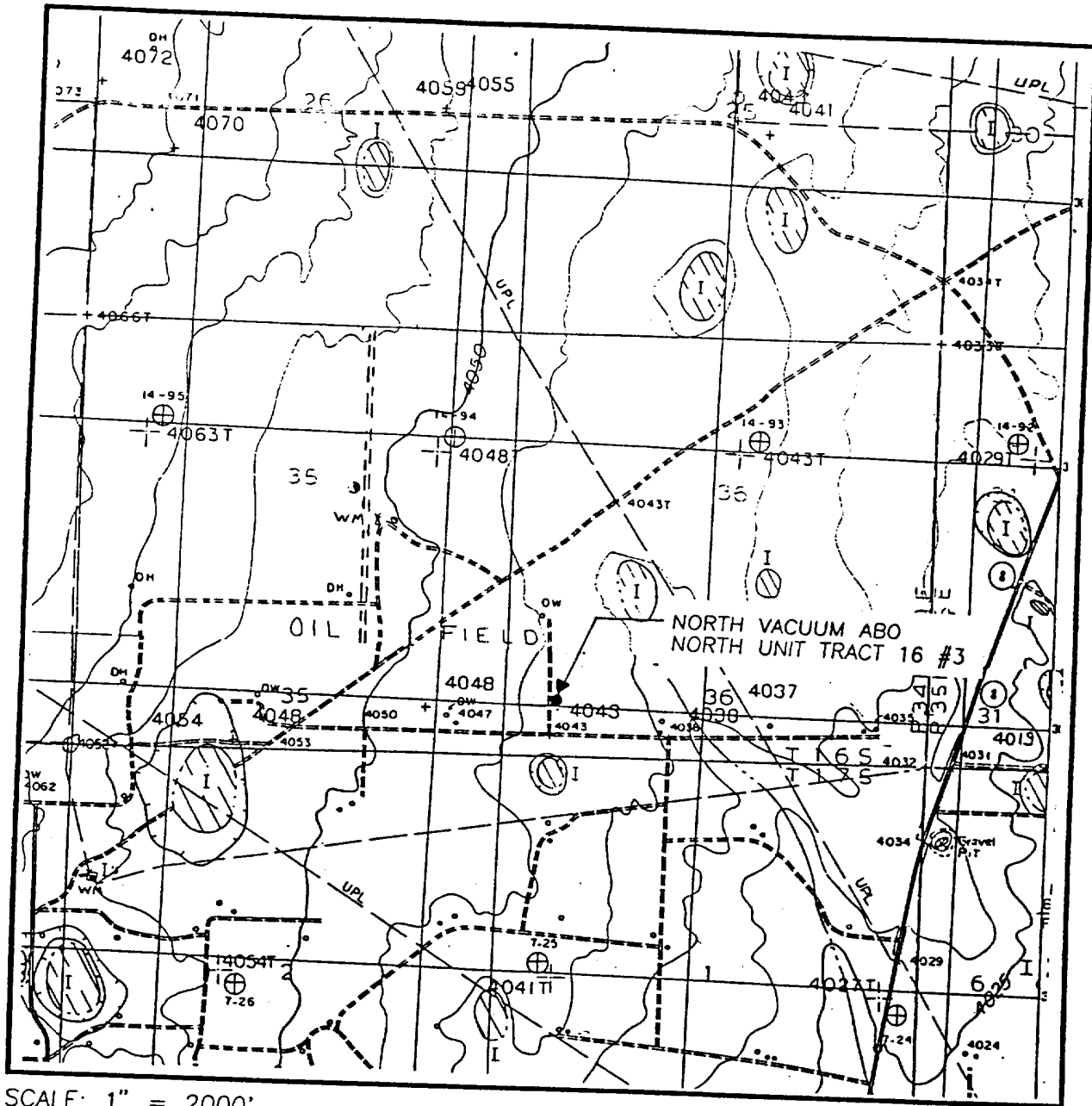
FEBRUARY 11, 1998
Date Surveyed DMCC

Ronald J. Eidson
Signature
Professional Surveyor

NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR
RONALD J. EIDSON
2-13-98
98-11-0258

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JOHNSON 11341

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BUCKEYE - 5'
BUCKEYE NE - .5'

SEC. 36 TWP. 16-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FSL & 660' FWL

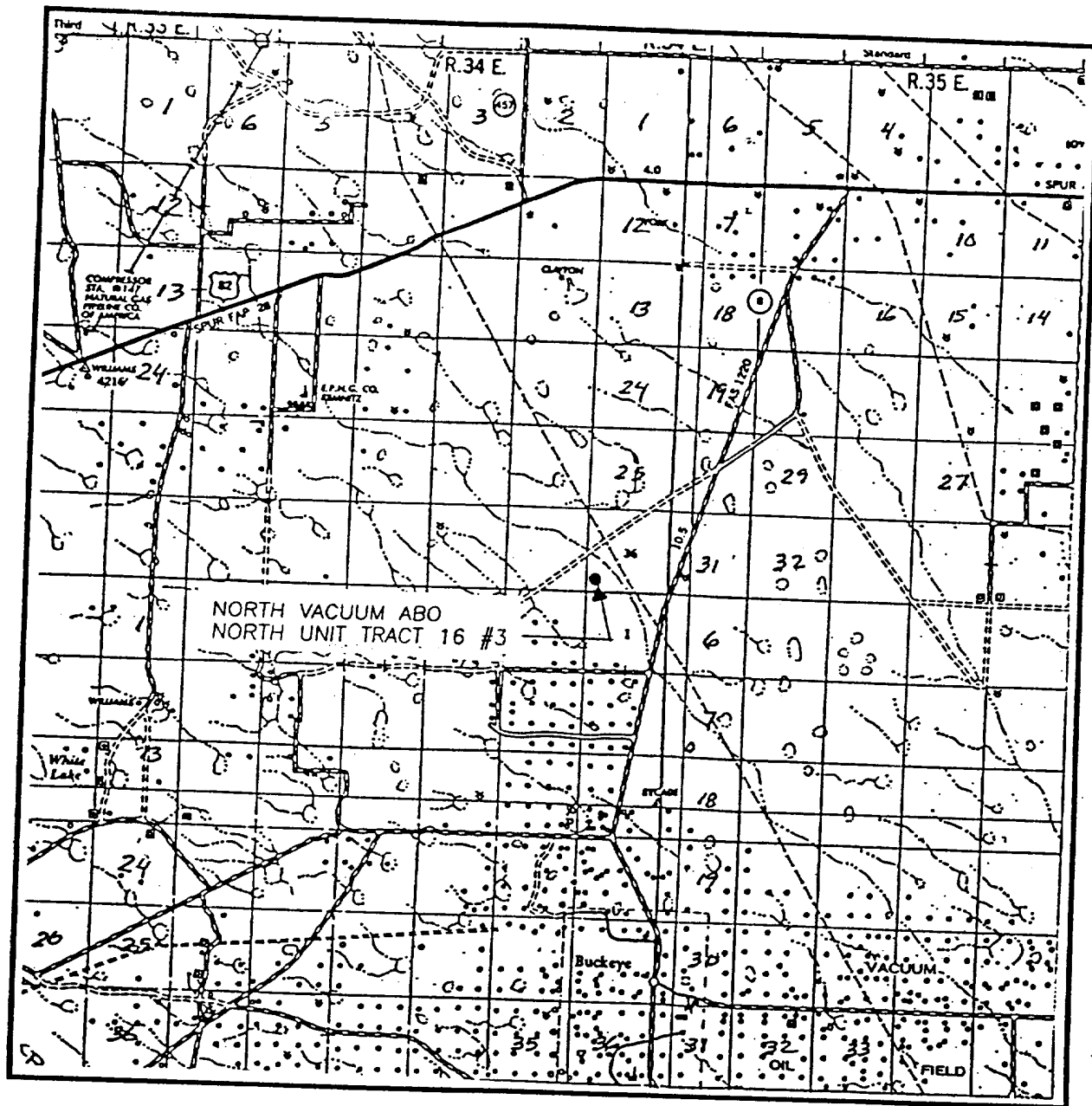
ELEVATION 4044

OPERATOR SAGE ENERGY COMPANY
LEASE NORTH VACUUM ABO
NORTH UNIT TRACT 16

U.S.G.S. TOPOGRAPHIC MAP
BUCKEYE, BUCKEYE NE, N.M.

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 36 TWP. 16-S RGE. 34-E.

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 660' FSL & 660' FWL

ELEVATION 4044

OPERATOR SAGE ENERGY COMPANY

LEASE NORTH VACUUM ABO
NORTH UNIT TRACT 16

**JOHN WEST ENGINEERING
HOBBS, NEW MEXICO**

(505) 393-3117

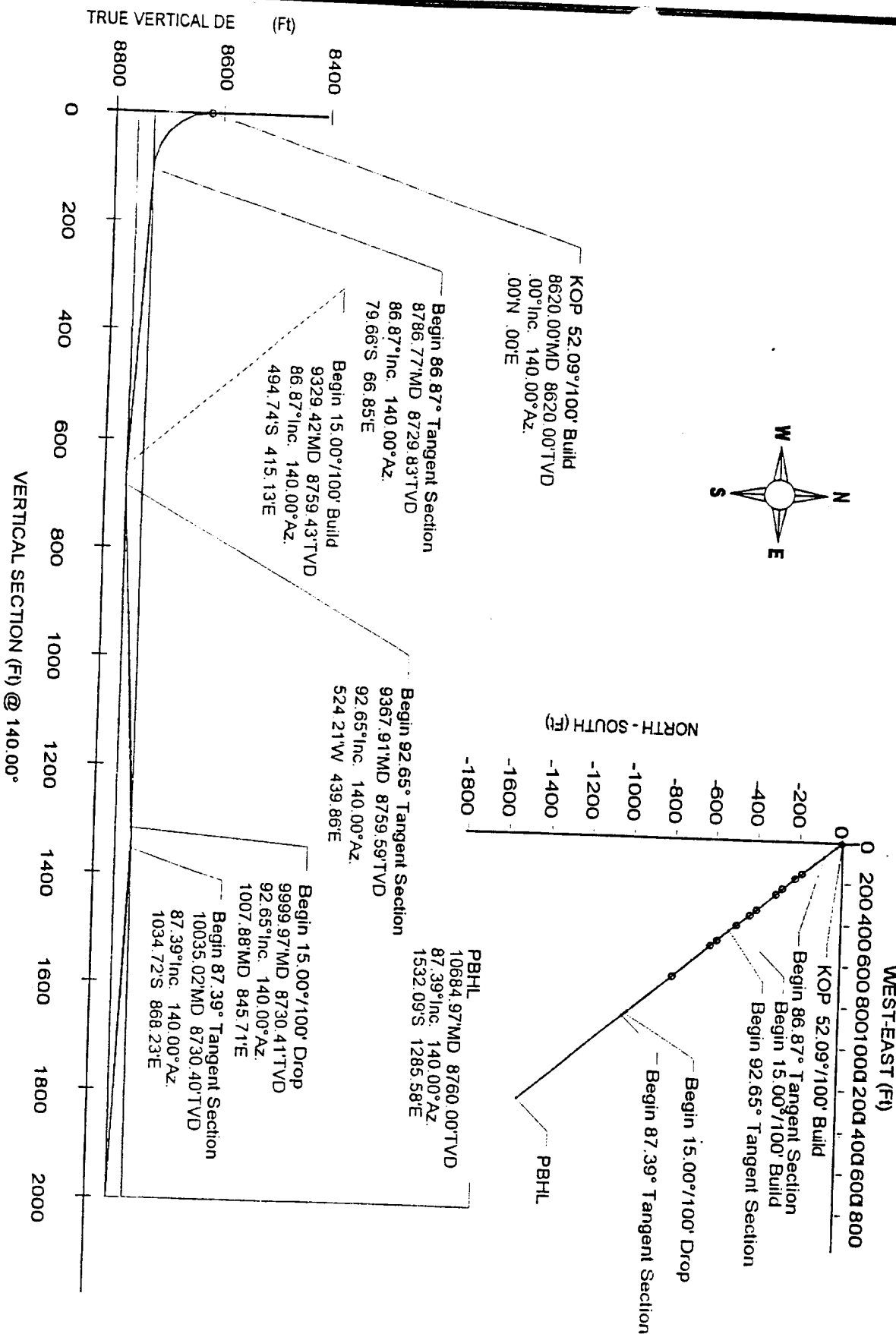


Job Number: P97-454
 Company: Sage Energy Company
 Lease/Well: NVANNU #3
 Location: Lea Cou: /
 Rig Name: Unknown

Declination: 9.13° East (est.)
 Grid: Assumed True
 File name: G:\PROPOSAL\97450\SIP97454\NVANNU3.SVY
 Date/Time: 09-Dec-97 / 13.35
 State/Country: New Mexico



Sage Energy Company



VERTICAL SECTION (Ft) @ 140.00°



Job Number: P97-454
 Company: Sage Energy Company
 Lease/Well: NVANU #3
 Location: Lea County
 Rig Name: Unknown
 RKB: Unknown
 G.L. or M.S.L.: Unknown

State/Country: New Mexico
 Declination: 9.13° East (est.)
 Grid: Assumed True
 File name: G:\PROPOSAL\97450\SIP97454\NVANU3.SVY
 Date/Time: 09-Dec-97 / 14:20
 Curve Name: 140° Az. Proposal Rev. 0

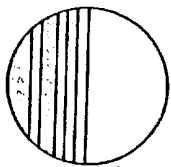
PHOENIX DRILLING SYSTEMS

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 140.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	BUILD RATE Deg/100	Radius FT
KOP 52.09°/100' Build										
8620.00	.00	140.00		8620.00	.00	.00	.00	.00	.00	N/A
8650.00	15.63	140.00	30.00	8649.63	-3.11	2.61	4.07	52.09	52.09	109.99
8680.00	31.25	140.00	30.00	8677.07	-12.23	10.26	15.96	52.09	52.09	109.99
8710.00	46.88	140.00	30.00	8700.29	-26.67	22.38	34.81	52.09	52.09	109.99
8740.00	62.51	140.00	30.00	8717.57	-45.36	38.06	59.22	52.09	52.09	109.99
8770.00	78.14	140.00	30.00	8727.64	-66.94	56.17	87.38	52.09	52.09	109.99
Begin 86.87° Tangent Section										
8786.77	86.87	140.00	16.77	8729.83	-79.66	66.85	103.99	52.09	52.09	109.99
Begin 15.00°/100' Build										
9329.42	86.87	140.00	542.65	8759.43	-494.74	415.13	645.83	.00	.00	N/A
9350.27	90.00	140.00	20.85	8760.00	-510.70	428.53	666.67	15.00	15.00	381.97
Begin 92.65° Tangent Section										
9367.91	92.65	140.00	17.64	8759.59	-524.21	439.86	684.31	15.00	15.00	381.97
Begin 15.00°/100' Drop										
9999.97	92.65	140.00	632.06	8730.41	-1007.88	845.71	1315.69	.00	.00	N/A
10000.21	92.61	140.00	.24	8730.40	-1008.06	845.86	1315.93	15.00	-15.00	381.97
10017.62	90.00	140.00	17.40	8730.00	-1021.39	857.05	1333.33	15.00	-15.00	381.97
Begin 87.39° Tangent Section										
10035.02	87.39	140.00	17.40	8730.40	-1034.72	868.23	1350.73	15.00	-15.00	381.97
PBHL										
10684.97	87.39	140.00	649.95	8760.00	-1532.09	1285.58	2000.00	.00	.00	N/A



Sage Energy Company



WVANT #3
LEA COUNTY, NEW MEXICO

Client No. 11444	Project No. ST
Date 1/20/07	Scale 1" = 100'
Change Order No. 1: Add 100' of pipe to the existing 100' of pipe. The 100' of pipe is to be installed in the existing trench.	
INSTALLATION	
Loc. 27 50 24 (N 44° E)	Proposed by: [Signature]
Zone 42 50 24 (N 44° E)	Checked by: [Signature]
Drawn by: [Signature]	Approved by: [Signature]
Scale 1" = 100'	Sheet No. 1 of 1

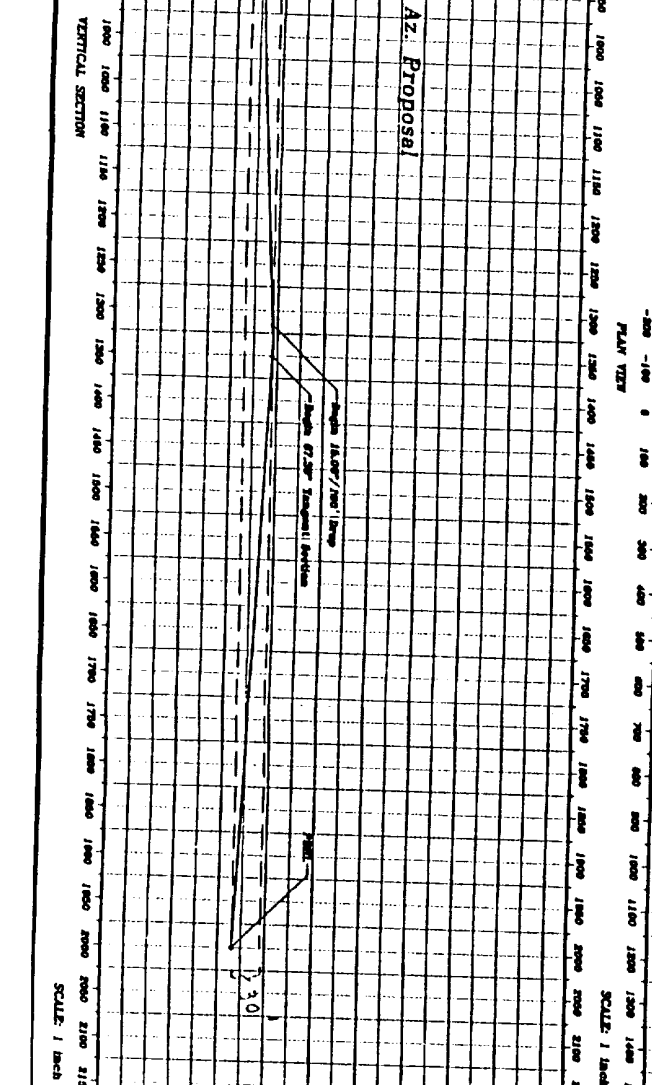
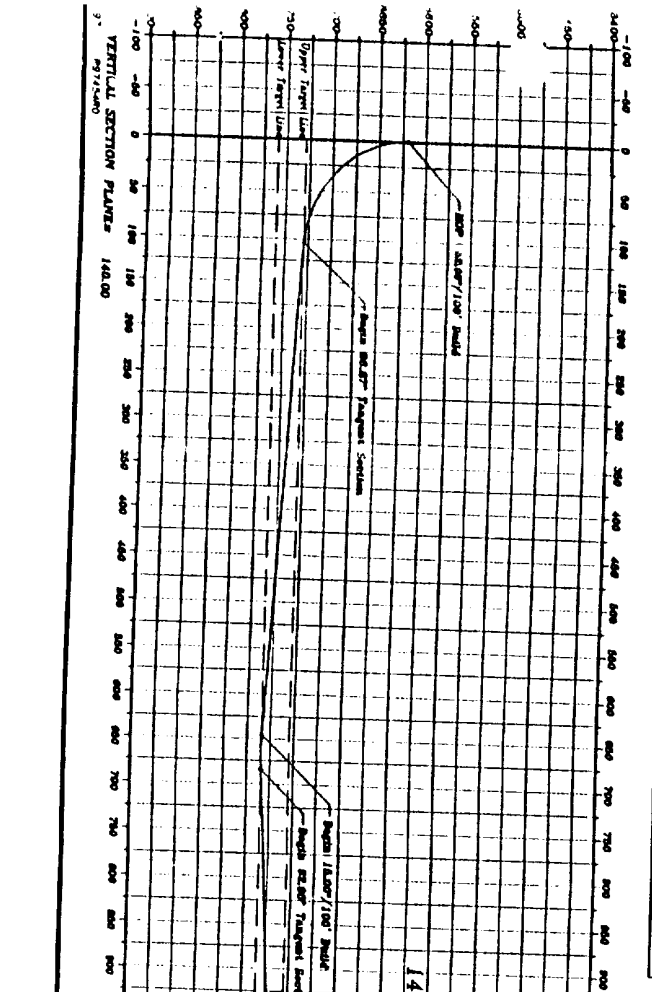
TARGET CHANGES

DATE	Target Description	TVD	Mag	Asm	Dip

CRITICAL POINTS FOR 140° AZ. Proposal

<#>	MD	Inc	Asm	TVD	VS	N-S	E-W	Comment
1	8620.00	0.00	140.00	8620.00	0.00	0.00	0.00	KOP
2	8786.77	86.87	140.00	8728.83	103.99	-79.66	66.85	Begin 86.87° Tangent Section
3	9320.42	86.87	140.00	8759.43	845.83	-494.74	415.13	Begin 15.00°/100' Build
4	9367.91	92.65	140.00	8759.59	84.31	-524.21	439.86	Begin 92.65° Tangent Section
5	9999.97	92.65	140.00	8730.41	-315.69	-1007.89	845.71	Begin 15.00°/100' Drop
6	10035.02	87.39	140.00	8730.40	-1034.72	-868.23	868.23	Begin 87.39° Tangent Section
7	10684.57	87.39	140.00	8760.00	-1592.09	-1285.58	1285.58	PHH

Handwritten notes:
 Horiz. Tangent
 87.30'
 8620
 110'



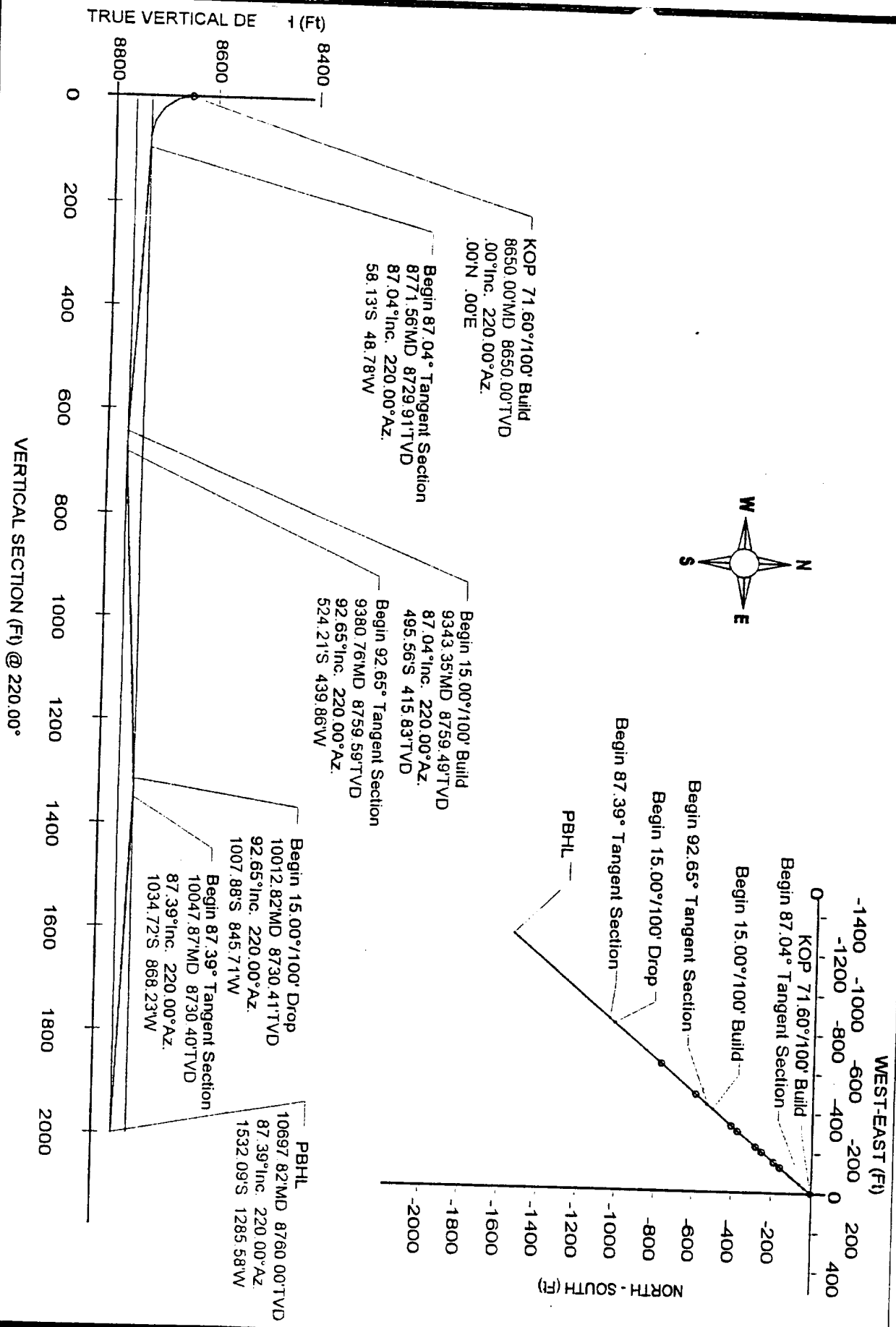


Job Number: P97-454
 Company: Sage Energy Company
 Lease/Well: NVANU 43
 Location: Lea County
 Rig Name: Unknown1

Declination: 9.13° East (est.)
 Grid: Assumed True
 File Name: G:\PROPOSAL\97454\S\P97454\NVANU3.SVY
 Date/Time: Tuesday, December 09, 1997
 State/Country: New Mexico



Sage Energy Company





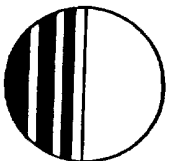
Job Number: P97-454
 Company: Sage Energy Company
 Lease/Well: NVANU #3
 Location: Lea County
 Rig Name: Unknown
 RKB: Unknown
 G.L. or M.S.L.: Unknown

State/Country: New Mexico
 Declination: 9.13° East (est.)
 Grid: Assumed True
 File name: G:\PROPOSAL\97450\SIP97454\NVANU3.SVY
 Date/Time: 09-Dec-97 / 14:17
 Curve Name: 220° Az. Proposal Rev. 0

PHOENIX DRILLING SYSTEMS

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 220.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Course Length FT	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100	BUILD RATE Deg/100	Radius FT
KOP 71.60°/100' Build										
8650.00	.00	220.00		8650.00	.00	.00	.00	.00	.00	N/A
8680.00	21.48	220.00	30.00	8679.30	-4.26	-3.57	5.56	71.60	71.60	80.02
8710.00	42.96	220.00	30.00	8704.53	-16.44	-13.79	21.46	71.60	71.60	80.02
8740.00	64.44	220.00	30.00	8722.19	-34.85	-29.24	45.50	71.60	71.60	80.02
8770.00	85.92	220.00	30.00	8729.82	-56.94	-47.78	74.33	71.60	71.60	80.02
Begin 87.04° Tangent Section										
8771.56	87.04	220.00	1.56	8729.91	-58.13	-48.78	75.88	71.60	71.60	80.02
Begin 15.00°/100' Build										
9343.35	87.04	220.00	571.80	8759.49	-495.56	-415.83	646.91	.00	.00	N/A
9363.12	90.00	220.00	19.76	8760.00	-510.70	-428.53	666.67	15.00	15.00	381.97
Begin 92.65° Tangent Section										
9380.76	92.65	220.00	17.64	8759.59	-524.21	-439.86	684.31	15.00	15.00	381.97
Begin 15.00°/100' Drop										
10012.82	92.65	220.00	632.06	8730.41	-1007.88	-845.71	1315.69	.00	.00	N/A
10013.06	92.61	220.00	.24	8730.40	-1008.06	-845.86	1315.93	15.00	-15.00	381.97
10030.47	90.00	220.00	17.40	8730.00	-1021.39	-857.05	1333.33	15.00	-15.00	381.97
Begin 87.39° Tangent Section										
10047.87	87.39	220.00	17.40	8730.40	-1034.72	-868.23	1350.73	15.00	-15.00	381.97
PBHL										
10697.82	87.39	220.00	649.95	8760.00	-1532.09	-1285.58	2000.00	.00	.00	N/A



Sage Energy Company

NYAND #3

LEA COUNTY, NEW MEXICO

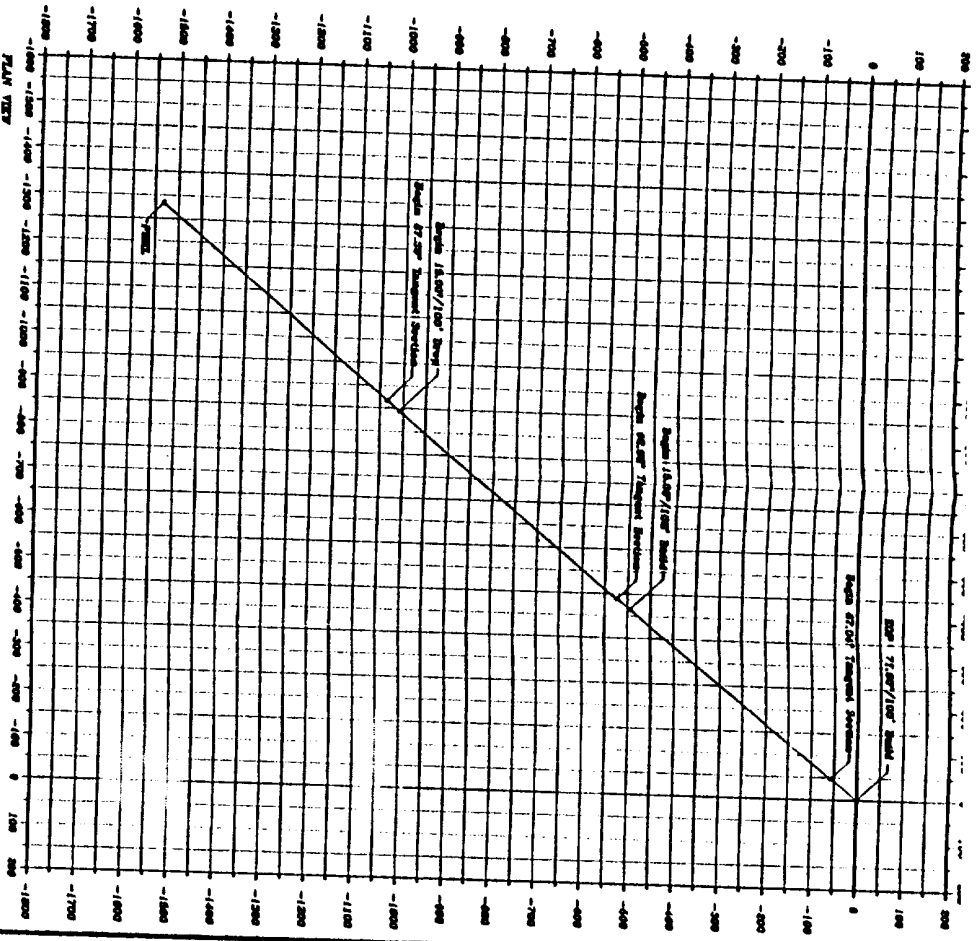
PROJECT NAME	NYAND #3
CLIENT	LEA COUNTY, NEW MEXICO
DATE	12/08/07
BY	[Signature]
CHECKED BY	[Signature]
SCALE	1" = 50'
DATE	12/08/07

TARGET CHANGES

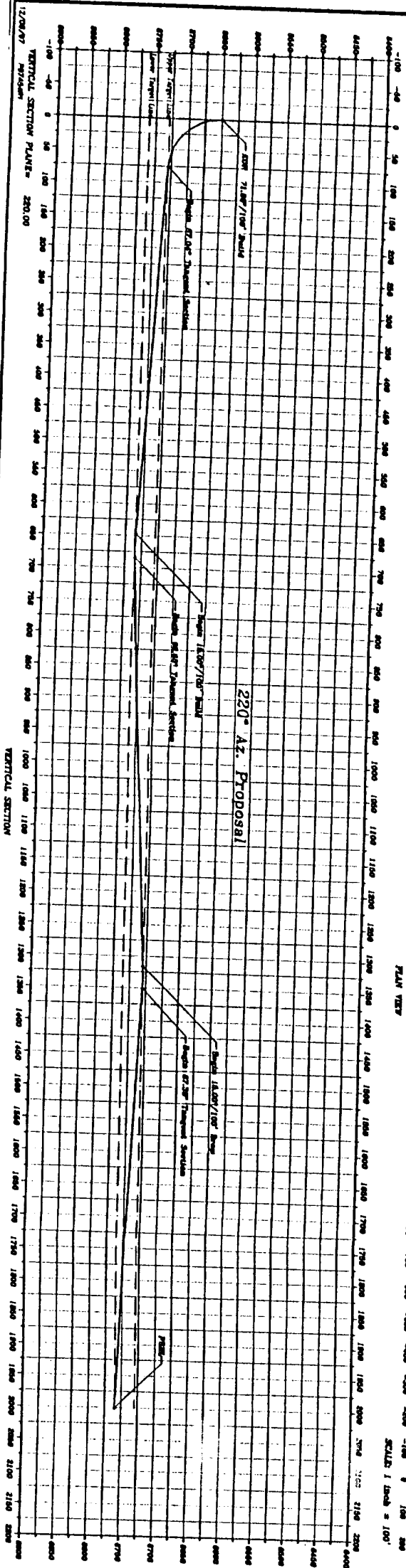
No.	DATE	Target Description	TV	Mag	Dist	Dir
1						
2						
3						
4						
5						
6						
7						

CRITICAL POINTS FOR 220° Az. Proposal

<#>	NO	Loc	AZIM	TV	VS	N-S	E-W	Comment
1	8650.00	0.001	220.00	8650.00	0.00	0.00	0.00	KOP 71.80°/100° Build
2	8771.56	87.04	220.00	8729.91	76.88	-68.13	-48.78	Begin 87.04° Tangent Section
3	8343.35	87.04	220.00	8759.49	646.91	-495.56	-415.83	Begin 16.00°/100° Build
4	8380.78	82.85	220.00	8758.59	684.31	-524.21	-439.86	Begin 82.85° Tangent Section
5	10012.82	82.85	220.00	8750.41	1313.69	-1007.88	-845.71	Begin 16.00°/100° Drop
6	10047.87	87.39	220.00	8750.40	1350.73	-1034.72	-868.23	Begin 87.39° Tangent Section
7	10897.82	87.39	220.00	8780.00	2000.00	-1532.09	-1285.58	PBR1



SCALE: 1 inch = 100'



SCALE: 1 inch = 50'

12/08/07
VERTICAL SECTION PLATE# 220.00
VERTICAL SECTION