

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address SAGE ENERGY COMPANY, PODIAUER 3068, 79701		OGRID Number 020054	
Property Code 9867		API Number 30-025-37018	
Property Name NORTH VACUUM ABO NORTH UNIT		Well No. 123	
Proposed Pool 1 NORTH VACUUM (ABO)		Proposed Pool 2	

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	16-S	34-E		608	SOUTH	1777	EAST	LEA

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/K	1/36	17S/16S	34E		660/2180	NORTH/SOUTH	460/2600	EAST/WEST	LEA

Additional Well Information

Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 4037
Multiple NO	Proposed Depth 10,643/10,602	Formation ABO	Contractor	Spud Date 4/1/2004
Depth to Groundwater 85		Distance from nearest fresh water well 340'		Distance from nearest surface water N/A
Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 4000 bbls Drilling Method: Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐				
Closed-Loop System ☐				

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	GL
11	8 5/8	32 & 24	4600	1740	GL
7 7/8	5 1/2	17 & 15.5	8740	770	VE 1500

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.

SET 5 1/2" CASING AT 8740'. DRILL OUT SHOE AND DRILL A 4 3/4" OH LATERAL ORIENTED AT 134° AZIMUTH WITH A VERTICAL SECTION OF ABOUT 1830'. A RETRIEVABLE BRIDGE PLUG AND WHIPSTOCK WILL BE SET IN THE 5 1/2" CASING AND A SECOND LATERAL WILL BE KICKED OFF AT 8706 AND ORIENTED AT 330° AZIMUTH. THIS LATERAL WILL ALSO BE 4 3/4" OH WITH A VERTICAL SECTION OF 1810'. BOTH LATERALS WILL BE ACIDIZED AND PUT ON PUMP. BLOW OUT PREVENTION WILL CONSIST OF APPROPRIATE PIPE RAMS (4 1/2" DP & 2 7/8" DP FOR LATERALS), BLANK RAMS AND A HYDRILL ANNULAR PREVENTOR.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: **GEORGE M. HARRIS, JR.**
Title: **DISTRICT ENGINEER**
E-mail Address: **g.harris@sagemid.com**
Date: **12/13/04** Phone: **432-683-5271**

OIL CONSERVATION DIVISION

Approved by: **[Signature]**
Title: **DEC 29 2004 PETROLEUM ENGINEER**
Approval Date: Expiration Date:
Conditions of Approval Attached ☐

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 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 30-025-3708		² Pool Code 61760	³ Pool Name North Vacuum Abo
⁴ Property Code 9367	⁵ Property Name North Vacuum Abo North Unit		⁶ Well Number 123
⁷ OGRID No. 020054	⁸ Operator Name Sage Energy Company		⁹ Elevation 4037'

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
0	36	16-S	34-E		608	South	1777	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/K	1/36	17S/16S	34E		660/2180	North/South	460/2600	East/West	Lea
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			
				U					

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 Section 36 Section 1				¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>George M. Harris Jr.</i> Signature George M. Harris Jr. Printed Name DISTRICT ENGINEER Title 12/13/04 Date	
				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 belief. December 3, 2004 Date of Survey Signature and Seal of Professional Surveyor: <i>Max A. Schumann, Jr.</i> Max A. Schumann, Jr. Certificate Number 1510	

Job No. 69,010

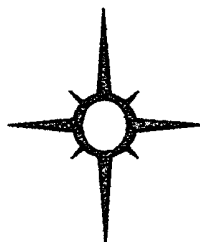
Company: Sage
Lease/Well: 123
Location: Lea County
Rig Name:

SAGE

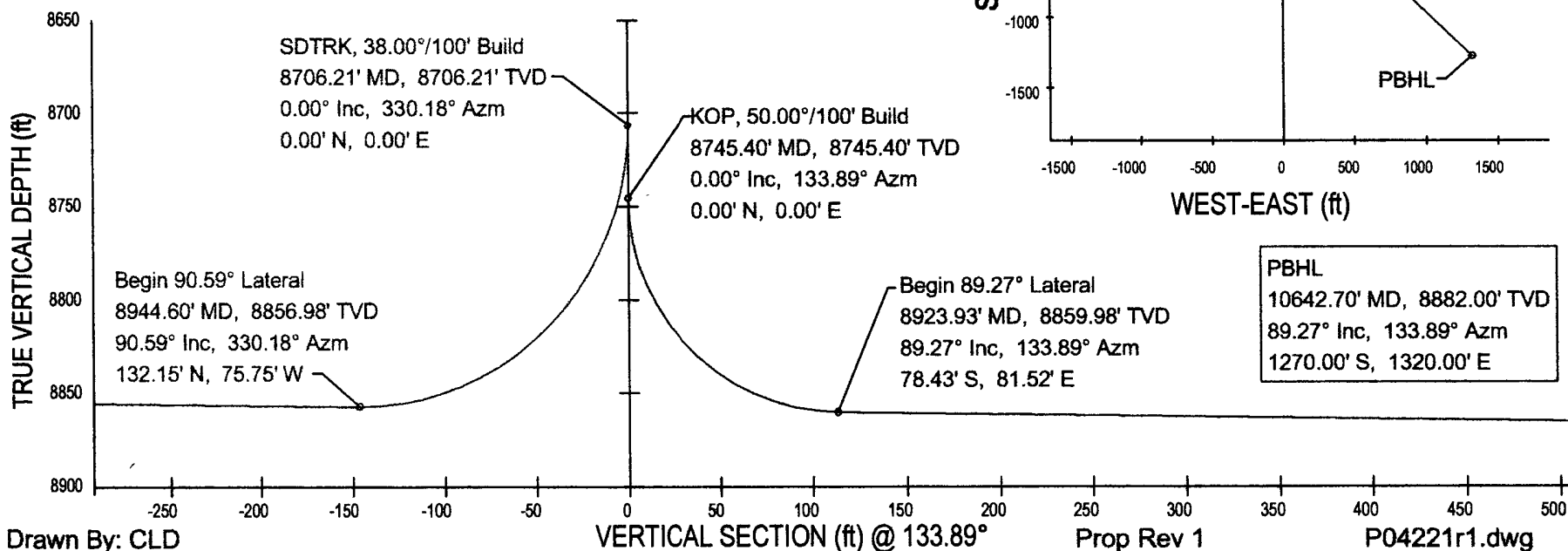
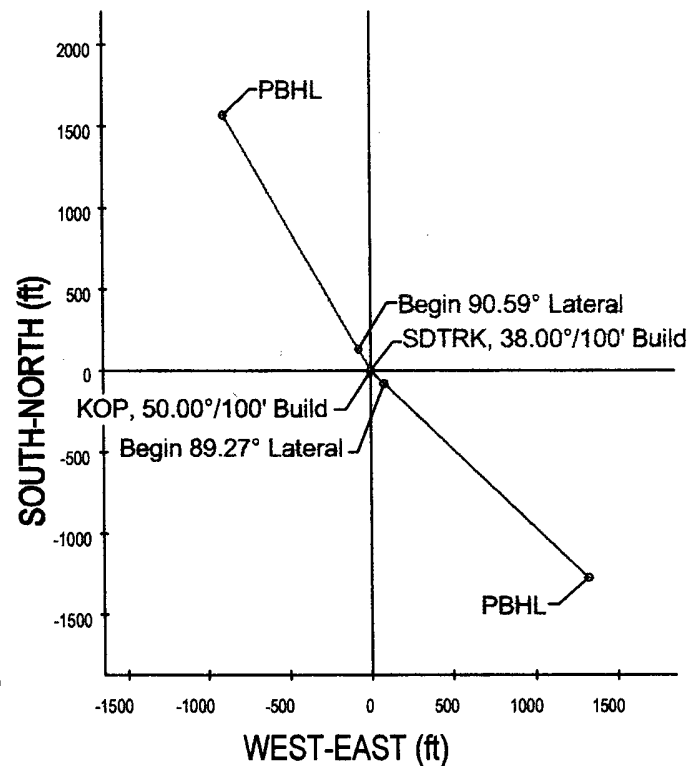
State/Country: New Mexico
Declination:
Grid: Assumed to True North
Date/Time: 12/06/04

MULTI-SH-T

Bearings Referenced to Assume True North



PBHL
10602.03' MD, 8840.00' TVD
90.59° Inc, 330.18° Azm
1570.00' N, 900.00' W



Prop Rev 1

P04221r1.dwg

Job Number: P04-221

Company: Sage

Lease/Well: 123

Lea County

G.L. or M.S.L.:

State/Country: New Mexico

Declination:

Grid: Assumed to True North

File name: F:\WELLPL~1\2004\IP04220\S\IP04221\04221.SVY

Date/Time: 06-Dec-04 / 09:31

Curve Name: Dndip Rev 1

MULTI-SH • T

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 133.89
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
KOP, 50.00°/100' Build									
8745.40	.00	133.89	8745.40	.00	.00	.00	.00	.00	.00
8775.40	15.00	133.89	8775.06	-2.71	2.81	3.90	3.90	133.89	50.00
8805.40	30.00	133.89	8802.69	-10.64	11.06	15.35	15.35	133.89	50.00
8835.40	45.00	133.89	8826.43	-23.27	24.19	33.56	33.56	133.89	50.00
8865.40	60.00	133.89	8844.64	-39.72	41.29	57.30	57.30	133.89	50.00
8895.40	75.00	133.89	8856.09	-58.89	61.20	84.93	84.93	133.89	50.00
Begin 89.27° Lateral									
8923.93	89.27	133.89	8859.98	-78.43	81.52	113.12	113.12	133.89	50.00
PBHL									
10642.70	89.27	133.89	8882.00	-1270.00	1320.00	1831.75	1831.75	133.89	.00

Job Number: P04-221

Company: Sage

Lease/Well: 123

Lea County

G.L. or M.S.L.:

State/Country: New Mexico

Declination:

Grid: Assumed to True North

File name: F:\WELLPL-1\2004\IP04220\S\IP04221\04221.SVY

Date/Time: 06-Dec-04 / 09:32

Curve Name: Updip Rev 1

MULTI-SH • T

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 133.89
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
SDTRK, 38.00°/100' Build									
8706.21	.00	330.18	8706.21	.00	.00	.00	.00	.00	.00
8736.21	11.40	330.18	8736.02	2.58	-1.48	-2.86	2.97	330.18	38.00
8766.21	22.80	330.18	8764.64	10.22	-5.86	-11.31	11.78	330.18	38.00
8796.21	34.20	330.18	8790.96	22.62	-12.97	-25.03	26.07	330.18	38.00
8826.21	45.60	330.18	8813.94	39.29	-22.52	-43.47	45.28	330.18	38.00
8856.21	57.00	330.18	8832.67	59.57	-34.15	-65.90	68.66	330.18	38.00
8886.21	68.40	330.18	8846.40	82.66	-47.38	-91.45	95.27	330.18	38.00
8916.21	79.80	330.18	8854.61	107.65	-61.71	-119.10	124.08	330.18	38.00
Begin 90.59° Lateral									
8944.60	90.59	330.18	8856.98	132.15	-75.75	-146.21	152.32	330.18	38.00
PBHL									
10602.03	90.59	330.18	8840.00	1570.00	-900.00	-1737.08	1809.67	330.18	.00

SAGE ENERGY COMPANY
NVANU #123
WELLDONE DIAGRAM

