

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

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

Form C-101
Revised March 17, 1999

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 ST MARY LAND & EXPLORATION CO. P O BOX 7168 BILLINGS, MT 59103		² OGRID Number 154903
		³ API Number 30 - 015 - 26593
³ Property Code 31922	⁵ Property Name EAST BURTON FLAT 36 STATE	⁶ Well No. 1-S

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
I	36	19S	29E		2240	S	660	E	EDDY

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
J	36	19S	29E		1376	S	1667	E	EDDY

⁹ Proposed Pool 1 Under Parkway ATOKA (73200)	¹⁰ Proposed Pool 2 STRAWN (73400)
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¹¹ Work Type Code E	¹² Well Type Code G	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3330'
¹⁶ Multiple N	¹⁷ Proposed Depth 11132MD	¹⁸ Formation ATOKA	¹⁹ Contractor UNKNOWN	²⁰ Spud Date ~4/01/03

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	94	382'	900sx+18yds RM	10'
17-1/2"	13-3/8"	48	1348'	1675sx	Surface
12-1/4"	8-5/8"	24	3198'	1750sx	Surface
7-7/8"	5-1/2"	17	11354'	650sx	8865' (CBL)
7-7/8"	5-1/2"	17	11132'	~1000sx	Surface

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.

BOP will consist of minimum of one annular and two ram type preventors with a minimum 5000psi working pressure.

We propose to abandon existing Strawn perfs (10698'-10714') with a 5-1/2" CIBP @ 10600' capped with 25' of cement. Another 5-1/2" CIBP will be set at 8900' and capped with 25' of cement (CBL indicated the TOC to be 8865'). The 5-1/2" casing will be cut and recovered from ~8300'. A cement plug will be set across the kick off depth of 7000'. The new hole will be sidetracked from there to the proposed BHL per the attached directional plan. After logging, 5-1/2" casing will be rerun to the new TD at 11132'MD and cemented to surface with a completion attempt in the Atoka and/or Strawn zones to follow.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Herb Thackeray*

Printed name: Herb Thackeray

Title: Operations Engineer

Date:
1/31/03

Phone:
(406) 245-6248

OIL CONSERVATION DIVISION

Approved by:

ORIGINAL SIGNED BY TIM W. GUM
DISTRICT II SUPERVISOR

Title:

Approval Date: FEB 13 2003

Expiration Date: FEB 13 2004

Conditions of Approval:

Attached ☐

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-26593	² Pool Code 73200	³ Pool Name BURTON FLAT; ATOKA, EAST
⁴ Property Code	⁵ Property Name EAST BURTON FLAT 36 STATE	⁶ Well Number 1-S
⁷ OGRID No. 154903	⁸ Operator Name ST MARY LAND & EXPLORATION CO.	⁹ Elevation 3300'

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
I	36	19S	29E		2240	S	660	E	EDDY

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
J	36	19S	29E		1376	S	1667	E	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill N	¹⁴ Consolidation Code	¹⁵ Order No.
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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 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Herb Thackeray Printed Name Operations Engineer Title 2/4/03 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. 12/03/90 Date of Survey Signature and Seal of Professional Survey See attached C-102 from original vertical hole. Certificate Number

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

Box 1980, Hobbs, NM 88240

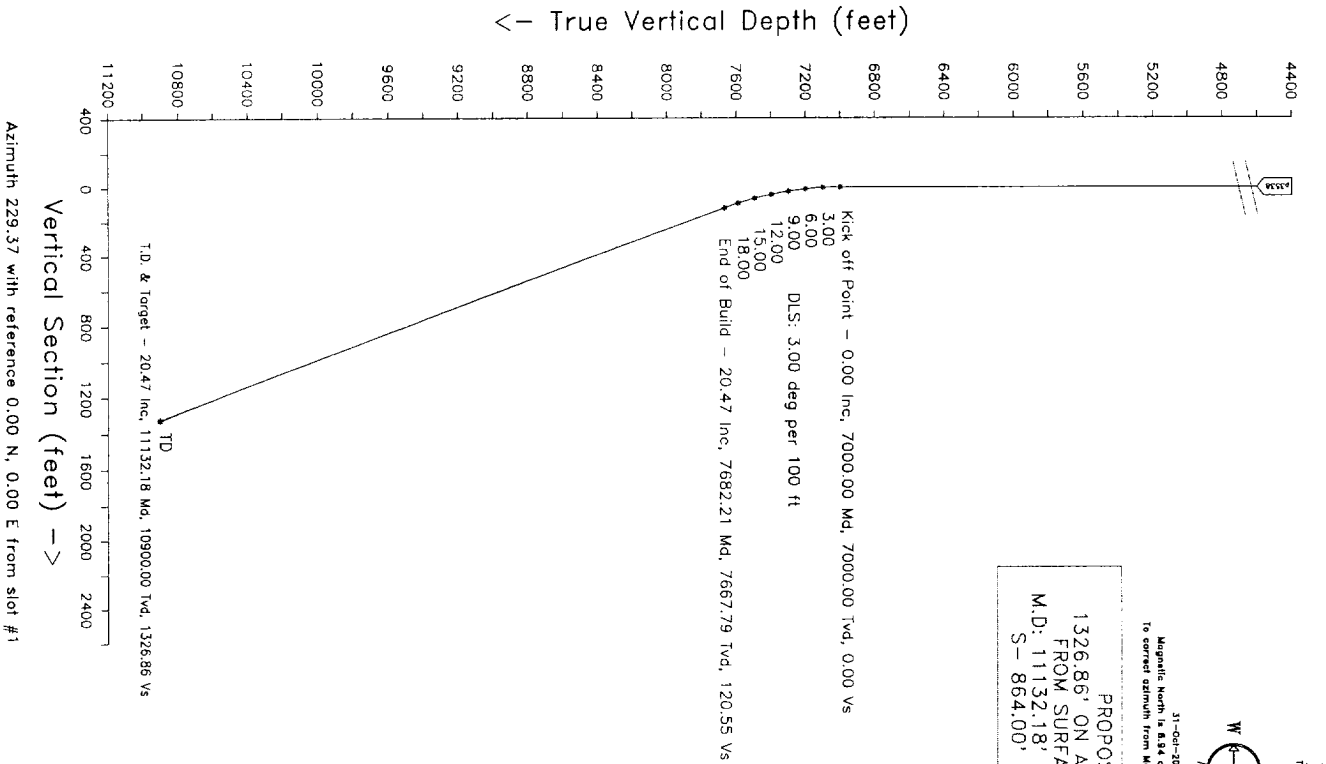
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator SANTA FE ENERGY OPERATING PARTNERS LP.		Lease EAST BURTON FLAT STATE 36		Well No. 1
Unit Letter I	Section 36	Township 19 SOUTH	Range 29 EAST	County EDDY
Actual Footage Location of Well: 2240 feet from the SOUTH line and 660 feet from the EAST line				
Ground level Elev. 3329.9	Producing Formation Strawn	Pool East Burton Flat Strawn Gas		Dedicated Acreage: 320 Acres
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? ☐ Yes ☐ No If answer is "yes" type of consolidation <u>Common ownership</u> If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.				
State of New Mexico Lease # V-1776 State of New Mexico - 1/6 RI SFEOP, L.P. et al - 5/6 WI State of New Mexico Lease # V-1576 State of NM - 1/6 RI SEEP et al - 5/6 WI			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
			Signature <i>Michael R. Burton</i> Printed Name Michael R. Burton Position Operations Manager Company Santa Fe Energy Operating Partners, L.P. Date December 21, 1990	
			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 12-3-90 Signature & Seal of Professional Surveyor <i>John W. West</i> Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239	



ST. MARY ENERGY

Structure : EAST BURTON FLAT STATE 36-1S

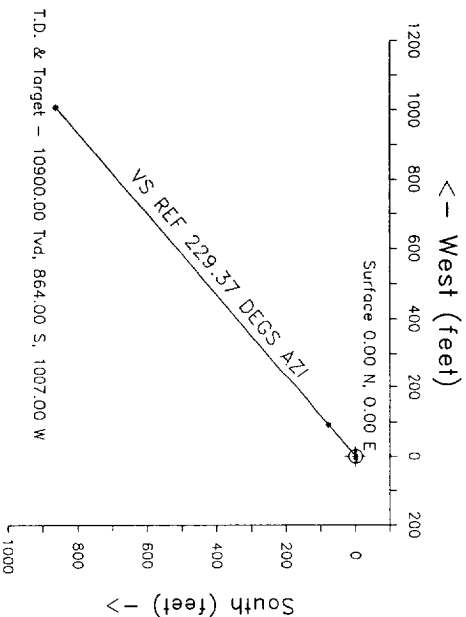
Slot : slot #1

Field : UNKNOWN

Location : Eddy County New Mexico

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Top	0.00	0.00	229.37	0.00	0.00	0.00	0.00	0.00
KOP	7000.00	0.00	229.37	7000.00	0.00	0.00	0.00	0.00
End of Build	7682.21	20.47	229.37	7667.79	-78.50	-91.49	120.55	3.00
T.D. & Target TD	11132.18	20.47	229.37	10900.00	-864.00	-1007.00	1326.86	0.00



INTEQ

Created By Kellym
Date plotted : 16-Dec-2002
Plot Reference is PD 2DU RC.
Coordinates are in feet, reference slot #1.
True Vertical Depths are reference rotary table.
ebf536
--- Baker Hughes INTEQ ---

ST. MARY ENERGY
EAST BURTON FLAT STATE 36-1S

slot #1
UNKNOWN
Eddy County New Mexico

P R O P O S A L L I S T I N G

by
Baker Hughes INTEQ

Your ref : P0 2DJ RC
Our ref : prop3538
License :

Date printed : 16-Dec-2002
Date created : 31-Oct-2002
Last revised : 16-Dec-2002

Field is centred on n32 30 0.000,w104 15 0
Structure is centred on n32 30 0.000,w104 15 0

Slot location is n32 30 0.000,w104 15 0.000
Slot Grid coordinates are N 545622.802, E 525691.731
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is True North

ST. MARY ENERGY
EAST BURTON FLAT STATE 36-1S, slot #1
UNKNOWN, Eddy County New Mexico

PROPOSAL LISTING Page 1
Your ref : P0 2DJ RC
Last revised : 16-Dec-2002

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
0.00	0.00	229.37	0.00	0.00 N	0.00 E	0.00
500.00	0.00	229.37	500.00	0.00 N	0.00 E	0.00
1000.00	0.00	229.37	1000.00	0.00 N	0.00 E	0.00
1500.00	0.00	229.37	1500.00	0.00 N	0.00 E	0.00
2000.00	0.00	229.37	2000.00	0.00 N	0.00 E	0.00
2500.00	0.00	229.37	2500.00	0.00 N	0.00 E	0.00
3000.00	0.00	229.37	3000.00	0.00 N	0.00 E	0.00
3500.00	0.00	229.37	3500.00	0.00 N	0.00 E	0.00
4000.00	0.00	229.37	4000.00	0.00 N	0.00 E	0.00
4500.00	0.00	229.37	4500.00	0.00 N	0.00 E	0.00
5000.00	0.00	229.37	5000.00	0.00 N	0.00 E	0.00
5500.00	0.00	229.37	5500.00	0.00 N	0.00 E	0.00
6000.00	0.00	229.37	6000.00	0.00 N	0.00 E	0.00
6500.00	0.00	229.37	6500.00	0.00 N	0.00 E	0.00
7000.00	0.00	229.37	7000.00	0.00 N	0.00 E	0.00
7100.00	3.00	229.37	7099.95	1.70 S	1.99 W	3.00
7200.00	6.00	229.37	7199.63	6.81 S	7.94 W	3.00
7300.00	9.00	229.37	7298.77	15.31 S	17.85 W	3.00
7400.00	12.00	229.37	7397.08	27.18 S	31.67 W	3.00
7500.00	15.00	229.37	7494.31	42.38 S	49.39 W	3.00
7600.00	18.00	229.37	7590.18	60.87 S	70.94 W	3.00
7682.21	20.47	229.37	7667.79	78.50 S	91.49 W	3.00
8000.00	20.47	229.37	7965.53	150.86 S	175.82 W	0.00
8500.00	20.47	229.37	8433.96	264.70 S	308.51 W	0.00
9000.00	20.47	229.37	8902.40	378.54 S	441.19 W	0.00
9500.00	20.47	229.37	9370.84	492.38 S	573.87 W	0.00
10000.00	20.47	229.37	9839.28	606.22 S	706.56 W	0.00
10500.00	20.47	229.37	10307.72	720.06 S	839.24 W	0.00
11000.00	20.47	229.37	10776.16	833.90 S	971.92 W	0.00
11132.18	20.47	229.37	10900.00	864.00 S	1007.00 W	0.00
						1326.86 TTD

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 1326.86 on azimuth 229.37 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 229.37 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

ST. MARY ENERGY
 EAST BURTON FLAT STATE 36-1S, slot #1
 UNKNOWN, Eddy County New Mexico

PROPOSAL LISTING Page 2
 Your ref : P0 2DJ RC
 Last revised : 16-Dec-2002

Comments in wellpath
 =====
 MD TVD Rectangular Coords. Comment

11132.18 10900.00 864.00 S 1007.00 W TD

Targets associated with this wellpath
 =====
 Target name Geographic Location T.V.D. Rectangular Coordinates Revised

TD 10900.00 864.00S 1007.00W 31-Oct-2002