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

DEC – 1 2008
OCD-ARTESIA

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

Form C-101
June 16, 2008
Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
ST. MARY LAND & EXPLORATION COMPANY 3300 NORTH "A" STREET BUILDING 7 SUITE 200 MIDLAND, TEXAS 79705	154903
	[3] API Number 30- 015- 36838

[5] Property Code	[6] Property Name	[7] Well No.
35718	GAIL "36" STATE	# 1

[9] Proposed Pool 1	[10] Proposed Pool 2
CROW FLATS-WOLFCAMP (97691)	

[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
D	36	16S	28E		660'	NORTH	100'	WEST	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
A	36	16S	28E		660'	NORTH	330'	EAST	Eddy

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	O	ROTARY	S	3578'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	MD-11,390'	WOLFCAMP		WHEN APPROVED

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17½"	13 3/8"	48#	320'	450 Sx.	Surface
12¼"	9 5/8"	40#	2150'	700 Sx.	Surface
8 3/4"	7"	26#	7040'	600 Sx.	~~2000'~~ FS 1600'
6 1/8"	4½"	11.6#	11,390'	No Cement	

[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.

SEE ATTACHED SHEET FOR DETAIL

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

Signature: Joe T. Janica

Printed name: Joe T. Janica

Title: Permit Eng.

E-mail Address: joejanica@valornet.com

Date: 11/26/08 Phone: 575-391-8503

OIL CONSERVATION DIVISION

Approved by: Jim W. Gum

Title: District II Supervisor

Approval Date: 12/10/08 Expiration Date: 12/10/10

Conditions of Approval Attached ☒ NOTE: TIE BACK OF PRODUCTION STRING

ENTERED 12/12/08

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 17½" hole to 320'. Run and set 320' of 13 3/8" 48# H-40 ST&C casing. Cement with 250 Sx. of Class "C" cement + 2% CaCl, + additives, mix at 12.5 PPG, Yield 1.94, tail in with 200 Sx. of Class "C" Permium Plus cement + 2% CaCl, mix at 14.8 PPG, Yield 1.34, circulate cement to surface.

3. Drill 12¼" hole to 2150'. Run and set 2150' of 9 5/8" 40# J-55 ST&C casing. Cement with 500 Sx. of Class "C" cement + 0.25 lb of flocele/Sx, + additives, mix at 11.5 PPG, Yield 2.76, tail in with 200 Sx. of Class "C" Premiun Plus cement + additives, mix at 14.8 PPG, Yield 1.32, circulate cement to surface.

4. Drill 8 3/4" hole to 7040' Run and set 7040' of 7" 26# P-110 LT&C casing. Cement with 400 Sx. of Class "H" cement + 0.3% dispersant + 0.7% fluid loss control, + ¼#/Sx defoamer, mix at 11.9 PPG, Yield 2.49, Tail in with 200 Sx. of Class "H" cement + 0.5% fluid loss control, + 0.4% dispersant, + ¼#/Sx defoamer, mix at 15.6 PPG, Yield 1.2 top of cement estimate 2000' from surface.

5. Drill 6 1/8" hole to 11,390'. Run and set 11,390' of 4½" 11.6# P-110 LT&C liner. Hang liner at 6640±', liner will not be cemented to enhance formation stimulation.

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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 October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-36838	97691	UL; CROW FLATS-~~WOLFCAMP~~ Abo

Property Code	Property Name	Well Number
37518	GAIL 36 STATE	1

OGRID No.	Operator Name	Elevation
154903	ST. MARY LAND & EXPLORATION COMPANY	3577.7'

Surface Location

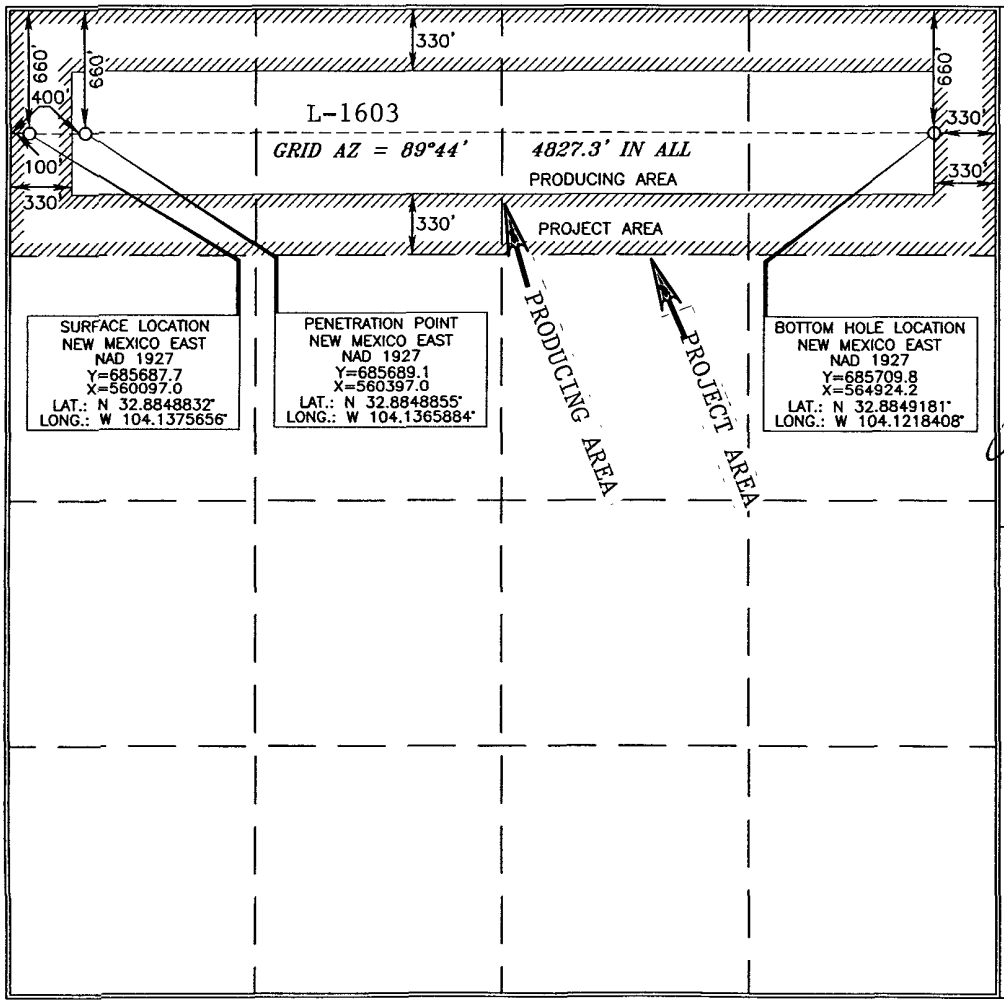
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	36	16 SOUTH	28 EAST, N.M.P.M.		660	NORTH	100	WEST	EDDY

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	36	16 SOUTH	28 EAST, N.M.P.M.		660	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Joe T. Janica
Signature *Date* 11/26/08

Joe T. Janica
Printed Name

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.

SEPTEMBER 8, 2008
Date of Survey

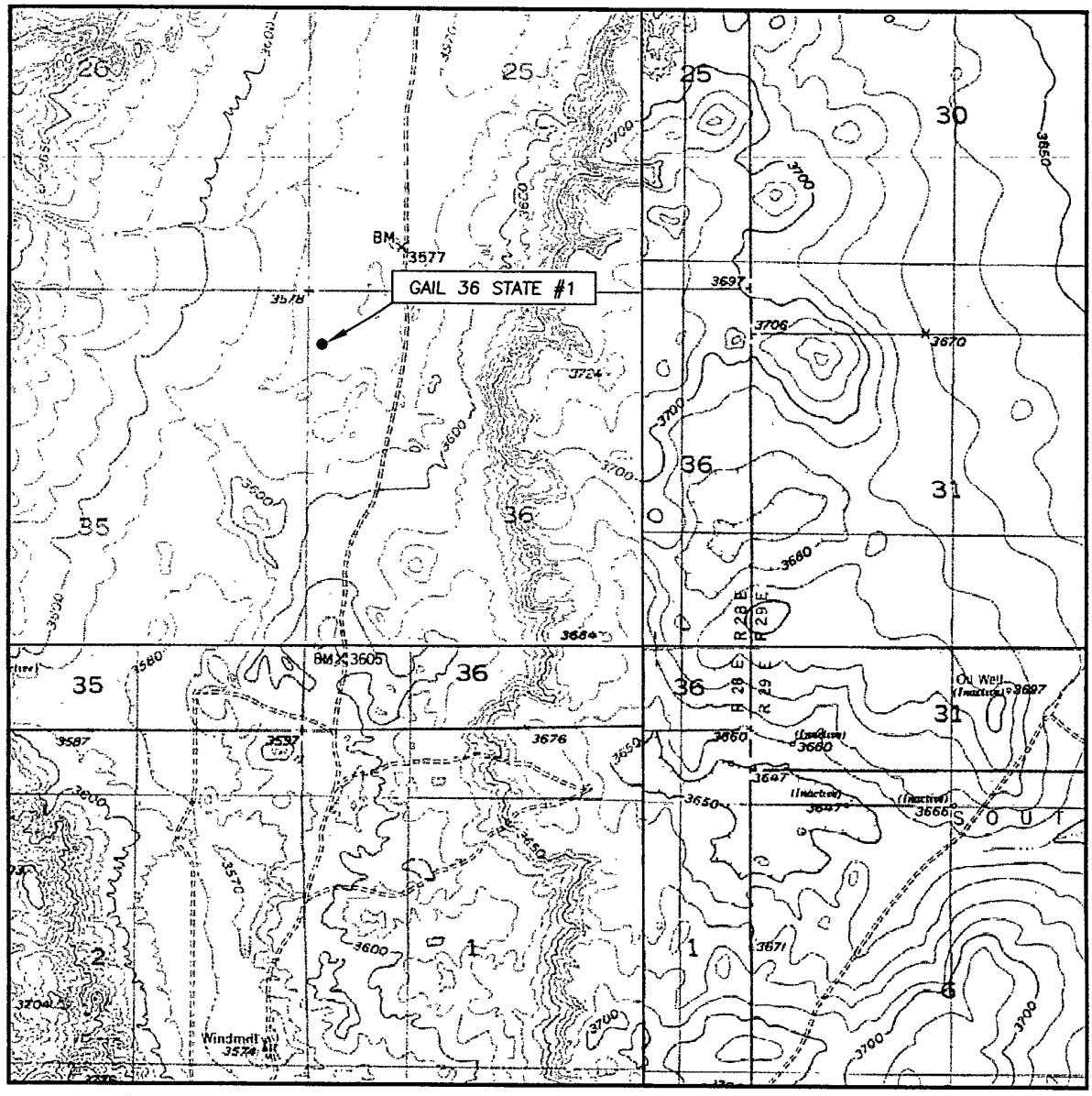
Signature and Seal of Professional Surveyor:

NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

Terry J. Asel 11/7/2008
Certificate Number 15079

WO# 080906WL-a (Rev. A)(KA)

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 36 TWP. 16-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 100' FWL

ELEVATION 3577.7'

OPERATOR ST. MARY LAND & EXPLORATION COMPANY

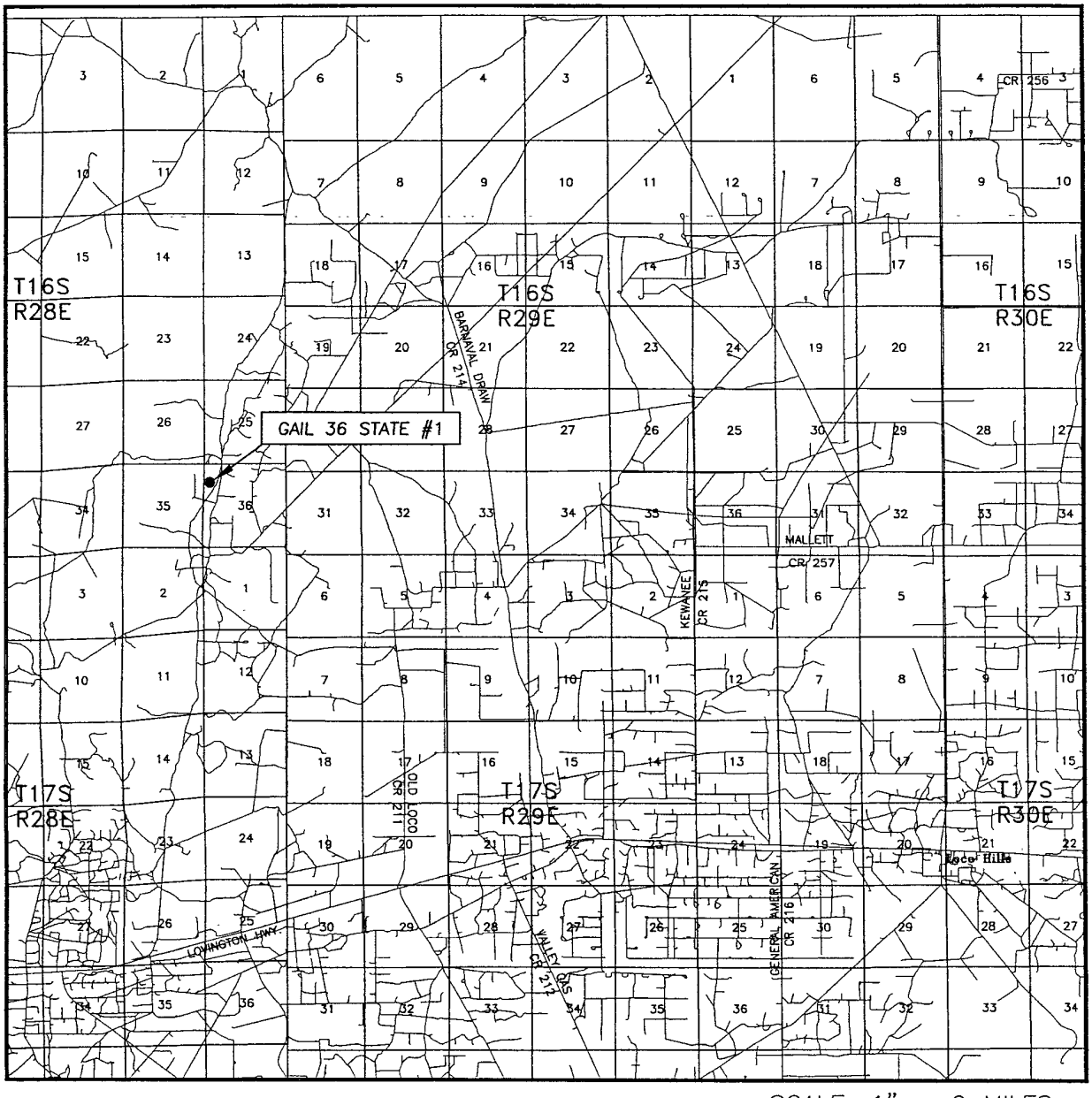
LEASE GAIL 36 STATE #1

U.S.G.S. TOPOGRAPHIC MAP
DIAMOND MOUND, N.M.

Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
HOBBS, NEW MEXICO - 575-393-9146

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 36 TWP. 16-S RGE. 28-E
SURVEY N.M.P.M.
COUNTY EDDY
DESCRIPTION 660' FNL & 100' FWL
ELEVATION 3577.7'
OPERATOR ST. MARY LAND & EXPLORATION COMPANY
LEASE GAIL 36 STATE #1

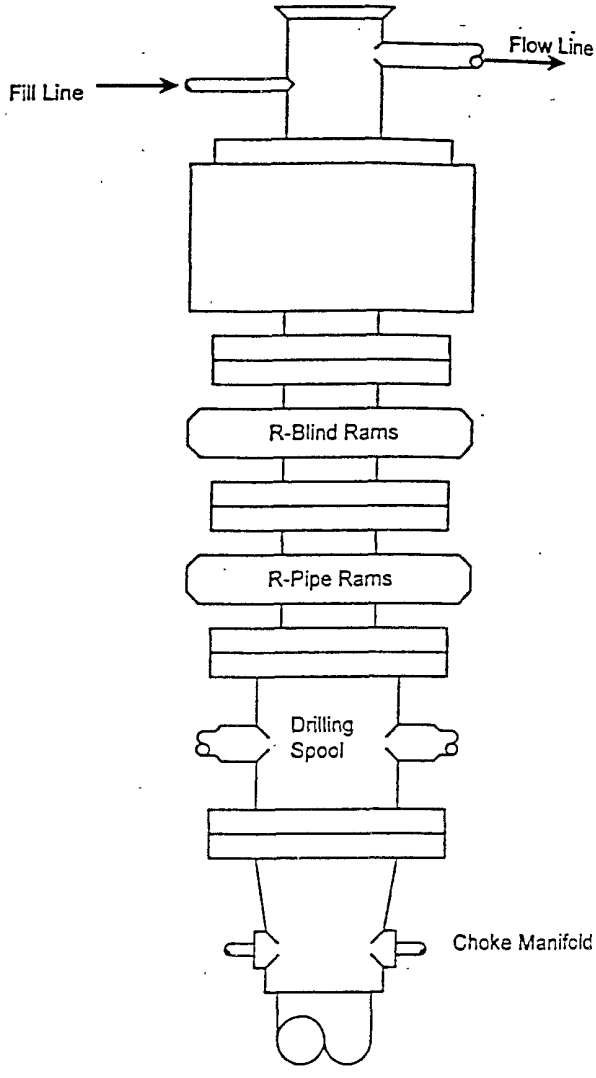
Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
HOBBS, NEW MEXICO - 575-393-9146

DIRECTIONS BEGINNING IN LOCO HILLS AT THE INTERSECTION OF US HWY. #82 AND EDDY COUNTY ROAD #217, GO WEST ON US HWY. #82 FOR 9.7 MILES TO COUNTY ROAD #209 (TURKEY TRACK ROAD), TURN RIGHT AND GO NORTH FOR 6.2 MILES, TURN LEFT AND GO WEST FOR 0.2 MILES TO LOCATION.

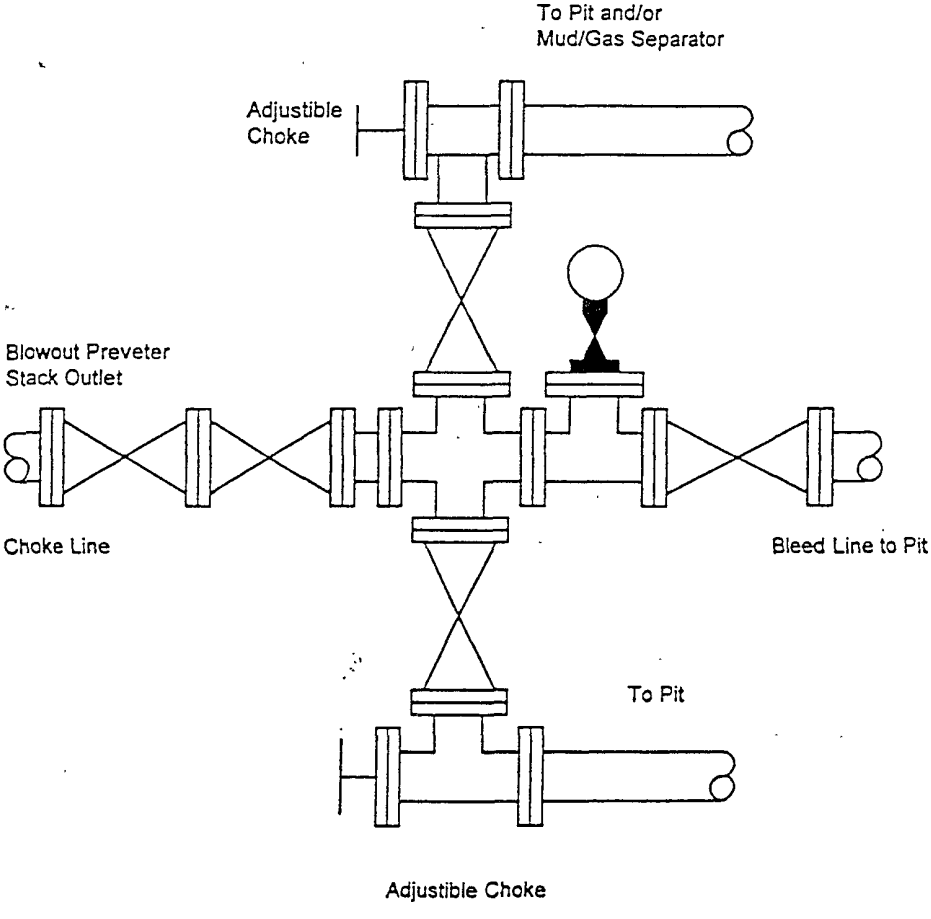
BLOWOUT PREVENTER SYSTEM

3000 PSI



Type 900 SERIES
3000 PSI WP

Choke Manifold Assembly for 5M WP System



DRILLING PLAN

PROSPECT/FIELD	WolfBo			**COUNTY/STATE**	Eddy County, New Mexico
OWNERS	St Mary Land & Exploration				
WELL NO.	~~Gail 36 State #1~~		**LEASE**		
LOCATION	**NWNW 36 -16S- 28E**	Surface Location:	~~660' FNL~~	~~100' FWL~~	
EST. T.D.	11,390 ' MD	6,838 ' TVD		**GROUND ELEV.**	**3,575' (est)** ungraded
	Total Lateral	4,350 ft			

PROGNOSIS: **Based on 3,598' KB(est)**

MARKER	DEPTH	DATUM
Yates	710	**2,888**
Seven Rivers	927	**2,671**
Queen	1,470	**2,128**
San Andres	2,142	**1,456**
Glorieta	3,563	**35**
Abo	5,609	**(2,011)**
Top Of Dolomite Porosity	6,771	**(3,173)**
Base Of Dolomite Porosity	6,856	**(3,258)**
Wolfcamp	6,941	**(3,343)**
Wolfcamp XX Marker	7,113	**(3,515)**
Pilot Hole TD	7,400	**(3,802)**

Dip Rate **1.7 ft/100 ft DOWN dip**

LOGS:

Type	Interval
Surface	None
Intermediate #2	Quad Combo to Int. Csg. GR/Neu to surf.
CBL	Optional

DEVIATION:

Surf.	2 deg. max., 1 deg / 100', survey @ TD
Prod.	3 deg. max , 1 deg / 100', survey every 500'

DST'S: None Planned

CORES: None Planned

SAMPLES:

Mudlogging:
One-Man:
Two-Man: Intermediate #1 casing point to TD.

BOP:

13 5/8" 3M psi Blind, Pipe & Annular

Max. Anticipated BHP:

Surface Formation:

MUD:

Interval	Type	WT	Vis	WL	Remarks
0' - **320'**	Native	8 6 - 8 9	28-34	NC	Closed Loop
320' - **2,150'**	Saturated Brine	10 0	29	NC	Closed Loop
2,150' - **11,390'**	Fresh Water	8.4	29	NC	Closed Loop

CASING:

	Size	Wt ppf	Hole	Depth	Cement	WOC	Remarks
Surface:	13 5/8	48	17 1/2	320'	250 sx	4 hrs	TOC @ Surface
Intermediate #1	9 5/8	40	12 1/4	2,150'	500 sx	4 hrs	TOC @ Surface
Intermediate #2	7	26	8 3/4	7,040'	400 sx	4 hrs	TOC @ 2000 ft
Production.	4 1/2	11 6	6 1/8	11,390'		NA	Un Cemented

PROBABLE PLUGS, IF REQ'D:

	Depth	Cement	WOC
Plug Back Cmt Plug for Horizontal Kick Off	6200' - 7400'	200 sx	24 hrs

OTHER:

	MD	TVD	FNL/FSL	FEL/FWL	S-T-R	AZI	Build Rate(per 100')	12.0
Surface:	N/A	N/A	660' FNL	100' FWL	**36-16S-28E**	**N/A**		
KOP:	6,290'	6,290'	660' FNL	100' FWL	36-16S-28E	**90.0**		
Intermediate #2 Csg Point:	7,040'	6,771'	**660' FNL**	**577' FWL**	36-16S-28E	**90.0**		
TD	11,390'	**6,838'**	**660' FNL**	**330' FEL**	36-16S-28E	**90.0**		

Comments:

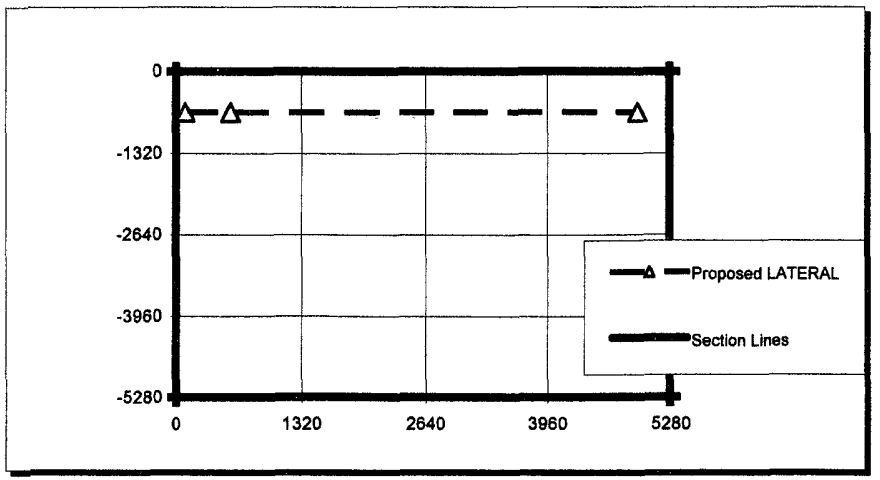
MWD Surveys will be taken every 30' while building curve and every 90' while drilling lateral

Prep By: B D Short **Date:** 11/13/2008 **Doc:**

Gail 36 State #1			TARGET DATA SHEET	6941.00		SURFACE	-660	100
NWNW 36 -16S- 28E			TARGET INCLINATION =	87.00		Casing Point	-660	577
11,390 ' MD	6,838' TVD		PROPOSED AZM.=	90.00		Way Point #1	-660	4926
TOTAL LATERAL:		4,350'	MWDSPACING	36.00		Projected TD	-660	4926
			BUILD RATE=	12.00				

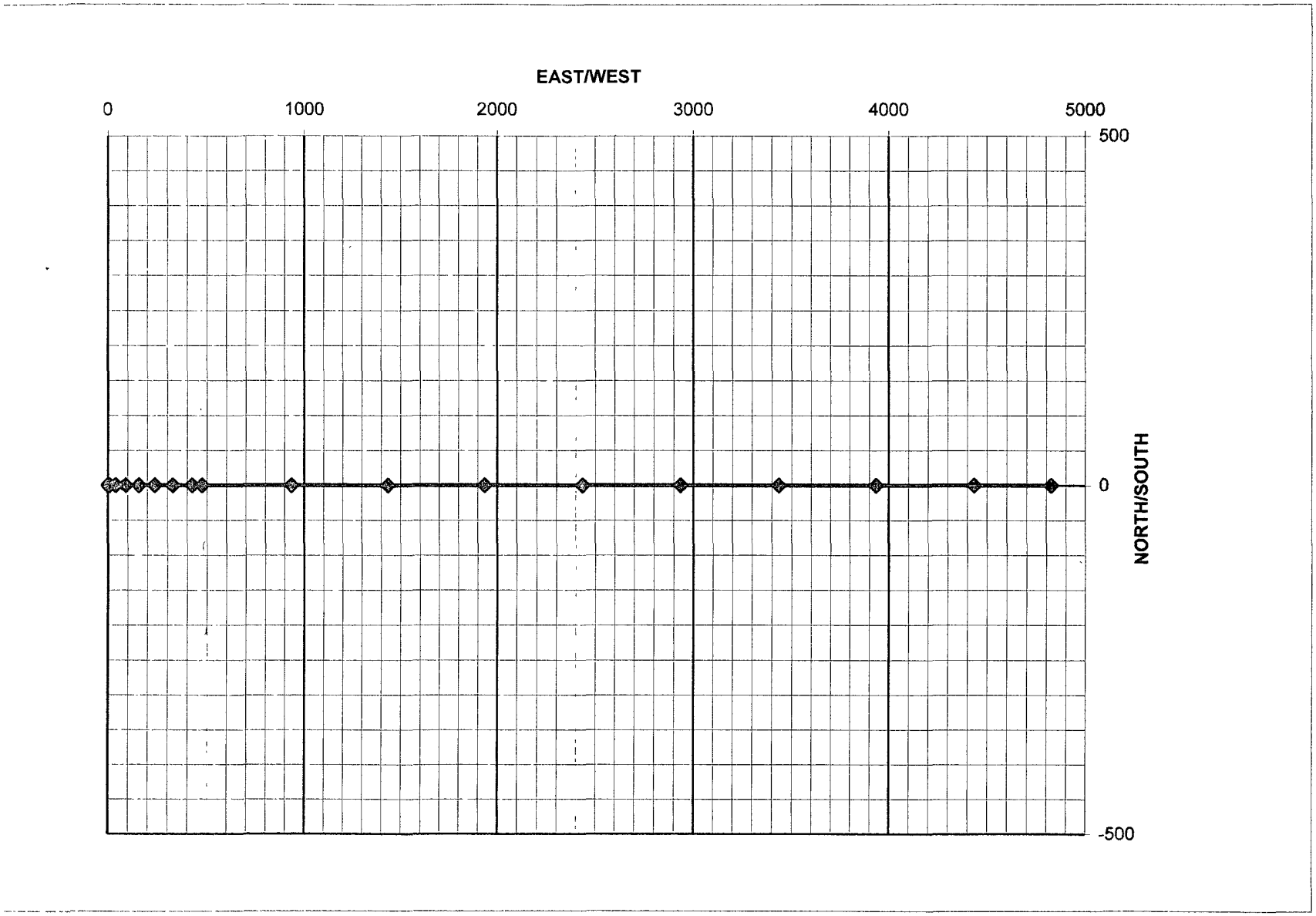
DEPTH	INC.	AZM	CL	T.V.D.	V.S.	N/S	E/W	N/S from Surface	E/W from Surface
500			500	500.00					
1000			500	1,000.00					
1500			500	1,500.00					
2000			500	2,000.00					
2500			500	2,500.00					
3000			500	3,000.00					
3500			500	3,500.00					
4000			500	4,000.00					
4500			500	4,500.00					
5000			500	5,000.00					
5500			500	5,500.00					
6000			500	6,000.00		-660.00	100.00		
6290		90.0	290	6,290.00		-660.00	100.00		
6390	12.0	90.0	100	6389.27	10.4	-660.00	110.40		10.40
6490	24.0	90.0	100	6484.20	41.2	-660.00	141.17		41.17
6590	36.0	90.0	100	6570.65	91.0	-660.00	190.97		90.97
6690	48.0	90.0	100	6644.83	157.6	-660.00	257.62		157.62
6790	60.0	90.0	100	6703.50	238.2	-660.00	338.22		238.22
6890	72.0	90.0	100	6744.10	329.2	-660.00	429.23		329.23
6990	84.0	90.0	100	6764.85	426.7	-660.00	526.68		426.68
7040	90.0	90.0	50	6767.46	476.6	-660.00	576.57		476.57
7500	89.0	90.0	460	6771.48	936.5	-660.00	1036.54		936.54
8000	89.0	90.0	500	6780.21	1436.5	-660.00	1536.46		1436.46
8500	89.0	90.0	500	6788.93	1936.4	-660.00	2036.39		1936.39
9000	89.0	90.0	500	6797.66	2436.3	-660.00	2536.31		2436.31
9500	89.0	90.0	500	6806.38	2936.2	-660.00	3036.23		2936.23
10000	89.0	90.0	500	6815.11	3436.2	-660.00	3536.16		3436.16
10500	89.0	90.0	500	6823.84	3936.1	-660.00	4036.08		3936.08
11000	89.0	90.0	500	6832.56	4436.0	-660.00	4536.01		4436.01
11390	89.0	90.0	390	6839.37	4825.9	-660.00	4925.95		4825.95

GAIL 36 STATE #1
NWNW SEC 36 TWN 16S - R28E
EDDY CO, NM



BDS
11/13/2008

Gail 36 State #1 Drlg Plan PLAT


EAST/WEST
0
1000
2000
3000
4000
5000
500
0
-500
NORTH/SOUTH

Gail 36 State #1
Sec 36 Twn 16S R 28E
Vertical Section vs TVD