

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

RECEIVED

AUG 16 2010

HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources

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 Merit Energy Company 13727 Noel Rd. Suite 500 Dallas, Texas 75240		² OGRID Number 14591
³ Property Code 17988 306843		⁴ Property Name Fanning B
⁵ Proposed Pool 1 Teague; Paddock-Blinebry (58300)		⁶ Well No 2
⁷ Surface Location		⁸ Proposed Pool 2 Imperial; Tubb-Drinkard (33600)

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	23S	37E		990	N	330	E	Lea

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

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code O	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3294'
¹⁶ Multiple N	¹⁷ Proposed Depth 6450'	¹⁸ Formation Paddock-Blinebry	¹⁹ Contractor UDI	²⁰ Spud Date 08/16/2010

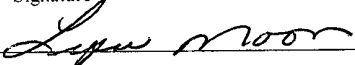

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	1100'	575	Surf.
7-7/8"	4-1/2"	11.6#	6450'	985	Surf.

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.

Drill a 6450' oil well to test the Paddock-Blinebry

Permit Expires 2 Years 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		OIL CONSERVATION DIVISION	
Signature 		Approved by 	
Printed name Lynne Moon		Title PETROLEUM ENGINEER	
Title Regulatory Manager		Approval Date AUG 20 2010	Expiration Date
E-mail Address. lynne.moon@meritenergy.com			
Date 08/10/10	Phone 972-628-1569	Conditions of Approval Attached <input type="checkbox"/>	

RECEIVED

State of New Mexico

DISTRICT I
1625 N. FRENCH DR., HOBBS NM 88240

AUG 16 2010

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210**HOBBSOCD**

OIL CONSERVATION DIVISION

Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-39829	Pool Code 58300	Pool Name Teague Paddock - BLINEDAY
Property Code 47986 306843	Property Name FANNING B	Well Number 2
OGRID No. 14591	Operator Name MERIT ENERGY COMPANY	Elevation 3294'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	23-S	37-E		990	NORTH	330	EAST	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		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

	GEODETTIC COORDINATES NAD 27 NME Y=462226.8 N X= 862706.8 E LAT =32 265327" N LONG =103 159935" W	
OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature <u>Lynne Moon</u> Date <u>08/08/10</u> Printed Name <u>LYNNE MOON</u>		
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. Date Surveyed <u>08/06/2010</u> Signature <u>Ronald J. Eidson</u> Seal of Professional Surveyor Certificate No. <u>GARY EIDSON 12641</u> <u>RONALD J. EIDSON 3239</u>		

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

AUG 16 2010

CONSERVATION DIVISION

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

HOBBSOCD

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 33600	Pool Name Imperial TUBB-DRINKARD
Property Code 7788 306843	Property Name FANNING B	Well Number 2
OGRID No. 14591	Operator Name MERIT ENERGY COMPANY	Elevation 3294'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	33	23-S	37-E		990	NORTH	330	EAST	LLA

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		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

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=462226.8 N X=862706.8 E</p> <p>LAT. = 32 265327" N LONG = 103 159935" W</p>	<p>096'</p> <p>330'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Lynn Moon</i> 08/13/10 Signature Date LYNNE MOON Printed Name</p>
		<p>SURVEYOR CERTIFICATION</p> <p>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</p>
		<p>RONALD J. EIDSON 29 NEW MEXICO Professional Surveyor 3239</p> <p>Date Surveyed Signature & Seal of Professional Surveyor RONALD J. EIDSON 08/06/2010</p>
		<p>Certificate No GARY EIDSON 12641 RONALD J. EIDSON 3239</p>

MERIT ENERGY COMPANY – FANNING B2 DRILL WELL
SEC33-T23S-R37E LEA COUNTY, NM
PROPOSED MUD PROGRAM

DRILLING FLUID

Interval Depth	ppg	VIS	PV	YP	pH	Filtrate	Solids (% Vol)	Chloride (mg/L)
0-1100'	8.6-9.2	32-36	8-12	6-12	10-10.5	NC	< 5	1k – 5k
1100-4800'	9.8-10.0	28-30	0-2	0-1	10-10.5	NC	< 5	165k
4800-6200'	10.0-10.1	28-30	1-4	0-2	9-10	10-20cc	<2	150-190k
6200-6450'	10.0-10.3	36-38	5-12	3-10	10	10-12cc	< 5	150-190k

0-1,100' (Drill a 12 ¼' hole and set 8 5/8' casing)

Spud in with Fresh Gel flocculated with Lime for sufficient viscosity to clean the hole. Use Paper as needed for any seepage. Mix Paper as needed for seepage. Add fibrous materials for any losses.

VISCOSITY	WEIGHT	WATER LOSS
32-36 sec/1000cc	8.6-9.2	no control

1,100'- 4,800' (drill a 7 7/8' hole with brine)

Drill out from under surface with brine water and circulate the reserve pit. Mix Lime to control the pH at 10-10.5. Mix Paper as need for seepage. Mix MF55 slowly at the flow line to reduce solids and keep the fluid clear at the suction. Mix BI Seal and Salt Gel to control any losses.

VISCOSITY	WEIGHT	WATER LOSS
28-30 sec/1000cc	9.8-10.0	no control

4,800'- 6,450' (Drill a 7 7/8' hole with a Salt Gel/Starch mud system- set 5 ½' casing)

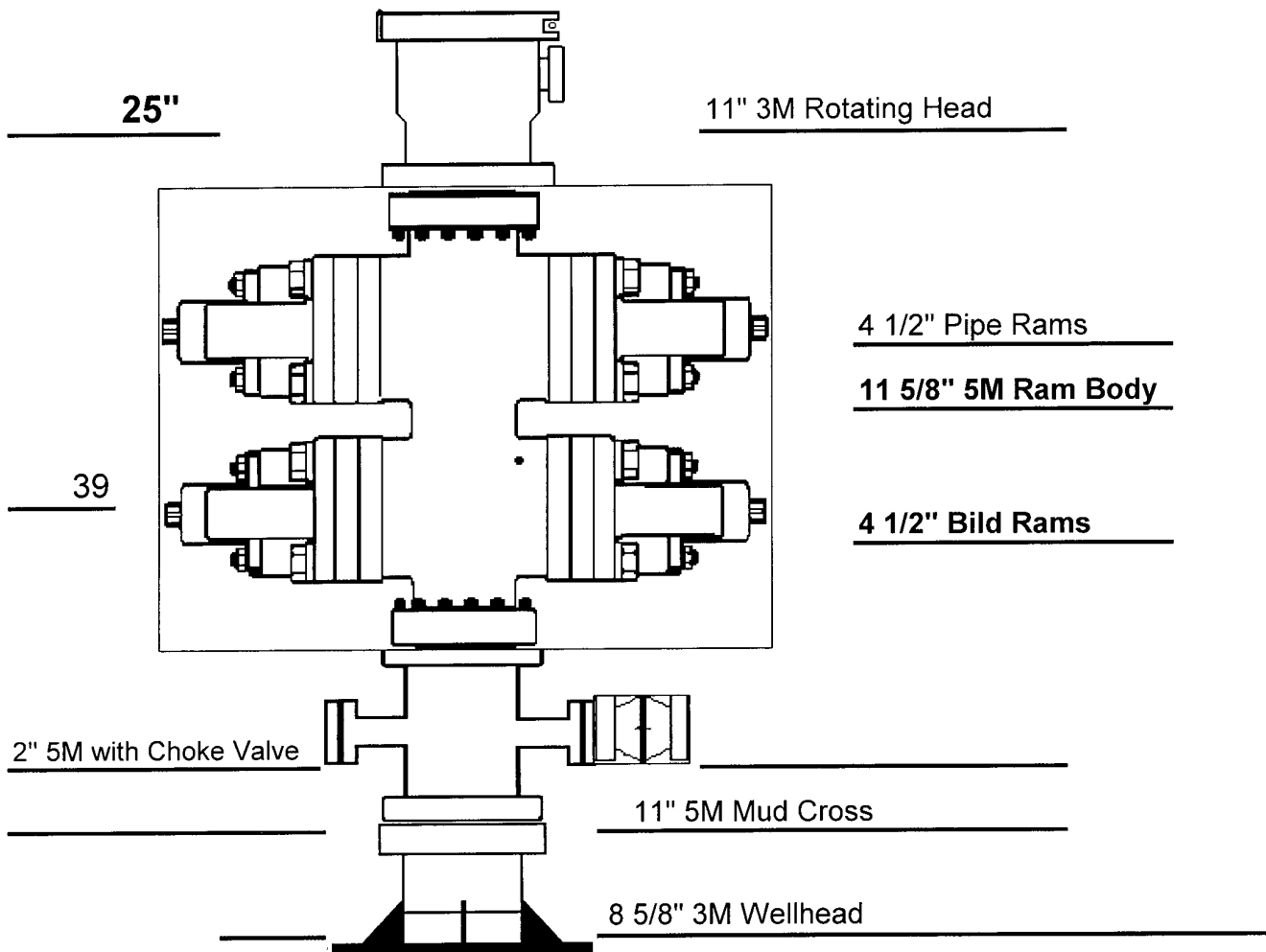
Go to the working pits at 4800' and Starch up for a 10-20cc filtrate. The Starch should help with better samples along with seepage control. Continue to add Lime to control the pH at 9.0-10.0 slowly through the chemical barrel. Jet as needed to control the mud weight and solids. Use brine water from the reserve pits for volume. Prior to total depth or about 6-8 hours before to raise the viscosity to 36-38 seconds with Salt Gel and reduce the filtrate to 10-12cc for logs. Mix daily additions of BL1150 for biocide control and use WC Defoamer for any airing problems. Use BI Seal to help control any losses.

VISCOSITY	WEIGHT	WATER LOSS
28-30 sec/1000cc	10.0-10.1	10-20cc
36-38 sec/1000cc	10.0-10.3	10-12cc – for logging

UDI RIG 201 Surface - BOP

Length

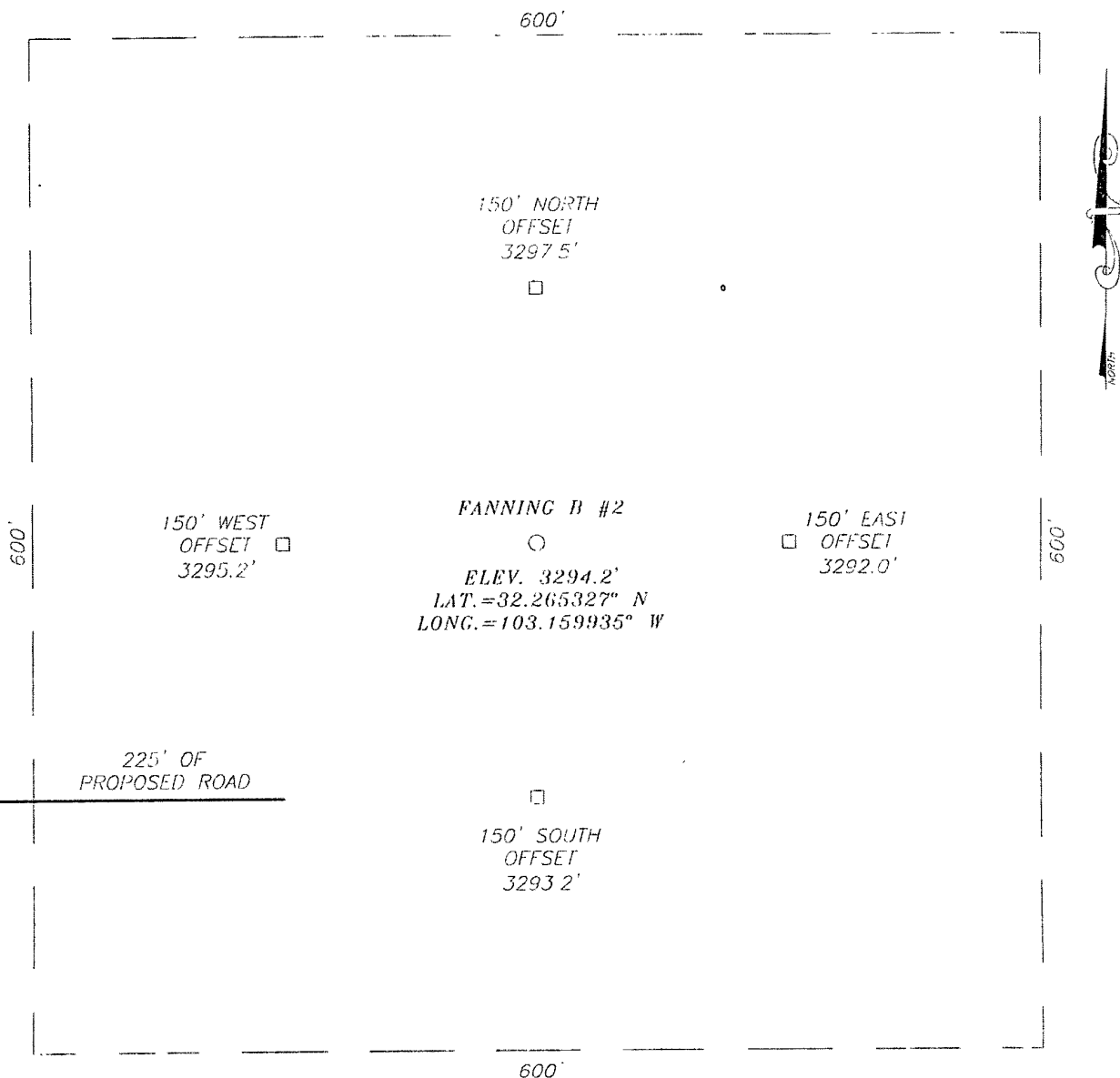
Description



There is a 4" valve out of the mud cross flowing to gas buster

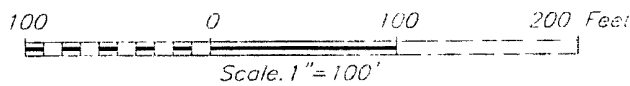
8/1/2010

SECTION 33, TOWNSHIP 23 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST HWY #18 AND CO.
 RD E-11 (TLAGUE SWITCH RD.), GO SOUTH ON ST
 HWY #18 APPROX 1.2 MILE. TURN LEFT AND GO
 EAST APPROX. 1.1 MILES. VEER LEFT AND GO
 NORTHEAST APPROX 0.1 MILE. TURN RIGHT AND GO
 EAST APPROX 0.1 MILES. TURN RIGHT AND GO
 SOUTHEAST APPROX 0.1 MILE TO A PROPOSED ROAD
 SURVEY FOLLOW ROAD SURVEY EAST 225 FEET TO
 THIS LOCATION



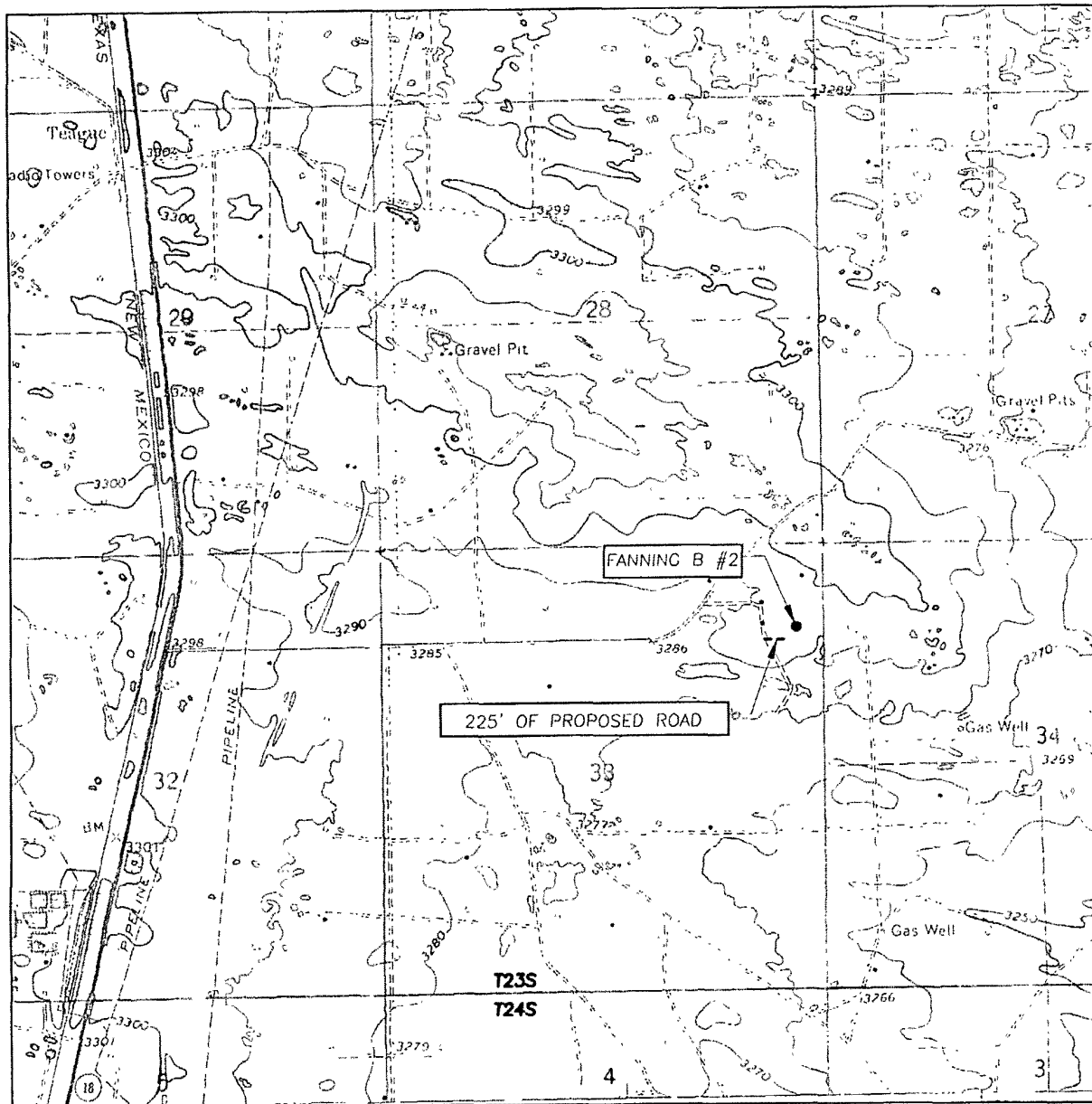
MERIT ENERGY COMPANY

FANNING B #2 WELL
 LOCATED 990 FEET FROM THE NORTH LINE
 AND 330 FEET FROM THE EAST LINE OF SECTION 33,
 TOWNSHIP 23 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

Survey Date: 7/29/10	Sheet 1 of 1 Sheets
W.O. Number: 10.111118	Dr By: LA
Date 8/4/10	10111118
	Scale 1"=100'

LOCATION VERIFICATION MAP



SCALE 1" = 2000'

CONTOUR INTERVAL
RATTLESNAKE CANYON N.M. -- 10'

SEC 33 TWP 23-S RGE 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

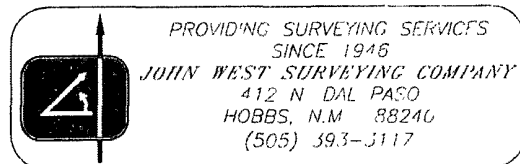
DESCRIPTION 990' FNL & 330' FEL

ELEVATION 3294'

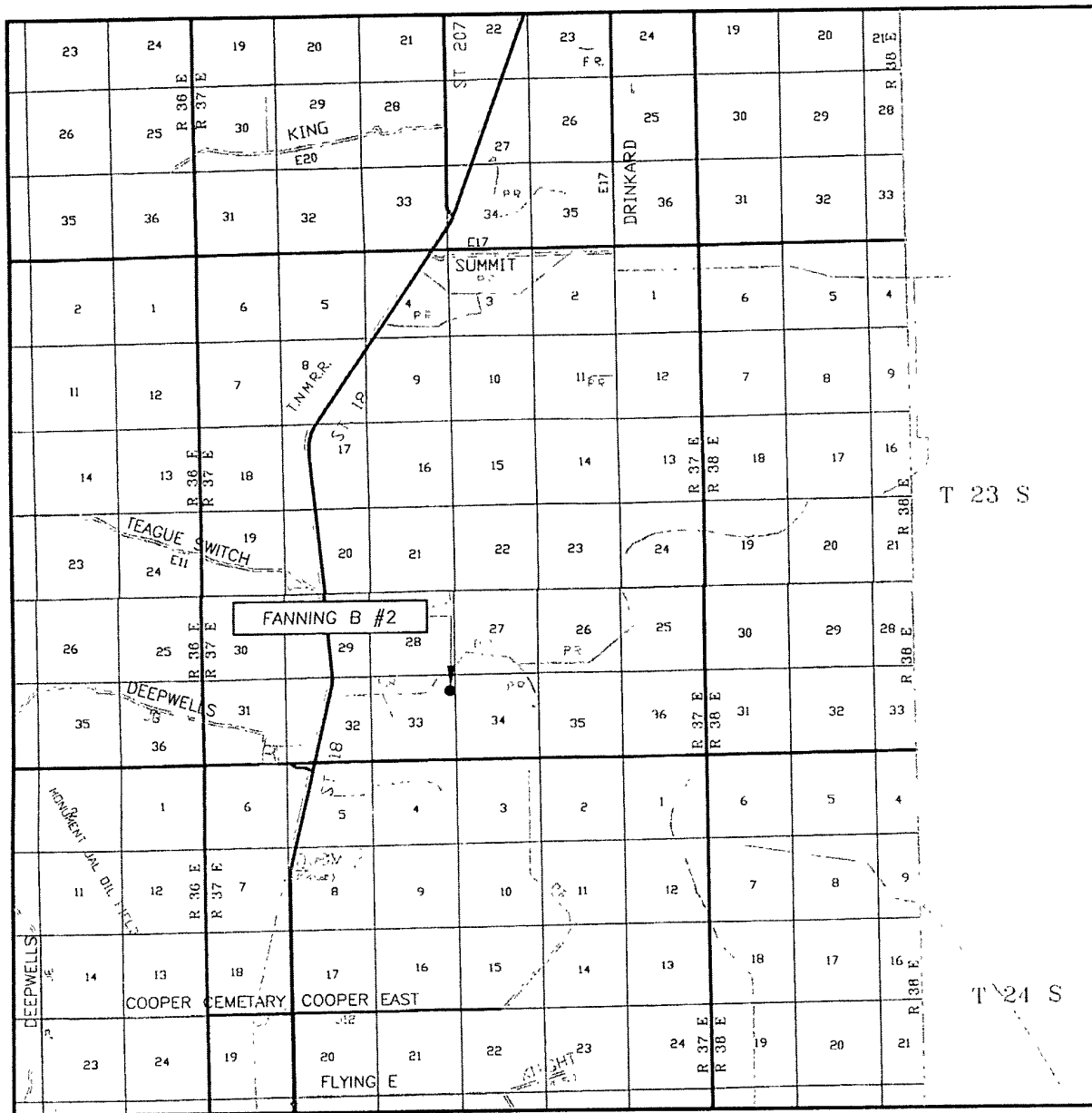
OPERATOR MERIT ENERGY COMPANY

LEASE FANNING B

U S G S. TOPOGRAPHIC MAP
RATTLESNAKE CANYON, N.M.



VICINITY MAP



SCALE 1" = 2 MILES

SEC 33 TWP. 23-S RGE. 37-E

SURVEY _____ N.M.P.M. _____

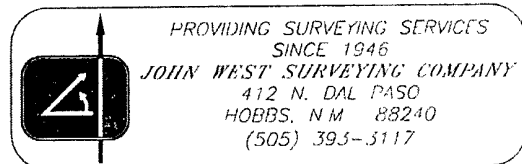
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 990' FNL & 330' FEL

ELEVATION 3294'

OPERATOR MERIT ENERGY COMPANY

LEASE FANNING B



OFFSET MERIT PRODUCING WELLS TO PROPOSED DRILL WELL LOCATIONS

Well	Section	Oil	Gas (mcf/d)	Prod GOR (scf/stb)	
Fanning A1	33	2.5	7	2800	(ignore - anomaly to section-low)
Fanning B1	33	8	35	4375	
Travis #5	21	5	35	7000	
GG Travis #2	21	2	17	8500	
GG Travis #3	21	3	10	3333	
GG Travis #4	21	4	52	13000	(ignore - anomaly to section-high)

avg= 4.1 stb/day

avg= 5800 scf/stb

Pasquill-Gifford Derived Equation

Estimated escape rate (Q)	23,780 scf/day
hyd sulfide concentration	0.325 (mole equivalent fraction of h2s in gas mixture)
X =	362.27 ft [100-ppm radius of exposure]
X =	165.54 ft [500-ppm radius of exposure]

h2s concentration taken from Southern Union Gas Services gas analysis

****No public areas exist within either radius of exposure calculated above****

Since no public areas exist in radius of exposure - these wells **DO NOT** represent a potentially hazardous volume of hydrogen sulfide
No H2S contingency plan will be required

****Drilling - API RP-68 and API RP-49 need to be followed (gas conc >100 ppm)**

Prepared by

John Petty, P.E.
Permian Operations

Updated: 8/9/2010
Printed: 8/10/2010