FORM IV-2 1000versel (12-81)



		State	County	Permit
API Well	No.	47	073	1530
Operator Well No.	's	Fox	_ 1_	
Date:	Se	pt.	3	19 82

Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE:		The second secon
		erground storage / Deep / Shallow X /)
LOCATION:	Elevation: 1074 Wat	ershed: BARKWELL CREEK
	District: WASHINGTON Cou	nty: Pleasants Quadrangle: RAVEN ROCK
		DESIGNATED ACENT Walter Allen
Address	P.O. Box 5306	Address P.O. Box 5306
	Vienna, WV 26105	Vienna, WV 26105
OIL & GAS	ER_W. G. Fox et al	COAL ORDERATION
	Box 233, Belmont	COAL OPERATOR
		Address
	W. Va. 26134 31 Ac.	
Acreage		COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNE	CR W. G. Fox	Name
Address	Box 233, Belmont,	Address
	W. Va. 26134	
Acteage	31 Ac.	Name
FIELD SALE (IF	MADE) TO:	Address
Address		
		COAL LESSEE WITH DECLARATION ON RECORD:
	ECTOR TO BE NOTIFIED	Name
	Robert Lowther	Address
	General Delivery	and the second s
_	Middlebourne, WV 26140	
The undersigned	Phone: 758-4764 well operator is entitled to operate for oil or easy	purposes at the above location under a deed/ leaseX
other contract	/dated_March 1, 19 82	to the undersigned well operator from W. G. Fox, et ux
		to the undersigned well operator from w. G. FOX, et ux
Recorded on	, or other contract has been recorded:)	The letter for the first of the second of th
Va., in Deed	1 172, in the office of the Cle	County, 17CSI
	at page	A permit is requested as follows: ETEROS 38 TOUM TIMES OFF
PROPOSED WOR	K: Drill X / Drill deeper / Re	edrill Fracture or stimulate /
	Plug off old formation/ Perfora	ite new formation
	Other physical change in well (specify)	
		IF OPERATIONS HAVE NOT COMMENCED BY
	-planned as shown on the work order on	
The above named co	oal operator, coal owner(s), and coal lessee are h	ereby notified that any objection they wish to make or are required to
,	3 must be filed with the Department of Mines	within fifteen (15) days after the receipt of this Application by the
the above named coul	It Application and the enclosed plat and reclamate	tion plan have been mailed by registered mail or delivered by hand to
	operator, coal owner(s), and coal lessee on or b ines at Charleston, West Virginia.	efore the day of the mailing or delivery of this Permit Application to
PLEASE SUBMIT CO GEOPHYSICAL LOG	S DIRECTLY SELVE	
ro:		Energex Oil & Gas Corporation
WEST VIRGINIA OII CONSERVATION	L AND GAS OCT 04 1982	Well Operatory 1
SION	The second secon	By Carrell & Borio
CHARLESTON, WV 25	OIL & GAS DIVISION	lis Agent
HONE: WHI 44	DEPT. OF MINE	

BLANKET BUND

(12-01)

Latter, C. CE. Cabld

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING C	ONTRAC	TOR (IF	KNOW	N)		Paul Dr	illing C	orp.		
						P.O. Bo				
						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	burg, WV	26101		
GEOLOGICAL	TARGI	ET FOR	MATION		MA	RCELLUS	SHALE			
GEOLOGICA	L IAROI	of	lated me		+000	(e)	t Rotars	, X / Cab	le tools	1
								24 feet.		
Approxi	mate wat	ier strata	aeptns:	ries	n,	- leet	, sait,	in the area? Ver	/ No	X /
				N/	A	Is coal	being mined	in the area? Yes		
CASING AND	TUBIN	G PROG	RAM							
CASING OR TUBING TYPE		Grade	IONS Weight per ft	New	Used		Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
Conductor	11"	ST-C	24		х	400	400	to surface	Kinds	
Fresh Water	85/8	ST-C	24	X		1000	1000	fill-up 150'		
Coal									Sizes	
Intermediate							N 1000 NO. 100 NO.	'c. 1		1
Production	43	ST-C	9½	X	Acceptant (4000	4000	fill-up above 2nd Cow	Depths set	
Tubing				-				Run		
Liners		-		-	-				Perforations:	
			-	-	-		-		Тор	Bottom
				_						
						\$ 73.63				
pres "Re prev Cod A be p	clamation viously pa e \$22-4-1 separate part of the	y Regulat Plan'', id on the 8a from t Form lv-2 work for	ion 12, of applicable same we he owned which a STED AT	or in e to the il, the r of an t be re permit	he reclared my water is sough	ereof the other mation required uired by Code er well or dwe for fracturing of the and is noted	ed by Code \$ \$ 22-4-12a, and Illing within 20 or stimulating a d as such on the	plation 11, (ii) a bond owed by Code 5 22-4- 22-4-12b and Regular (v) if applicable, the 60 feet of the propose well where fracturing the Form IV-2 filed in co	tion 23, (iv) un consent required ed well.	less 1 by
ALL PRO	VISIONS	BEING	N ACC	THE	TOCA.	TION IS HERE	BY			
1 DDD 01/	ED EOD	dril	ling		THIS P	ERMIT SHALL	EAPIRE			
APPROV	ATIONS	HAVE N	OT COM	AMEN	CED BY	675-83	1			
BY	Ties	27	5	i	de	MC	-			
									Same of the	
					•••••					
Th de	e followin	ng waiver under Co	must be	comple 4-20.	ted by	the coal operat	or and by any c	oal owner or coal lesse of fifteen (15) days of	e who has recor receipt thereof.	ded a
						WA	IVER			
proposed we	ell location	n. If a mir	ne map e	xists w	hich co	osed to be don		of the coal under this ion, the well location lon, provided, the well sons.		
										784 5 KIND OF THE STREET
Date:	production of residence of the second	Action with the se	, 1	9			Ву	Oil & GAS DI		



#1016

API NO.

WELL NO. FOX - 1

State of Mest Virginia

Bepartment of Mines Gil und Cas Bivision

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Energex Oil & Gas C	orp. n	ESIGNATED AG	Walter	H. Allen
Address P. O. Box 5306, Vienna				
Telephone (304) 295-8501			(304) 295-8	
LANDOWNER W. G. FOX		SOIL CONS.	DISTRICT le	PER OHIO
Revegetation to be carried out by	Energex		as Corporat	
This plan has been reviewed by	IPPED !	2410	con al	
and additions become a part of this p	lan:	9/9/82	S.D. AL	1 corrections
	2	Semeth 2	91/2	
		(SCD Agent		
ACCESS ROAD			LOCATION	
Structure Culvert (12" MIN)	(A)	Structure		
Spacing If Necessary		Material .		
Page Ref. Manual	130.00	Page Ref. Ma	mual	,λ
Structure Stone (CRUSHED)		and the second control of	September 1990	10
76.11	(B)	Structure_	3	//
		Material	- 6	
Page Ref. Manual	EIV)E	Page Ref. Ma	nual ///	
Structure		Structure_	- 1/1	
Spacing	T 04 1982	Material	9	
Page Ref. Manual OIL 8	A GAS DIVISION	Dago Bof Mar	1	
All structures should be inspected commercial timber is to be cut and s	regulantu	Page Ref. Mar	if wassamm	. AZZ
cut and removed from the site before	dirt work	begins.	small tumbe	r to be
	EVECETATION			
Treatment Area I			atment-Area	П
or correct to pH 6.5	e I	or correct	to pH	Tons/acr
Fertilizer 500 lbs/acre	F	ertilizer	w pr	- lbs/acre
(10-20-20 or equivalent)			-20-20 or equ	ivalent)
Mulch 2 Tons/acre	M	ulch_		Tons/acm
Seed* KY FESCUE 40 lbs/acre	S	eed*		lbs/acre
LADINE CLOVER 8 155/acre				· 1bs/acre
. lbs/acre		i .		lbs/acre
*Inoculate all legumes such as vetch, Inoculate with 3X recommended amount	trafail ma	d a1 au au a 23		
Inoculate with 3X recommended amount.	vi sjott und	. CLOURS WIT	the proper	Dacterium.
	PLAN PREPAR	ED RY	and K	16 -
NOTES: Please request landowners!		# 1	Par 5200	poure
needling for one growing season.	ADDI	RESS P. O.	Box 5306.	
Allacia departed sheets as		Vienna	, WV 2610	5
Total Commensa.	PRONE	NO. (304)	295-8501	

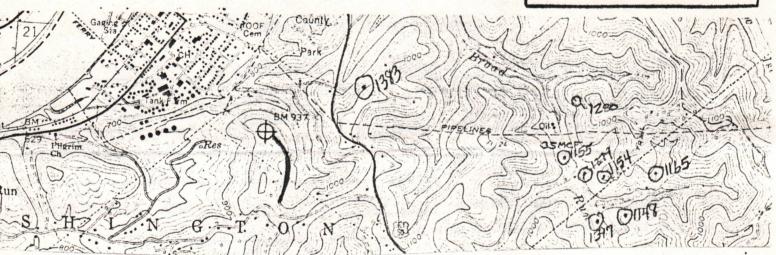
PHONE NO.

(304)

295-8501

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP.

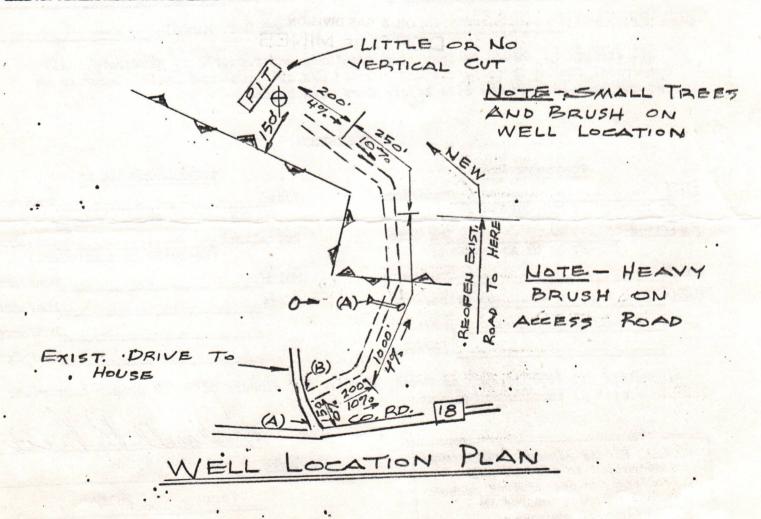
QUADRANGLE RAVEN ROCK 71/2



WELL SITE PLAN

Sketch to include well location, existing access road, roads to be constructed, well drilling pits and necessary structures numbered or lettered to correspond with the part of this plan. Include all natural drainage.

Diversion 4000000000000000000000000000000000000
Spring O->
Wet spot &
Building 1
Drain pipe O
Waterway &====



MICH 172 PAGE 332 OIL AND GAS LEASE ACREEMENT, made and entered into this by fund between... William G. Fox of Bex 233, Oslowent, WV 26/34 party of the first part, hereinafter called Lessor (whether one or more), and Engran Oil Cas Corpe, Box 5300, Vienna Word One Dollar, the receipt of which is hereby acknowledged, and the covenants and agreements hereinafter contained, does hereby grant unto the Lessee all of the oil and gas and all of the constituents of either in and under the land hereinafter described, together with the exclusive right to drill for, produce and market oil and gas and their constituents and of storing gas of any kind in any formation underlying the land, and also the right to enter thereon at all times for the purpose of drilling and operating for oil, gas and water, laying pipe lines, execting tanks, machinery, powers and structures, and to possess, use, and occupy so much of said premises as is necessary and convenient for said purposes and to convey the land, and also the right to enter thereon at all times for the purpose of drilling and operating for oil, gas and water, laying pipe lines, execting tanks, machinery, powers and structures, and to possess, use, and occupy so much of said premises as is necessary and convenient for said purposes and to convey the land being citate in warring to the purpose and to convey the land being citate in warring to the land. Townships the above named products therefrom or thereto by pipe lines or otherwise; said land being situate in Washington Townships

County of Pleasants, State of West Vinginia, and described as follows, to-wit: Bounded on the

NEATH by lands of St. Marys NEATH by lands of 57 EAST by lands of Beley SOUTH by lands of Clipford Cunningham Quaker State Wil Refinery WEST by lands of Containing Artie M. Fox thirty-one acres, more or less and being the same land conveyed to lessor by Artie M. Fox by deed dated August 3, 1977
recorded in said county records in Plagsants Book No. 148 Page A Page 15 2. It is agreed that this lease shall remain in force for a primary term of thereafter as operations for oil or gas are being conducted on the premises, or oil or gas is found in paying quantities thereon, or any formation underlying the herein leased land is used for storage of gas as provided under paragraph 7 hereof.

3. The Lessee shall deliver to the credit of the Lessor free of cost, in the pipe line to which he may connect his wells, the equal one-eighth (1/2) part of all oil produced and saved from the leased premises, and shall pay Lessor.

One—eighth (1/2) of all preceds

for all gas and easing head gas produced and sold from the premises, payable monthly; provided, Lessee shall pay Lessor a royalty at the rate of Fifty Dollars per year on each gas well while, through lack of market, gas therefrom is not sold or used off the premises, and while said royalty is so paid said well shall be held to be a paying well under paragraph 2 hereof. 4. The Lessee shall commence operations for a well on the premises on or before March 8th, 1982, unless Lessee pays thereafter a rental of 155.00 for each 57% months that operations are delayed from the time above mentioned. The consideration first recited herein, the down payment, shall cover not only the privilege granted to the date when first said rental is payable as aforesaid, but also the Lessee's option of extending that period as aforesaid, and any and all other rights conferred. The drilling of a non-productive well shall be accepted by the Lessor in lieu of delay rental for a period of one year after its completion, and following the exhaustion or abandonment of all wells the Lessee shall have the right for a period of one year to resume the payment of delay rental or commence operations for another well. Upon the resumption of payment of rentals the provisions hereof governing such payment and the effect thereof shall continue in force as though they had not been interrupted. 5. All moneys coming due hereunder shall be paid or tendered to William G. or Payling D. Fax direct, or by check payable to his (or her) order mailed to Box 233, Belowet, WW, 26/34, and no default shall be declared against the Lessee by the Lessor for failure of the Lessee to make any payment or perform any conditions provided for herein unless the Lessee shall refuse or neglect to pay or perform the same for ten days after having received written notice by registered mail from the Lessor of his intention to declare such default. ceived written notice by registered mail from the Lessor of his intention to declare such default.

6. Lessor reserves 200,000 cubic feet of gas per annum for domestic use, to be taken through his own appliances at any producing gas well, and agrees to pay Lessee a fair domestic rate for any gas used in excess thereof. Lessor further covenants and agrees that his taking and use of gas shall be wholly at his own risk, the Lessee not to be held liable for any accident or damage caused thereby, nor shall Lessee be liable for any shortage or failure in the supply of gas for said domestic use.

7. Lessee shall have the right to use any formation, underlying the lessed premises for the storage of gas and shall have all rights and rights-of-way necessary to store and produce such stored gas. As full payment for such storage rights, the Lessee shall pay to the Lessor a rotal at the rate of the per per year, while the premises are so used, and so long as the storage dayment by made, all provisions of this lesse shall remain in full effect.

8. Lessor futher grants to the lessee, his heirs and assigns, the right to unitize this lesse with other lesses to form a drilling unit or units according to the rules and regulations which may be adopted for the proper development and conservation of the field. In the event this lesse is so unitized, the Lessor agrees to accept, in her of the royally hereinbefore recited, such proportion of the royally above provided, as the accepted by this lesse bears to the total acreage countrising the paint.

9. If said Lessor owns a less interest in the above described land than the undivided for simple estate therein, then the royal-ties and rentals herein provided shall be paid the Lessor only in the proportion which his interest bears to the whole and undivided fee. 10. No well may be drilled nearer than 200 feet to the house or barn now on said premises without the written consent of Lessor. Lessee shall have and enjoy all rights and privileges necessary and convenient for the proper use and development of this lease, and shall have the right to use, free of cost, gas, oil and water produced on said land for its operations thereon, except water from wells of Lessor. Lessee shall also have the right at any time to remove all or any part of the machinery, fixtures or structures placed on said premises, including the right to draw and remove easing. Lessee shall pay for damages caused by its operations to growing crops on said lands, and, when requested by Lessor, shall bury its pipe lines below plow depth.

11. The interest or estate of either party hereto may be assigned, the privilege of assigning in whole or in part being expressly allowed. In event this lease shall be assigned as to any part or parts of the above described land and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them, such default shall not operate to defeat or affect this lease insofar as it covers a part or parts of said land upon which the said Lessee or any assignee thereof shall make due payment of said rental. No change of ownership in the land or in the rentals or royalties shall be binding on the Lessee until after notice to the Lessee and it has been furnished with a written transfer or assignment or a certified copy thereof.

12. At any time, Lessee, its successors or assigns, shall have the right to successors the last of the proportional parts.

tified copy thereof.

12. At any time, Lessee, its successors or assigns, shall have the right to surrender this lease or any part thereof for cancelation, after which all payments and liabilities hereunder thereafter shall cease and determine, and if the whole is surrendered, then this lease shall become absolutely null and void. This surrender may be made to the Lessor, or if more than one Lessor, then to any one of them, or to the heirs or assigns of any one of them by delivery of a duly executed surrender thereof in person or by mail addressed to the post office address of such person, or by recording a duly executed surrender thereof in the Recorder's office of the County in which the land is located.

13. Lessor hereby warrants and agrees to defend the title to the land herein described and agrees that the Lessee at its option may pay, discharge or redeem any taxes, mortgages, or other liens existing, levied, or assessed on or against the above described lands, and in event it exercises such option, it shall be subrogated to the rights of any holder or holders thereof and may reimbursed itself by applying any royalty or rentals accruing horeunder to the discharge of any such taxes, nortgages or other liens.

14. It is expressly agreed that if the Lessee shall commence drilling operations at any time while this lease is in force, it shall as production continues. If after the expiration of the terms of this lease production from the leased premises shall cease from any cause, this lease shall not terminate provided Lessee resumes operations within sixty days from such cessation, and this lease shall decaded in a given constitues.



IV-35 (Pev 8-81)



State of Mest Mirginia

Bepartment of Mines Gil und Gas Bivision

Date	December 28,	1982
Opera	ator's	
Well	No Fox 1	
Farm	William Fox	
API N	6. 47 - 073	- 1530

WELL OPERATOR'S REPORT

			Or			
DRILLING,	FRACTURING	AND/OR	STIMULATING,	OR	PHYSICAL	CHANGE

IOCATION: Elevation: 1074' Watershed	Barkwell (reek		
District: Washington County Plea	asants	Quadrangl	e Raven	Rock
COMPANY Energex Oil & Gas Corp.				
ADDRESS105 Alta St., Marietta, OH 45750	Casing	Used in	Left	Cement
DESIGNATED AGENT Darrell Boice	Tubing	Drilling		fill up
ADDRESS P.O. Box 5306, Vienna, WV 26105	Size	Dilling	Tu werr	Cu. ft.
SURFACE OWNER W. G. FOX	20-16			
ADDRESS Rt. 233, Belmont, WV 26134	Cond.			
MINERAL RIGHTS OWNERW. G. Fox et al.	13-10"	400	400	to surf.
ADDRESS Rt. 233, Belmont, WV 26134	9 5/8	1000	1000	Fill-up
OIL AND GAS INSPECTOR FOR THIS WORK RObert	8 5/8	1000	1000	ц50'
Lowther ADDRESS Middlebourne, WV 26140	7			
PERMIT ISSUED Oct. 4, 1982	5 1/2	2701	2703	Fill-up
DRILLING COMMENCED Oct. 10, 1982	4 1/2	3701	3701	and Cow R
DRILLING COMPLETED Oct. 16, 1982	3	1	ECE	VED
IF APPLICABLE: PLUGGING OF DRY HOLE ON	2			
CONTINUOUS PROGRESSION FROM DRILLING OR	Liners		JAN4-	1983
REMORKING. VERBAL PERMISSION OBTAINED ON NOT APPLICABLE	used		IL AND GA	DIVISION
GEOLOGICAL TARGET FORMATION Marcellus Shale			h 4000	
THE THE PARTY OF T	Rotary X			
Water strata depth: Fresh 370 feet;			. 10015	
Coal seam depths: None	Dare	being mine	ed in the	area? NO
		acary number		
OPEN FLOW DATA			. 2050 55	200
Producing formation Devonian Shale	-		And depth spirit and a series print the series	
Gas: Initial open flow 400 Mcf/d			***************************************	Bbl/c
Final open flow 250 Mcf/d				
Time of open flow between ini				
Static rock pressure 780 psig(surfa		ent) after	24 hou	rs shut i
(If applicable due to multiple completion				
Second producing formation_				
Gas: Initial open flow Mcf/d				
Final open flow Mcf/d	Oil: Fin	al open fl	.ow_	Bbl/c

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated 2950-60' (6 shots), 3000-21' (11 shots), 3130-41' (six shots), 3200-20' 11 (shots).

Fractured with 350 gallons of HCL acid and 1200 Mcf nitrogen.

WELL LOG

FORMATION COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Shale	Gray	0	175	
Sand	Gray	176	225	
Shale - Sand	Gray	226	250	
Shale	Gray	251	475	
Lime	White	476	650	
Shale	Gray	651	725	
Shale	Black	725	800	
Rock	Red	801	950	
Shale	Gray	950	1300	The second section and the second
Salt Sand	White	1301	1510	<i>r</i> 4
Shale	Gray	1511	1850	
Big Lime	Green	1851	1900	
Big Injun	Sand	1900	1912	
Shale	Gray	1913	1960	
Lime	Gray	1961	2250	
Shale	Brown	2251	2295	
Berea Sand	White	2296	2300	
Shale	Gray	2301	2500	
Gordon Stray	Gray	2501	2540	
Shale	Gray	2541	2650	
Gordon Sand	Gray	2651	2675	
Shale	Gray	2675	3701 T	
And the second second		Tables (and the second of the second o

(Attach separate sheets as necessary)

ENERGEX OIL & GAS CORPORATION

By: And M. Goodine SECRETARY

Date: SEC. 28, 1982

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



OCT 1 5 1982

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 073	<u>-15</u> 30				Oil or	Gas Well
Company Ener	ger oil + C	ras	CASING AND TUBING	USED IN DRILLING	LEFT IN	PACKERS
Address Viln	na wila	(Size			
Farm W. G.	FOX		16			Kind of Packer
Well No.	a de la composition de la composition La composition de la		13 14	222	3 63	
District Washing	and County A	Dagan)	A second	393	393	Size of
Drilling commenced	10-11-18	2	65%			Depth set
	Total depth	411	5 3/16			
			3			Perf. top
Date shot	Depth of shot_		2			Perf. bottom
Initial open flow	/10ths Water	r inInch	Liners Used			Perf. top
Open flow after tubing	/10ths Merc.	in Inch				Perf. bottom
Volume Rock pressure		**************************************	CASING CEME	RVICE COMPA	ANY Have	3 No. FT/0-/2-8 JAC INC FEETINCHES
resh water	feet	feet	FEET_	INCH	IES	FEETINCHES
alt water	feet	feet	FEET_			FEETINCHES
Orillers' Names	9.1 0	1 3 (0) 1	100	
emarks: Clanca	A Rollin	neal t	SKS CX	ass H	Cemer	
	- 1, - 0, - 0	9 70				

10-12-82

R.A. Lowthe

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS			
COMPANY				1,1 2,1 3,1 3,5 3,5	**********	e West garage and Company of the
FARM		DISTRICT	CALLY STATE OF THE	COUNTY	100	
Filling Material Used						
Liner Loc	eation	Amount	Packer	Location	1	_1.565777/
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	IG AND T	UBING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
					4 × = 1 × 5 = 1 = 1	T. T
						930000000000000000000000000000000000000
					- 1; T-1; T-1; T-1; T-1; T-1; T-1; T-1;	Company Style S
				To the second	april 1 may 1	
				-		
44.				A STATE OF THE STA		3: 75/00 (30)
		The second second second		24 th 6	* 2. 17 . 18 .	y. 17 . 18 . 18 . 18 . 18 . 18 . 18 . 18
4-2-5	50. 100					
	V 255 12 73	TANK CONTRACT	. 7 2 4 2 7 2 3 22 2 2 4 4 4 4 4 4	, , , , , , , , , , , , , , , , , , ,		
301 374	STATE OF ACTION	Y GENNESY "	The second of the second	and the second	even nitte knishnin	name of the
	***	, and the same	and the state of t	diam't di		and the state of t
				N		1 19 1 19 1
Drillers' Names						13 250 1
	Legisland Control of the Control of	SERVICE STATE OF THE SERVICE OF THE		The second secon	- September 1987	1.8 Year April 10 Committee of the Spring
Remarks:				and the second second second second	· ·	positionalli
DATE	I hereby certify I	visited the above	ve well on this date			

DISTRICT WELL INSPECTOR

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



OCT 1 8 1982

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. <u>D</u> 73-73 30		AC	Oil or	Gas Well
Company Energy oil & Cas	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address Velnna W.Var	Size			Code State and Andrew
Farm FOX	16		10 1 10 15 100 11 10 10 10 10 10 10 10 10 10 10 10	Kind of Packer
Well No.	13		A STATE OF THE STA	
District Washington County Plasan	55/8	1208	1204	Size of
Drilling commenced	6%		TO DE SOME CASTES THAT THE TANK	Depth set
Drilling completedTotal depth/20\$	5 3/16	:		
Date shotDepth of shot	2			Perf. top
Initial open flow/10ths Water inInch	Liners Used			Perf. top
Open flow after tubing/10ths Merc. inInch				Perf. bottom
VolumeCu. Ft.	CASING CEME	NTED 8 78	SIZE/2/	& No. FT/0-14-Date
lock pressurelbshrs.	NAME OF SER		3	
Dilbbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	FEETINCHES
resh waterfeetfeet				FEETINCHES
alt waterfeetfeet	FEET_			FEETINCHES
Deillord Monay	Administration of the second			in the state of
Cemented with 50 D	ha cla	10		
emarks:	W Ca	so AC	emel	1

10-14-82 DATE R.A. Lowther
DISTRICT WELL INSPECTOR

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

Permit No				- CAL	II No	
OMPANY			ADDRESS	and the second s		
ARMCOUNTY						
illing Material Used						1/
iner Lo	eation	Amount	Packer	Location	1	
PLUGS USED	AND DEPTH PLACED		BRIDGES	CASIN	IG AND T	UBING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
	17213	. b		The same		
			A. A		Response to the second	Company of the
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DISTRICT WELL INSPECTOR



State of West Virginia

Bepartment of Mines

Gil and Gas Bivision

Charleston 25305

OIL & GAS DIVISION

FINAL INSPECTION REPORTEPT. OF MINES
INSPECTORS COMPLIANCE REPORT
February 29, 1984
Corporation

COMPANY	Energex Oil & Gas Corporation	PERMIT NO	073-1530 (9-82)
	105 Alta Street	FARM & WELL	NO William Fox # 1
	Marietta, Ohio 45750-0905	DIST. & COUNT	Washington/Pleasant
RULE	DESCRIPTION		IN COMPLIANCE YES NO
23.06 25.04 25.03 16.01 15.03 15.02 15.01 15.04 15.05 23.02 25.01 23.04 23.05 23.07 16.01 16.02 7.05	Notification Prior to Starting Work Prepared before Drilling to Prevent Wa High-Pressure Drilling Required Permits at Wellsite Adequate Fresh Water Casing Adequate Coal Casing Adequate Production Casing Adequate Cement Strenght Cement Type Maintained Access Roads Necessary Equipment to Prevent Waste Reclaimed Drilling Pits No Surface or Underground Pollution Requirements for Production & Gatherin Well Records on Site Well Records Filed Identification Markings		
Your wel	NSPECTED THE ABOVE CAPTIONED WELL AND R 1 record was received and reclamation r pter 22, Article 4, Section 2, the abov for the life of the well.	DATE fundaments appre well will re	proved. In accordance main under bond -Oil & Gas Division 19, 1984

JAN 2 1983

FERC-121

				0	1 8 G45
1.0 API well number: (If not available, leave blank. 14 digits.)		47-	073-1530	CE:	T. OF NI.
2.0 Type of determination being sought: (Use the codes found on the front of this form.)		103 Section of No	GPA	Category Code	-
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	 	_	3220	feet	
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Name 105 Al Street Mariet	x Oil & Gas ta St. ta,	OH		None Seller Code
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Field Nan	Rock Quandr ne nts County,	angle	W State	-
(b) For OCS wells:	N/Area Nam			Block Number	
(c) Name and identification number of this well: (35 letters and digits maximum.)	Fox No	. 1			-
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	N/.	A			
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Not de	termined			Buyer Code
(b) Date of the contract:	N/A	A	Mo. Day	Yr.	
(c) Estimated annual production:	 		75	MMcf.	
		(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	 	<u>N/A</u> _	<u>N/A</u> _	<u>N/A</u> _	<u>N/A</u>
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)		2.710	234		29_4_4_
9.0 Person responsible for this application: Agency Use Only Date Received by Juris Agency Date Received by FERC	Name Signature	M. Goolrick	n. Gools	Secretary Title 4-373-6644 Phone Number	7

IV-35 Well Record ______ Drilling _____ Deepening _____

IV-48 Application for certification. Complete?

Other: Survey _____ Logs ____ Geological Charts __

Production Formation: Devonian Shale

Production Depth: 2950 · 3220

Final Open Flow: 230MCF

After Frac. R. P. 780# 24hrs.

Avg. Daily Gas from Annual Production:

Was Determination Objected to ______ By Whom? _____

Avg. Daily Gas from 90-day ending w/1-120 days _____

10-17. Is affidavit signed? Notarized?

Additional information _____ Does computer program confirm? _____

IV-36 Gas-Oil Test: Gas Only ____ Was Oil Produced? ___ Ratio

IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? _____ Affidavit Signed ____

Date commenced: 10 - 10 - 82 Date completed 10 - 16 - 82 Deepened ____

From Completion Report ____

10−17. Does lease inventory indicate enbanced recovery being done N 🛭

Does official well record with the Department confirm the submitted information?

Structure Map _____ 1: 4000 Map ____ Well Tabulations ____

Days off line:

IV-2 Well Permit ✓

Other Gas Test:

Line Pressure:

Oil Production:

IV-6 Well Plat

IV-40 90 day Production

Gas Analyses

IV-39 Annual Production _____ years

3 -

4.

8 -

10-17.

18-28.

(5)

(5)

(5)

(5)

(5)

(6)

(7)

(8)

(8)

13

PSIG from Daily R

Date December 28 182

DEPARTMENT OF MINES, OIL AND GAS DIVISION

Operator's Fox No. 1

 $\begin{array}{c} \text{API Well} \\ \text{No.} \quad \frac{47}{\text{State}} \quad - \quad \begin{array}{c} \textbf{073} \\ \hline \text{County} \end{array} \quad - \quad \begin{array}{c} \textbf{1530} \\ \hline \text{Permit} \end{array}$

STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. (If Applicable)

WELL OPERATOR Energex Oil & Gas Corp. Designated agent Darrell Boice	
ADDRESS 105 Alta St. ADDRESS P. O. Box 5306	
Marietta, OH 45750 Vienna, W 26105	
Gas Purchase Contract No. None and Date N/A	
Meter Chart Code N/A (Month, day and year)	
Name of First Purchaser Not determined	
(Street or P. O. Box)	
(City) (State) (Zip Code) FERC Seller Code None FERC Buyer Code	
TYPE OF DETERMINATION BEING SOUGHT:	
103	
(2) Determination that increased production is the result of enhanced recovery technology.	
(3) Determination of a seasonally affected well.	
Robert M. Goolrick Secretary Name (Print) / Title	
Signature M. Codland	
105 Alta St.	
Street or P. O. Box	
Marietta, OH 45750 City State (Zip Code)	
(614 373-6644	
Area Phone Number	
(Certificate of Proof of Service to Purchaser)	
A copy of this Application for Well classification, and other documents	
filed herewith, has been served upon the purchaser named above (if any) by first-	
class mail.	
(All of the character to be considered by the character to the character t	
(All of the above to be completed by the Operator/Applicant)	
(To be completed by Jurisdictional Agency. Executed copy to be returned to Operator/Applicant and purchaser, if known).	
The Department of Mines has received a request, for certification of the above describe well as meeting the requirements of Section under the Natural Gas Policy Act of 1978, (NGPA); for for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA); for for determination of a seasonally affected well under Section 108 of	
All interested parties are hereby notified that on the <u>day of</u> , 19, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard there will be a public hearing, if requested, or if objection is filed.	
This Application is assigned File No	
Initial review of information submitted indicates the well is, is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafte as the matter may be heard.	r
Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.	
WEST VIRGINIA DEPARTMENT OF MINES	
1.5.1. 0.1003	

JAN 31983

Date received by Jurisdictional Agency

Title

STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date	December 29	1982
Ope: Well	rator's FOX NO. 1	
API No.	Well 47 - 073 State County	1530

WELL CLASSIFICATION FORM NEW ONSHORE PRODUCTION WELL

	NGPA Section	on 103
		DESIGNATED AGENT Darrell Boice
•		ADDRESS_ P. O. Box 5306
		Vienna, WV 26105
WELL OPERATOR Energex Oil & Gas	Corp.	LOCATION: Elevation 1074'
ADDRESS 105 Alta St.		Watershed Barkwell Creek
Marietta, OH 45750		Dist Washingtoncounty Pleasants QuaRaven
GAS PURCHASER		Gas Purchase Quadravell
ADDRESS		Contract No. N/A
		Meter Chart Code N/A Date of Contract N/A
		Date of ContractN/A
Ţ		
* * * * * * *	* *	* * * * * * *
Date surface drilling was begun:	Octobe	er 10, 1982
batta dilling was begun:	000000	10, 1502
Indicate the bottom hole pressure of	the well an	nd explain how this was calculated
		i i
720 psi (24-hour test)		2
	RHP	= Pi+Pi (eGL/53.84 T-1)
	12411	11.11/6
	AFFIDAVI	
I, Robert M. Goolri	CK havir	mg been first sworn according to law state that rmination is sought was begun on or after February 14
1977; the well satisfies applicable st	ate or fede	rmination is sought was begun on or after February 14 eral well spacing requirements and the well is not
reservoir from which eas is or will be	produced	diffing began, which was applicable to the
was capable of producing gas in commer	cial cuenti	and which
is a new onshore production well and t	hat I am no	the well for which this determination is sough
application which is inconsistent with	this concl	lusion.
		(11 m / 11
		All M. Good we
STATE OF WEST VIRGINIA.		
COUNTY OF Wood TO WIT:		
I. <u>Pamela Hubbard</u>	. a Notary	Public in and for the state and county aforesaid,
do certify that RODERT M. GOOLTICK,	whose name	is signed to the writing above, bearing date
the 29thday of December , 19 8	2. has ackr	nowledged the same before me, in my county aforesaid
Given under my hand and of	ficial seal	1 this 29th day of December , 1982.
My term of office expires	on the 2nd	d day of December 1984.
, and a second compared		
NOTARIAL SEAL]		Handle Mulha
		/ NOTBTY/PWD#16

JAN 3 1983

FERC-121

	(HL & GAS DIV T
 API well number: (If not available, leave blank. 14 digits.) 	47-073-1530 DE	PT. OF MI
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	107 Devonian Sh Section of NGPA Category Code	- 1
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	3220feet	
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Energex Oil & Gas Corp. Name 105 Alta St. Marietta, OH 45750 City State Zip Code	None Seller Code
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Raven Rock Quandrangle Field Name Pleasants County, W County State	-
(b) For OCS wells:	N/A Area Name Block Number Date of Lease: Mo. Day Yr. OCS Lease Number	
(c) Name and identification number of this well: (35 letters and digits maximum.)	Fox No. 1	-
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	N/A	-
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Not determined Name	Buyer Code
(b) Date of the contract:	N/A Mo. Day Yr.	
(c) Estimated annual production:	75	
	(a) Base Price (b) Tax (c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	N/A N/A N/A N/A	N/A
 8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.) 	5.420467	58_8_7_
9.0 Person responsible for this application: Agency Use Only Date Received by Juris Agency Date Received by FERC	Robert M. Goolrick Name Title December 28, 1982 Date Application is Completed Robert M. Goolrick Secreta Title Title Phone Number	ry

			A	
ART	1	CI	PA	NTS:

WELL OPERATOR:	Energex	0:14	Gas	Corp.
THE CHACE		+ 1-+	- 1 1 -	~ 0

FIRST PURCHASER: Not determined.

OTHER:

W. Va. Department of Mines, Oil & Gas Division WELL DETERMINATION FILE NUMBER

930103-107-073: 1530

Use Above File Number on all Communications
Relating to Determination of this Well



QUALIFIED

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

	<u> </u>
1.	FERC -121 / Items not completed - Line No. All 124 7.0 8.0 E
2.	IV-1 Agent Darrell Boice
3.	IV-2 Well Permit ✓
4.	IV-6 Well Plat _/
5.	IV-35 Well Record / Drilling / Deepening
6.	IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio
7.	IV-39 Annual Production years
8.	IV-40 90 day Production Days off line:
9.	IV-48 Application for certification. Complete?
10-17.	IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
18-28.	Other: Survey Logs Geological Charts
	Structure Map 1: 4000 Map Well Tabulations
(5)	Date commenced: 10 - 10 - 82 Date completed 10 - 16 - 82 Deepened
(5)	Production Depth: 2950 • 3220
(5)	Production Formation:
	Production Formation: Devonion Shale
	Final Open Flow: 230MCF
(5)	
(5)	Final Open Flow: 230MCF
(5)(5)(6)	After Frac. R. P. 250 mc F
(5)(5)(6)(7)	After Frac. R. P. 780 to 24hr. Other Gas Test: Avg. Daily Gas from Annual Production:
(5)(5)(6)(7)(8)	After Frac. R. P. 780 # 24hrs. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days
 (5) (6) (7) (8) 	After Frac. R. P. 780 24hrs. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days Line Pressure: PSIG from Daily
 (5) (5) (6) (7) (8) (5) 	After Frac. R. P. 760 Apple. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days Line Pressure: PSIG from Daily Oil Froduction: From Completion Report
(5) (6) (7) (8) (8) (5)	After Frac. R. P. 780 24hrs. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days Line Pressure: PSIG from Daily
(5) (6) (7) (8) (8) (5) :0-17.	After Frac. R. P. 760 24hr. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days Line Pressure: Oil Froduction: From Completion Report Does lease inventory indicate enhanced recovery being done Is affidavit signed? Notarized?
(5) (6) (7) (8) (8) (5) :0-17. :pes of	After Frac. R. P. 760 24hrs. Other Gas Test: Avg. Daily Gas from Annual Production: Avg. Daily Gas from 90-day ending w/1-120 days Line Pressure: Oil Froduction: From Completion Report Does lease inventory indicate enhanced recovery being done

DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date December 28 . 182 Operator's Fox No. 1 API Well No. 47 State - O73 County -1530

STATE APPLICATION FOR WELL CLASSIFICATION

	County Permi
	Previous File No.
WELL OPERATOR Energex Oil & Gas Corp.	(If Applicable
ADDRESS 105 Alta St.	DESIGNATED AGENT Darrell Boice
Marietta, OH 45750	ADDRESS P. O. Box 5306
Gas Purchase Contract No. None	Vienna, WV 26105
Meter Chart Code N/A	Date N/A
Name of First Purchaser Not determined	(Month, day and year)
(Street or)	
(City)	ital
None None	(Zip Code)
TYPE OF DETERMINATION BEING SOUGHT	FERC Buyer Code
(1) Initial determination (8)	107
(2) Determination that increased production is recovery technology.	Section of MGPA the result of enhanced the result of enhanced
(3) Determination of a seasonally affected well	the result of enhanced
ที่	Robert M. Goolrick Secretary
ह	ignature Salay / Gracing
	05 Alta St.
St	treet or P. O. Box
M CT	darietta, OH 45750
	State (Zip Code) 614 373-6644
Ar	ea Phone Want
(Certificate of Proof of Service to Purchaser)	
	alamis:
A copy of this Application for Well filed herewith, has been served upon the purchaser)	irchaser named and other documents
filed herewith, has been served upon the puclass mail.	- stabled above (if any) by first-
(All of the above to be	
(All of the above to be completed by the Operator/Appl	icant)
(To be completed by Jurisdictional Agency. Executed co	
The D	opy to be returned to Operator/Applicant and
The Department of Mines has received a re (NGPA): [] for for determination that increased product under Section 108 of (NGPA): [] or for determination of All interested parties are hereby notified the heard, thereby the product the behard, thereby the section in Charleston in Charleston in Charleston in the section in Charleston in Charleston in the section in the sec	equest. for certification of the above described
under Section 108 of (NGPA): or for dutamin	under the Natural Gas Policy Act of 1978
All interested parties are hereby notified the office of the Oil and Gas Division in Charleston, We be heard there will be a public hearing, if requested, of This Application is assigned by	f a seasonally affected well under Section 100
be heard there will be a public beard in Charleston, We	at on the day of
be heard there will be a public hearing, if requested, of This Application is assigned by the state of the control of the cont	or if objection is filed.
assimed File No.	
Initial review of information submitted indica entitled to certification as claimed under the Natural G and any additional evidence will be made at the Natural G	ites the well is. is not
as the matter may be heard.	ointed for a public bearing of this evidence
Unless objections are timely filed or a request days, a hearing will not be held except on ex parte motion to determination.	t for a hearing is made within fifteen (15)
	and the matter will

WEST VIRGINIA DEPARTMENT OF MINES

JAN 31983

Date received by Jurisdictional Agency

Title 18

Dece Dece	mber	29		1982
			-	
Vell No	Fox	No.	1	
÷21				

1530

HIGH COST GAS WELL - DEVONIAN SHALE

	GAS WELL - DEVONTAN SHALE		
::c	GPA Section 197		
	Darrell Boice		
	ADDRESS P. O. Boy Face	2	
WELL OPERATOR Energex Oil & Gas Corp.	17.		
ADDRESS 105 Alta St.	LOCATION Elevation 1074		
Marietta, OH 45750	Watershed Barkwell Creek		
CAS PURCHASER Not determined	DisWashingtonounce: Pleasants	_	
ADDRESS	Contract No. N/A	Creek	
Date surface	Meter Chart Code N/A Date of Contract N/A		
Indicate of Illing began: October	10, 1982	•	
the bottom hole pressure of the wa	all and		
Indicate the bottom hole pressure of the we	and explain how this was calculated		
720 psi (24-hour test)			
the percentage of footage of the producing interval where less than 0.7 if a Gamma Ray log described subparagraph port described in subparagraph (3)(ii)(B); I have demonstrated any information not described in the application which high cost natural gas well.	been first sworm according to law, state that. I have of the first sworm according to law, state that. I have of the first sworm according to law, state that. I have of the first sworm according to law, state that the percentage of potentially disqualify the gross Devomian age interval; and I have no known according to the first the first sworm according to the first the first sworm according to the first the first sworm according to law.	calculated index of index of ing non- owledge of fies as a	
STATE OF WEST VIRGINIA. COUNTY OF Wood . TO WIT			
1. Pamela Hubbard	Press B. L.		
do certify that Gene Huck	me is signed to the writing	a Commune to	
the 29thday of .December . 1982 . has	me is signed to the writing above, bearing do acknowledged the same before me, in my count	ernresata.	
	same nefore me. in me	ru	
My term of office expires on the 2nd	day of December . 1984		
[NOTARIAL SEAL;	Notary Public Hos	7	

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: Energex Oil & Gas Corp.	Agent: Sharon A. Barker			
Type Determination being sought - 107	(Devonian Shale)			
API Well No.: 47-073-1530	Well Name: Fox #1			
West Virginia Office of Oil and Gas References: SJA File No.	County: Pleasants Co.			
Vol Page Line I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.				
II. Gamma Ray elevation indices:				
A. Shale Base Line (API Units)				

- Gamma Ray Log Value at 0.7 x Value at Base Line

GR Value at Base Line = 110

2.

Remarks:

GR Value = 110 * API Units
Calculation: 0.7 (GR Value at Base Line)
0.7 (110 *) = 77 API Units

* API Units

Intervals with GR index less than 0.7 x (Value at Base Line): III.

Interval Thickness		Feet of less than*	
From**	To***	of Interval Feet	0.7 (Shale Base Line) Feet
2302' 2600' 3100'	2600' 3100' 3701'	298 ' 500 ' 601 '	5' 5' 0

Total Devonial Interval 1399 Total Less Then 0.7 (Shale Base) 10 .

Less Than 0.7 (Shale Base Line) = _.007 x 100 =

*Marked on log included with analysis.

**Top of Devonian Section Recorded on First Interval in this Column.

**Lesser of TD or Section of Devonian Section Recorded as last Interval

