



(If "Gas," Production X / Underground Storage Deep / Shallow X /)  CCATION: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CMPANY Kaiser Exploration and Mining Company  CMPANY Kaiser Exploration and Mining Company  CMPANY Kaiser Exploration and Mining Company  COMPANY Kaiser Exploration and Mining Company  Casing Used in Left fill up  Tubing Drilling in Well Cu. ft.  Size 20-16  Cord.  Size 20-16  Cord.  13-10* 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  Fill LING COMMENCED April 30, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  FAPPLICABLE: PLUGGING OF DRY HOLE CN  CONTINUOUS PROGRESSION FROM DRILLING OR  Liners	STUEST	1	• ,		•
Department of Hest Sirginia Well No. KEM 150  Pagariment of Himse Farm Carlos Epling  OIL & GAS DIVISION OF MINNE OF M					
Department of Hest Sirginis Well No. KEM 150  Begaring of Hest Sirginis Well No. KEM 150  Begaring of Hiss Hissis Well No. 47 - 035 - 165  OIL & GAS DIVISION OF MINES OF		7) <b>- ]</b>	<u>.</u>	_	
DEPT. OF MINES  OIL & GAS DIVISION  OIL & GAS DIVISION  DEPT. OF MINES  WELL OPERATOR'S REPORT  OF  DRILLIN: FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE  TI. TYPE: Oil			GOLDENS A		n de la grant de la companya del companya del companya de la compa
DEFT. OF MINE Stand Of Stand O	1982 State of West	: Birgin	Well No	KEM 1	50
OIL & GAS DIVISION DEPT. OF MINES  WELL OPERATOR'S REPORT OF  DRILLIN: FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE  ELL TYPE: Oil		6880	Farm	Carlos Ep	ling
DRILLIN: FRACTURING AND/OR STIMILATING, OR PHYSICAL CHANGE  ELL TYPE: Oil	OIL & GAS DIVISION Gil und Gas	2 Division	API No.	47 - 03	<u> </u>
DRILLIN: FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE  LI TYFE: Oil	DEPT OF MINES				
CATION: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  MPANY Kaiser Exploration and Mining Company DRESS P. O. Box 8, Ravenswood, NV 26164 ESIGNATED AGENT Same  Tubing Drilling in Well Cu. ft.  DISTRICT CWNER Carlos L. Epling DRESS Route 3, Box 164, Ripley, WV 25271 DRESS ROUTE 3,		S REPORT			• •
(If "Gas," Production X / Underground Storage / Deep / Shallow X /)  CATION: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CAPTON: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CAPTON: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CASING Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cond.  Size 20-16 Cond.  Size 20-16 Cond.  Size 30-16 Cond.  Si	DRILLING FRACTURING AND/OR STIMU	LATING, C	R PHYSICA	L CHANGE	
(If "Gas," Production X / Underground Storage / Deep / Shallow X /)  CATION: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CAPANY Kaiser Exploration and Mining Company  CORESS P. O. Box 8, Ravenswood, MV 26164  ESIGNATED AGENT Same  CORESS  CREACE OWNER Carlos L. Epling  CORESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS CWNER Same  CORESS  CLAND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville,  Morris ADDRESS P. O. Box 372, Grantsville,  ERMIT ISSUED February 23, 1982  RILLING COMPLETED May 8, 1982  PAPPLICABLE: PLUGGING OF DRY HOLE ON  COMPINIOUS PROGRESSION FROM DRILLING OR  ENDRKING, VERBAL PERMISSION OBTAINED					·
CATION: Elevation: 895 Watershed Coleman Branch District: Ripley County Jackson Quadrangle Kenna  CMPANY Kaiser Exploration and Mining Company CDRESS P. O. Box 8, Ravenswood, WV 26164 ESIGNATED AGENT Same  CORRESS CORRESS Route 3, Box 164, Ripley, WV 25271  CORRESS Route 3, Box 164, Ripley Route 164,					liw y /
District: Ripley County Jackson Quadrangle Kenna  CMPANY Kaiser Exploration and Mining Company DDRESS P. O. Box 8, Ravenswood, WV 26164 ESIGNATED AGENT Same  CREACE CWNER Carlos L. Epling DDRESS Route 3, Box 164, Ripley, WV 25271 TINERAL RIGHTS CWNER Same  DDRESS TIL AND GAS INSPECTOR FOR THIS WORK Richard Morris ADDRESS P. O. Box 372, Grantsville, FEMIT ISSUED February 23, 1982 RILLING COMPANIED April 30, 1982 RILLING COMPANIED April 30, 1982 RILLING COMPANIED May 8, 1982 FAPPLICABLE: PLUGGING OF DRY HOLE ON CAMPINIOUS PROGRESSION FROM DRILLING OR ENORKING, VERBAL PERMISSION OBTAINED  TOMPANY Kaiser Exploration and Mining Company Tables Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 CCOrd. 13-10" 251 251 150 sx  9 5/8  7 2439 2439 165 sx  5 1/2  4 1/2 5255 5255 170 sx  Third Samples Company The Company T					
CMPANY Kaiser Exploration and Mining Company DDRESS P. O. Box 8, Ravenswood, WV 26164 ESIGNATED AGENT Same  DDRESS  DDRESS  DDRESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS OWNER Same  DDRESS  TL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville, Morris ADDRESS P. O. Box 372, Grantsville, FEMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  P APPLICABLE: PIUGGING OF DRY HOLE ON ONYINDOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  CASING Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  13-10* 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  11/2 5255 5255 170 sx  Liners CMPLETED May 8, 1982  Liners CMPLETED LINES ON OBTAINED  Liners CMPLETED LINES ON OBTAINED  Liners CMPLETED LINES ON OBTAINED				er en	
Casing Used in Left Cement fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  DDRESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS OWNER Same  DDRESS P. O. Box 372, Grantsville, WV Tables Address P. O. Box 372, Grantsville, February 23, 1982  FRILING COMMENCED April 30, 1982  FRILING COMPLETED May 8, 1982  FAPPLICABLE: PILKGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  Casing Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  13-10* 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  5 1/2  4 1/2 5255 5255 170 sx  SILING COMPLETED May 8, 1982  Liners Used in Left fill up Cu. ft.	District: Ripley County Jac	kson	Quadrangl	<u> Kenna</u>	
Casing Used in Left Cement fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  DDRESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS OWNER Same  DDRESS P. O. Box 372, Grantsville, WV Tables Address P. O. Box 372, Grantsville, February 23, 1982  FRILING COMMENCED April 30, 1982  FRILING COMPLETED May 8, 1982  FAPPLICABLE: PILKGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  Casing Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  13-10* 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  5 1/2  4 1/2 5255 5255 170 sx  SILING COMPLETED May 8, 1982  Liners Used in Left fill up Cu. ft.					
Casing Used in Left Cement fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  DDRESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS OWNER Same  DDRESS P. O. Box 372, Grantsville, WV Tables Address P. O. Box 372, Grantsville, February 23, 1982  FRILING COMMENCED April 30, 1982  FRILING COMPLETED May 8, 1982  FAPPLICABLE: PILKGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  Casing Used in Left fill up Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  13-10* 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  5 1/2  4 1/2 5255 5255 170 sx  SILING COMPLETED May 8, 1982  Liners Used in Left fill up Cu. ft.	TANKE IN THE STATE OF THE STATE				
FIGNATED AGENT Same  SIGNATED AGENT Same  Tubing Drilling in Well Cu. ft.  Size 20-16 Cord.  DRESS Route 3, Box 164, Ripley, WV 25271  INFRAL RIGHTS CWNER Same  DRESS  IL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. 0. Box 372, Grantsville, WV  ERMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMMENCED May 8, 1982  F APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  FIND TUBING USED IN WELL CN  Size 20-16 Cord.  13-10" 251 251 150 sx  9 5/8  8 5/8  7 2439 2439 165 sx  4 1/2 5255 5255 170 sx  SIZE 20-16 Cord.  13-10" 251 251 150 sx  9 5/8  8 5/8  2 14 1/2 5255 5255 170 sx  SIZE 20-16 Cord.  13-10" 251 251 150 sx  9 5/8  2 14 1/2 5255 5255 170 sx  SIZE 20-16 Cord.  13-10" 251 251 150 sx  9 5/8  2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	· · · · · · · · · · · · · · · · · · ·				Cenent
DRESS  REFACE CWNER Carlos L. Epling  DRESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS CWNER Same  DORESS  IL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville,  WV  ENVIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  P APPLICABLE: PLUGGING OF DRY HOLE ON  DNITINDOUS PROGRESSION FROM DRILLING OR  ENORKING. VERBAL PERMISSION OBTAINED  Size  20-16  Cord.  13-10*  251  251  150 sx  4 1/2  5 1/2  4 1/2  5 255  5 255  170 sx  Liners  ENORKING. VERBAL PERMISSION OBTAINED		40%			fill up
REFACE CWNER Carlos L. Epling  DORESS Route 3, Box 164, Ripley, WV 25271  INERAL RIGHTS CWNER Same  DORESS  HL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville, WV  ERMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMMENCED May 8, 1982  PAPPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  20-16  Cond.  13-10"  251  251  150 sx  9 5/8  8 5/8  7 2439  2439  165 sx  170 sx  170 sx  Liners  ENORKING. VERBAL PERMISSION OBTAINED			Drilling	in Well	Cu. ft.
Cord.  13-10** 251 251 150 sx  13-10** 251 251 150 sx  13-10** 251 251 150 sx  9 5/8  8 5/8  1 AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville, WV  25 1/2  27 2439 2439 165 sx  27 2439 2439 165 sx  28 11LING COMMENCED April 30, 1982  28 11LING COMMENCED April 30, 1982  29 APPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR DRIVENED USED USED USED USED USED USED USED US					
NERAL RIGHTS OWNER Same  DORESS  IL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville, WV  ERMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMMENCED May 8, 1982  P APPLICABLE: PLUGGING OF DRY HOLE ON INTINUOUS PROGRESSION FROM DRILLING OR DRIVING. VERBAL PERMISSION OBTAINED  13-10* 251 251 150 sx  9 5/8  7 2439 2439 165 sx  4 1/2 5255 5255 170 sx  Liners USER APPLICABLE: PLUGGING OF DRY HOLE ON INTINUOUS PROGRESSION FROM DRILLING OR INTINUOUS PROGRESSION FROM DRILLING OR USER INTINUOUS PROGRESSION OBTAINED					
MORRESS  IL AND GAS INSPECTOR FOR THIS WORK Richard  Morris ADDRESS P. O. Box 372, Grantsville, WV  ERMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  PAPPLICABLE: PILICGING OF DRY HOLE ON INTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED  9 5/8  8 5/8  7 2439 2439 165 sx  4 1/2 5255 5255 170 sx  1 10 sx  Liners  WE APPLICABLE: PILICGING OF DRY HOLE ON INTINUOUS PROGRESSION FROM DRILLING OR INTINUOUS PROGRESSION FROM DRILLING OR INTINUOUS PROGRESSION OBTAINED		13-10"	3 251	251	150 sx
Morris ADDRESS P. O. Box 372, Grantsville, WV  ERMIT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  P APPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EWORKING. VERBAL PERMISSION OBTAINED  8 5/8  7 2439 2439 165 sx  4 1/2 5255 5255 170 sx  4 1/2 5255 5255 170 sx  Liners  USed		9 5/8			
Morris ADDRESS P. O. Box 372, Grantsville, WV 5 1/2  FRATT ISSUED February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  PAPPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EMORKING. VERBAL PERMISSION OBTAINED 165 sx 7 2439 2439 165 sx		8 5/8			
February 23, 1982  RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  PAPPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EWORKING. VERBAL PERMISSION OBTAINED		7	2439	.2439	165 sx
RILLING COMMENCED April 30, 1982  RILLING COMPLETED May 8, 1982  P APPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EWORKING. VERBAL PERMISSION OBTAINED  4 1/2 5255 5255 170 SX  Liners Used	W	5 1/2			
RILLING COMPLETED May 8, 1982  P APPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EWORKING. VERBAL PERMISSION OBTAINED  Liners Used		4 1/2	5255	5255	170 sx
P APPLICABLE: PLUGGING OF DRY HOLE ON ONTINUOUS PROGRESSION FROM DRILLING OR EWORKING. VERBAL PERMISSION OBTAINED  Liners used		3	1		
ONTINUOUS PROGRESSION FROM DRILLING OR Liners EMORKING. VERBAL PERMISSION OBTAINED used		And the last of th			
	DNIINUOUS PROGRESSION FROM DRILLING OR				
	ENORKING. VERBAL PERMISSION OBTAINED	used			
	POLOGICAL TARGET FORMATION Oriskany Sand	stone	Dep	<b>th</b> 5180	feet
DOLOGICAL TARGET FORMATION Oriskany Sandstone Depth 5180 feet	Depth of completed well 5278 feet R	otary <u>x</u>	/ Cabl	e Tools_	
DOLOGICAL TARGET FORMATION Oriskany Sandstone Depth 5180 feet  Depth of completed well 5278 feet Rotary X / Cable Tools		Spanish and the second	Company of the Compan		
Depth of completed well 5278 feet Rotary X / Cable Tools Water strata depth: Fresh feet; Salt feet					area?
Depth of completed well 5278 feet Rotary X / Cable Tools Water strata depth: Fresh feet; Salt feet	PEN FLOW DATA not producing	Oriska	W- Ni	10.0.00	local Las
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?			and the same of th	h l h l million	234 / <b>feet</b>
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PEN FLOW DATA not producing Oriskany - plugged back to 3	The state of the s			· A communication and a second	Contract of the Contract of th
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  Producing formation Opiskany Sandstone Pay zone depth 5166-5234 / feet			/	<i>y</i> — <i>1</i>	A CONTRACTOR OF THE CONTRACTOR
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  FIN FLOW DATA not producing Original back to 3  Producing formation Original Sandstone Pay zone depth 5166-5234 / feet  Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Rbl/d					
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PRODUCING Formation Opiskany Sandstone Pay Zone depth 5166-5234 / feet  Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bbl/d  Pinal open flow 50 (est) Mcf/d Final open flow Bbl/d	-		•		
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PROW DATA not producing Original plugged back to 3  Producing formation Original Sandstone Pay zone depth \$166-5234 / feet  Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bbl/d  Pinal open flow 50 (est) Mcf/d Final open flow Bbl/d  Time of open flow between initial and final tests hours		•			
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PEN FLOW DATA			zone dec	<b>th</b> 3700!	3868! <b>feet</b>
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PEN FLOW DATA not producing Orokany - plugged back to 3  Producing formation Opiskany Sandstone Pay zone depth 5166-5234 / feet  Gas: Initial open flow N/A Mcf/d Cil: Initial open flow Bbl/d  Final open flow 50_(est) Mcf/d Final open flow Bbl/d  Time of open flow between initial and final tests hours  Static rock pressure 1000 psig(surface measurement) after hours shut in  [If applicable due to multiple completion—)				CONTRACTOR OF THE PROPERTY OF	Marking of Salah Salah Salah
Depth of completed well 5278 feet Rotary X / Cable Tools  Water strata depth: Fresh feet; Salt feet  Coal seam depths: Is coal being mined in the area?  PEN FLOW DATA not producing Orskany Sandstone Pay zone depth 5166-5234 / feet  Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bhl/d  Final open flow 50 (est) Mcf/d Final open flow Bhl/d  Time of open flow between initial and final tests hours  Static rock pressure 1000 psig(surface measurement) after hours shut in					

Final open flow 50 Mcf/d Oil: Final open flow

Time of open flow between initial and final tests

Static rock pressure 1060 psig(surface measurement) after

hours

Bbl/d

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

7/18 Oriskany Perforation:

5187-5191 (40 holes)

1/18 Oriskany Fracture:

Broke down at 2000 psig; treatment rate: 35 BPM; treatment pressure: 2600 psig; 60,000# of sand; total fluid: 900 BBL; Total nitrogen: 160,500 psig; ISIP: 1000 psig. 3700-3868 (18 holes)

1/14 Brown Shale perf:

/12 Set permanent plug at 3990'.

(Hole had to be junked in the Oriskany, lost tools and

cable in hole.)

/18 Devonian Brown Shale frac: 75 quality foam; treating pressure: 3600 psig; total sand: 15,000# (20/40 sand) screened-out; total nitrogen: 595,000 SCF;

total fluid: 148 bbl of sand ladened fluid.

#### WELL LOG

			REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	The state of the s
serial Court 1880 Of Coll	TOP FEEL	BUITOM FEET	and salt water, coal, oil and gas
			an sait water, war, our arm gas
Shale	0	250	
Sandstone	250	366	
Shale	366	512	
Sandstone	512	580	
Shale .	580	676	
Sandstone	676	694	
Shale	694	730	
Sandstone	730	790	
Shale	790	840	
• Sandstone	840	860	
Shale Shale	860	1190	
Sandstone	1190	1290	
Shale	1290	1356	•
Sandstone	1356	1532	
Shale to Sand	1532	1730	
Lime	1730	2076	
Shale	2076	2106	
Injun Sandstone	2106	2210	,
Shale	2210	2563	
Coffee Shale	2563	2586	
Berea Sandstone	2586	2597	
Shale -	2597	4150	Show of gas at 3710'
- Brown Shale	4150	4390	Show of gas at 4315'
- Shale	4390	4768	5.10W 57 gus ut 4515
Marcellus Shale	4768	5076	Show of gas at 4830, 5044
Onondaga	5076	5166	311011 01 gus at 4000, 5044
Oriskany Sandstone	5166	5234	Show of gas at 5186, 5232
Helderberg	5234	5274	31104 01 gas at 3100, 3232
Among encourage of the state of			
Total Depth	5274		
	A mention and a second and a se		•
			3700
			2597
			931/
			1103
			11.50
	0		

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY	
Well Operator	ч
By: Z.A.P	
Date:lune 21 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 1942, encountered in the drilling of a well.

FORM OG 8

# BTATE OF WLST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

AFFIDAVIT	OF	PLUGGING	AND	FILLING	WELL
-----------	----	----------	-----	---------	------

AFFIDAVIT SHOULD DE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, ONE COPYLIGHE RETAINED BY THE LED DEPARTMENT, ONE COPYLIGHE RETAINED BY THE LED DEPARTMENT, ONE COPYLIGHE RETAINED BY THE LED DEPARTMENT OF EACH COAL OPERATOR AT THEIR RESPECTIVE LED

eo	AL OPERATOR OR OWNER	-DAL	MANG OF WELL	DERATOR	NING
Opposition of the contract of	Подобра выничающий выправления и дин не на настройний профессований подобрать на профессова подобрать подобрат В детей выправления в настройний выправлений подобрать на профессований подобрать на профессова подобрать на под	P.0	BOX 8, RAVENS	SWOOD, M	TV
	Accres	. 3.	COMPLETE AD	DRESS	277
California contraction de la contraction del la contraction de la	AL OPERATOR OR OWNER	. 01	WELL AND LO	CATION	<u> 19_82</u>
Contraction of the second of t	gen destroy à l'anne a angla desponsacies de l'anne de agressité destructions de l'anne d'anne de l'anne d	R	IPLEY		District
CARLOS L.	ADDRESS TOT TATO		The state of the s	metro ant a month discontinuo essentia es	ANSTRICE
Characteristics of the Assessment Comments	DE DITING		ACKSON		County
_BT_3BOX	164, RIPLEY WV 25271	Well.	No. KEM-150	en transport de la company	
		antonia Con	PLOS L. EPLING	The second of the second secon	Farm
. State inspecto	R SUPERVISING PLUGGINGR	RICHARD	MORRIS		
	A man man a	DAVIT		e o man transferrance de company de destre	<b>(1) 人名</b> 克克斯 (1) 人名 (1
STATE OF WES	T VIRGINIA,	DAYII	a		
County ofIA	CKSON	_			•
R.A.	Pryce	and	R. L. Coty		
being first duly	sworn according to law depose	and say	that they are experie	nced in the	work of
a grant and a gran	- P	TOTAL COM	المصمحة الأخلال المسمحة الأخلال المس		
as are continued for f	on the 14 day of June following manner:	alle film Sudanna and reseale of Anthonium developments of Anthonium developments of Anthonium developments of	_, 19 <u>82</u> , and that th	ne well was	plugged
SAND OR ZONE RECOR	D FILLING MATERIAL	TOTAL THE STATE OF	PLUGS USED		
FORMATION			OUX & KIND	CSG	CSG
			·	PULLED	LEFT IN
ORISKANY Ss	PACKER SET AT 3990'	(KB)	4 1/2" perm-	0	
Contractor of the contract of	ON 6/12/82		anent bridge		<u> </u>
			plug		
All and the second seco					
all restriction and the second	2nd PACKER SET AT 3	874'	4 1/2 BAKER	0	
Construction of the second sec	(KB) ON 6/14/82		PERMANENT		
(Care or contract of the contr		Commission and agreement and any organization of the community	BRIDGE PLUG		
Charge and the Control of Control		Total along the transfer of the state of the			
Attendantica (en anno escriptiona de la companya de					
Charles the section with market exception of the processing the stables and other more section of the section o					
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
COAL SEAMS					
(NAME)			DESCRIPTION	OF MONUME	VT
(MANE)			PARTIAL PLUG.	NO MON	<u>IUMENT</u>
(MAME)			ERECTED.		
MAMES					
A STATE OF THE PROPERTY OF T	We specially a second of the s				
and that the work  JUNE	of plugging and filling said w	ell was o	completed on the	LA	day of
	ponents saith not.	Z	A.Pa-	ე ე	<b>සිට ජනාග ව</b> ර මතු කොරුණ ඇ
Swarn to and -	istranita standard	$\frac{1}{\sqrt{2}}$	I Coly	\$0.445m+50m0m40m0+20+2000+	~*************************************
	ubscribed before me this 561	day o	. 17 2 - 1		0 42.
My commission exp	ires;	reconser Their So So S	Ell Merzz Dal	Notary Pi	ıblic.
And the common of the star grammers is not as their hypersolitations.	more and an annual of more an annual annual and annual and annual and annual an		Permit	No. JAC-	1650.
				035-	

Jack, 165

#### PARTIAL PLUGGING

RECEIVED

PORM OG-8

(NAME)

(NAME) (NAME)

### STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION

AUG - 9 1982

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

### AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE KAISER EXPLORATION AND MINING COAL OPERATOR OR OWNER NAME OF WELL OPERATOR P.O. BOX 8, RAVENSWOOD, WV ADDRESS COMPLETE ADDRESS COAL OPERATOR OR OWNER WELL AND LOCATION RIPLEY District ADDRESS CARLOS L. EPLING JACKSON \_County LEASE OR PROPERTY OWNER BOX 164, RIPLEY WV 25271 Well No. KEM-150 CARLOS L. EPLING Farm STATE INSPECTOR SUPERVISING PLUGGING RICHARD MORRIS AFFIDAVIT STATE OF WEST VIRGINIA. County of JACKSON R. A. Pryce R. L. Coty being first duly sworn according to law depose and say that they are experienced in the work of and. plugging and filling oil and gas wells and were employed by KAISER EXPLOPATION & MINING well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 14 day of June , 19 82, and that the well was plugged and filled in the following manner: SAND OR ZONE RECORD FILLING MATERIAL PLUGS USED CASING PORMATION SIZE & KIND ORISKANY Ss PACKER SET AT 3990' (KB) 4 1/2" perm-ON 6/12/82 anent bridge plug 2nd PACKER SET AT 3874' 4 1/2 BAKER 0 (KB) ON 6/14/82 PERMANENT BRIDGE PLUG COAL SEAMS DESCRIPTION OF MONUMENT PARTIAL PLUG. NO MONUMENT and that the work of plugging and filling said well was completed on the 14 day of JUNE , 19 82 And further deponents saith not. Sworn to and subscribed before me this 5611 day of Auctivat , 19 8%. mithan Hallet My commission expires: Notary Public. Lucin her. 1, 1985 Permit No. JAC-1650

## STATE OF WEST VIRGINIA DEPARTMENT OF MINES



### Oil and Gas Division

CONSERVATION COMMERCIAL

## OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,	
Charleston, W. Va.	DATE February 8, 1982
Surface Owner Carlos L. Epling	Company Kaiser Exploration and Mining Company
ddress Rt. 3. Box 164. Ripley, WV 25271	
Kineral Owner Same	Farm Carlos L. Epling Acres 184
ddress	Location (waters) Coleman Branch
Owner Same	Well No KEM 150 Elevation 895'
oddress.	Dinloy
Coal Operator None	District Ripley County Jackson Quadrangle Kenna
wai operawi	Quadrangie Retind
AS 200 AT MUST BE POSTED AT THE WELL SITE provisions being in accurrance with Charles 22;	
drilling This permit shall expire if	INSPECTOR TO BE NOTIFIED Richard Morris
perations have not commenced by 10-23-82	ADDRESS P. O. Box 372, Grantsville, WV
Deputy Director - Off & Gas Division	PHONE 354-7259
entlemen:	
80, in <u>Jackson</u> County, Book <u>158</u> X NEW WELL	
OIL AND GAS WELL ORIGINALLY DRILL	LED BEFORE JUNE 5, 1969.  er or licensed land surveyor and all coal owners and/or operators
The above named coal owners and/or operator are here make by Section 3 of the Code, must be received by, of Copies of this notice and the enclosed plat were mailed	by notified that any objection they wish to make, or are required or filed with the Department of Mines within ten (10) days. *  by registered mail, or delivered to the above named coal operators  day
	Very truly yours,
LEASE SUBMIT COPIES OF ALL EOPHYSICAL LOGS DIRECTLY TO:	(Sign Name) Well Operator
EST VIRGINIA GEOLOGICAL AND CONOMIC SURVEY  Add	Kaiser Exploration and Mining Company P. O. Box 8  Street
0 0 DOX 0/ 3	perator Ravenswood City or Town
	West Virginia 26164

\*SECTION 3.... If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of anotice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

PERMIT NUMBER

PROPOSED WORK O	RDER TO_X	DRILL	DEEPENF	RACTURE-STIMULATE		
DRILLING CONTRAC			RESPONSIBLE AGENT	•		
NAME Unknown at this time						
ADDRESS			ADDRESS P. O. BO	x 8. Ravenswood, WV 26164		
TELEPHONE			TELEPHONE _273-537	1		
ESTIMATED DEPTH	F COMPLETED WELL	.: <u>5275 '</u>	ROTARY X	CABLE TOOLS		
PROPOSED GEOLOGIC	CAL FORMATION:	<u>Oriskany</u>				
TYPE OF WELL:	OILG	AS X CC	MBSTORAGE	E DISPOSAL		
				OODOTHER		
	· •	,				
TENTATIVE CASING	PROGRAM:	* B		•		
CASING AND TUBI	NG USE	D FOR	LIAT IN	CEMENT FIFE UP		
SIZE	DRI	LLING	WELL.	OR SACKS - CUBIC 1-T.		
20 - 16						
13 - 10						
9-5/8 10 3	/4"	250'	250	150 sks class A		
8 - 5/8						
		2450'	2450'	65 sks 50/50 pozmix		
5 ½		527 E t	E 07 = +	100 sks class A		
4 ½		52751	5275'	225 sks Class A		
3				Perf. Top Perf. Buttom		
Liners				Perf. Top		
				Perf. Bottom		
a companion and describe at a series and the series and the series	A JAN WASHINGTON AND GOOD OF A STANDARD WAS A NO.					
	1.2073.3		SALT WATER	FEET		
	DEPTHS		***************************************			
IS COAL BEING MINI	ED IN THE AREA?	None	BY WHOM?			
TO DRILL:				The state of the s		
	) COPIES OF OG - 1,	\$100.00 PERMIT	FEE, PERFORMANCE B	OND AND PERMANENT COPY		
OF PLAT.				•		
TO DRILL DEEPER O	R REDRILL:		•	•		
SUBMIT FIVE (5	COPIES OF OG - 1, S	SHOWING ORIGIN	NAL PERMIT NUMBER AN	ID PERFORMANCE BOND. ON		
WELLS DRILLED MUST ALSO BE		PERMANENT CO	PY OF THE PLAT AND	THE ORIGINAL WELL RECORD		
TO FRACTURE - STIM	•		·	•		
• • • • • • • • • • • • • • • • • • • •		DRILLED BEFOR	E JUNE 5 1929 FIVE (5)	COPIES OG - 1, PERFORMANCE		
BOND, PERMANE	ENT PLAT AND ORIGI	NAL WELL REC	ORD.			
				9. FIVE COPIES OG - 1, SHOW-		
	ERMIT NUMBER, AND					
		ty (90) days of co	empletion for bond release.	Inspector to be notified twenty-		
four (24) hours in	advance.					
			•			
				The state of the s		
				•		
, , , , , , , , , , , , , , , , , , ,		and the second second				
The following wai	ver must be completed	by the coal oper	ator if the permit is to be	issued within ten days of receipt		
	:A . A		<b>6</b> 14 6			
				r or Operator of the coal under		
			ps this proposed well local			
				vell being drilled at this location,		
	crator has complied with	all rules and regu	lations in Articles 4, 5, and	7, Chapter 22 of the West Virginia		
Code.						
. 🗢				· · · · · · · · · · · · · · · · · · ·		
			Gracina march mhathaid inn Mancagan agus markana acasan ann agus march	or Coal Company		
			,			
				Official Title		
			•			
			٠	•		
	· ·					



# Basin Surveys, Inc.

#### COMPENSATED DENSITY FILING NO. COMPANY KAISER EXPLORATION + MINING CO. PERUITNO WELL EPLING KEN #150 47-035-1650 FIFIDRIPLEY DISTRICT COUNTY C) ACKSON STATE\_ LOCATION: COLEMAN BRANCH OTHER SERVICES: QUAD: KENNA PRL-1 FIELD Permanent Datum: OROLUD LEVEL Elev.: K.B. 906 \_\_; Elev.: 895" D.F. 905 Log Measured From KELLY BUSHING 11 Ft. Above Perm. Datum Drilling Measured From KELLY BUSHING G.L.\895 Date MAYAZ Rún No. ONE TWO ONE GRCD CAL Type Log TEMP. 11.5.G.D. Depth-Driller 52.75 5275 52751 Depth-Logger 5278 52781 52781 **Bottom** logged interval 5278 5278 Top logged interval GRZ449TO SUICE 2449' 24491 Type fluid in hole AIR AIR AIR Salinity, PPM CI. Density Level Max rec. temp., deg F. Operating rig time 2.5HRS 1.5HR 1 HR. Recorded by E. CLAUS T. EDWARDS Witnessed by MR. COTY Run Bore-Hole Record Casing Record Bit From To Size Wgt. From To C1/4 2449' 5278 24491 SURFACE

HEADING

