

Coal: Eastern Associated Coal Corp., Koopers Bldg. Pittsburgh., Pa.

FILE NO .\_ DRAWING NO .. SCALE linch = 1000 feet MINIMUM DEGREE OF ACCURACY \_1/200 PROVEN SOURCE OF ELEVATION Junction of Roads 1800'NE of Location = 847

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGU-LATIONS ISSUED AND PRESCRIBED BY THE DEPART-MENT OF MINES. Mark C. Echard MARK C. ECHARD (SIGNED)\_ L.L.S. <u>49</u>0

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS FORM IV-6 (8-78)



R.P.E

AUGUST 26 DATE OPERATOR'S WELL NO. \_ONE APIWELL NO.

STATE

STATE OF WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION WELL TYPE: OIL \_\_GAS ✓ LIQUID INJECTION\_\_ WASTE DISPOSAL\_

(IF "GAS,") PRODUCTION \_STORAGE\_\_DEEP\_\_SHALLOW \_

\_\_\_\_WATER SHED\_SAND\_FORK\_ LOCATION: ELEVATION \_\_\_\_\_\_\_830

DISTRICT COVE \_COUNTY DODDRIDGE

QUADRANGLE VADIS 7.5 & 15 WG

ACREAGE 176.9

SURFACE OWNER GLEN G. 8 NINA M. RASTLE OIL & GAS ROYALTY OWNER GLEN G. & NINA M. RASTLE lease acreage <u>176.9</u>

LEASE NO...

PROPOSED WORK: DRILL CONVERT \_\_ DRILL DEEPER \_\_ REDRILL FRACTURE OR STIMULATE\_\_PLUG OFF OLD FORMATION\_\_PERFORATE NEW

FORMATION\_OTHER PHYSICAL CHANGE IN WELL (SPECIFY).

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG. milton South (307) TARGET FORMATION \_\_\_\_ SENSON\_\_\_ \_\_ESTIMATED DEPTH\_\_5400±

WELL OPERATOR CARSON PETROLEUM \_\_DESIGNATED AGENT MR.CLAY BOX 133

ADDRESS. ADDRESS....

SAND FORK, W.V. 26430 SAND FORK, W.V. 26430

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

FORM IV-35 (Obverse)

Date	Februar	y 24	9	1981
Operato	r's			

WELL OPERATOR'S REPORT /7

Well No. Rastle #1

[08-78]		DRILL	ING, FRA	ACTUR!	ING A	OF ID/OR STIMULAT			No. $\frac{17}{\text{State County}} - \frac{286}{\text{Perm}}$
LL TYPE: 0	11	/ Ga	ıs_ <u>X_</u> /	' Li	quid	Injection	_/ Waste D	isposal/	
(	If "Gas	", Pro	duction	<u> </u>	_/ [	Inderground st	orage/	Deep/	Shallow/)
ם	istrict	:	Cove		_ 00	ounty: <u>Doddr</u>	idge କ	uadrangle: <u>N</u>	ew Milton
LL OPERATOR	<u>Car</u>	son P	etroleu	ım Co	rpora	tion D	ESIGNATED AG	ENT Lowell M.	Johnson
Address	P 0	Box	133			and the state of t	Address	P O Box	133
			k, WV					Sand For	k, WV 26430
RMITTED WOR	K: Dri	11 X	/ Con	vert	/	' Drill deepe	r/ Red:	-111/ Pra	cture or stimulate
•	Oth	er ph	ysical o	change	e in	well (specify)			
RMIT ISSUE	о ом		Octo	ber 2	29 19_			SPECTOR FOR THI	
F APPLICABI	LE: PL	JGGING	OF DRY	HOLE	ON	UB			t
REWORKI	NG. VE	RBAL P	ERMISSI	ON OB	TAINE	D			WV 26301
			,19	<del></del>					-
EOLOGICAL T	ARGET F	TAMRC	ON:		E1k			Depth 5	1030
Depth o	f compl	eted w	ell,	5277		feet Rota	ary_X_/ (	Cable Tools	
						et; salt,_			•
								the area? No	·
									1: 81
WOLK WE	3 Comme	_						·	
SING AND T	UBING P	ROGRAI	<b>4</b>						
2710 011			IFICATION TO THE SECOND TO THE		,	FOOTAGE I		CEMENT FILL-U	
	Size	Grade	per ft	New	Used	For drilling	Left in well	(Cubic feet)	1
máuctor						-		- 6	Kinds
esh water	8 5/8			<u> </u>		1052'	1052'	To surface	
al					-				Sizes
termediate								_	
oduction	4 1/2						5080	320 sks	Depths set
bing							A		
ners	·								Perforations:
				ļ	ļ	1919			Top Bottom
· ·			-	<u> </u>		(36) [[]	27 1981	<u> </u>	
	Annual Company	4							
	***************************************				¢		GAS DIVISION		.•
PÈN FLOW DA			:						
									h 4651 fee:
Ga	s: Ini	tial o	open flo	)W,		Mef/d	Oil: Initia	l open flow, _	0551/d
4. * * *	- Fin	al ope	en flow,	,		Mcf/d	Final	open flow, _	0 Bb1/d
							-	sts, hour	•
St	atic ro	ck pre	essure,		3	osig (surface	measurement)	after ho	ours shut in
[If app	licable	due	to mult	iple	compl	etion]	{		
Second	produci	ng fo	rmation		Elk			Pay zone dept	th4918-5030" feet
Ga	s: In	tial	open flo	оw, _		Mc f/d	Oil: Initia	l open flow, _	0 3b1/d
	Fir	nal op	en flow	, (4	00.00	0 Mc1/d	Final	open flow,	0 Bb1/d .
				· ·				sts, 18 hou	
				7 1	$\alpha \alpha$			~ .	

Static rock pressure,  $\frac{1400}{\text{psig}}$  (surface measurement) after  $\frac{24}{\text{psig}}$  hours shut in

08-78]

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

Fractured January 21, 1981

E1k - 20,000 lb. 80/100 sand 40,000 lb. 20/40 sand 1600 lb. breakdown 490 bbls. water 22.2 BPM at 2000 lb. Benson - 20,000 lb. 80/100 sand 40,000 lb. 20/40 sand 485 bbls. water 17 BPM at 1800 lb.

Perforations - 4918 - 5030, 8 holes

Perforations - 4649 - 4651, 6 holes

ELL LOG

FORMATION	Color	Hard or Soft	17 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, cil and gas
Sand & Shale			13	157	Water @ 17', 75'
Coal			157	162	
Sand & Shale			162	337	:
Coal			337	340	
Sand & Shale			340	1184	
1st Salt Sand	***************************************		1184	1248	
Shale	The second secon		1248	1274	
Sand	verguodes	Discount of the Control of the Contr	1274	1288	
Shale			1288	1359	
2nd Salt Sand			1359	1379	
Shale			1379	1431	raine. Se in
2nd Salt Sand			1431	1496	er en
Shale		`	1496	1554	
3rd Salt Sand			1554	1604	
Shale			1604	1625	·
3rd Salt Sand	•		1625	1654	
Shale			1654	1697	
Maxton Sand	}		1697	1724	
Shale	9		1724	1736	
Little Lime			- 1736	1751	
Pencil Cave			1751	1769	
Blue Monday Sand			1769	1804	
Big Lime	*		- 1804	1876	en e
Big Injun Sand			1876	1952	
Gray Shale		!	1952	1989	
Weir Sand			1989	2081	and the second s
Gray Shale			2081	2198	
Gantz Sand	•		- 2198	2216	
Gray Shale	***		2216	4646	Gas at 3014, 4012, 4542, 4820
Benson Sand			4.646	4658	das at 3014, 4012, 4342, 4620
Gray Shale			4658	4914	
Elk Sand		an in the second	4914	5036	$(\mathbf{x}_{i}, \mathbf{y}_{i}, y$
Gray Shale			5036	5134	•
Total Depth			5134	5154	e e e e e e e e e e e e e e e e e e e
F	The second second				

(Attach separate sheets to complete as necessary)

	Carson Petroleum Cor	poration
We	ell Operator	2 0
Ву	Lewell m.	Johnson
Its	Agent	

(CTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geologial record of all formations, including coal, encountered in the drilling of a well."

FORM IV-2000 DVEI	STATE OF WEST VIRGINIA PARTMENT OF MINES, OIL AND GAS DIVISION	Ι
[08-78]	OIL AND GAS WELL PERMIT APPLICATION	ls A

(If "Gas", Production X / Underground storage /

Elevation: 8301 Watershed: Sand Fork

District: Cove County: Doddridge

DESIGNATED AG

COAL OPERATOR

Address

VELL TYPE: Oil \_\_\_\_/ Gas X /

Address P O Box 133

ELL OPERATOR <u>Carson Petroleum Corporation</u>

Sand Fork, WV 26430

IL & GAS OYALTY OWNER Glen G. & Nina M. Rastle

176.9

Address <u>Vadis, WV 26445</u>

OCATION:

Acreage

ION	Date: August 28,	19 <u>80</u>
10:1	Operator's Well No. Rastle #1	
	API Well No. 27 - 017 - State County	2861 Fermi
De	ep/ Shallow_X_')	
uadr	angle: <u>New Milton</u>	
тин	Clay Johnson P O Box 133	-
	Sand Fork, WV 26430	
. ,	Odna Torn, III Bollow	
	N/A	
		•
WIT	H DECLARATION ON RECORD:	
	N/A	
	N/A	
	3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	

OF M.

URFACE OWNER	Glen <u>G. &amp; Nina M. Rastle</u>		Name		N/A	
	Vadis, WV 26445	•		Address	• . • • • • •	
Addi 635	Vad15, WV 20145		* ************************************			
Acreage	176.9	•	Name		N/A	
TELD SALE (TE	MADE) TO:			Address		
4 <i>m</i> /	N/A					
Address			COAI,	LESSEE V	WITH DECLAR	ATION ON RECEPTION
_		· ·	Name		N/A	
IL & GAS INSP	PECTOR TO BE NOTIFIED			Address	<u>.</u>	OGT 2.9 1980
ame	Paul Garrett		•			OIL & GAS DIVIS ON
Address _	Clarksburg, WV 26301					DEPT. OF M.
	622-3871		•			water of the transfer of the t
	*				and the second of the second o	•

ndersigned well operator from \_\_\_\_\_\_ Consolidated Gas Supply Corporation

If said deed, lease, or other contract has been recorded:] ecorded on NOT OF RECORD, 19 , in the office of the Clerk of the County Commission of Doddridge ounty, West Virginia, in Lease Book at page. A permit is requested as follows: PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate Plug off old formation / Perforate new formation Other physical change in well (specify)

The undersigned well operator is entitled to operate for oil or gas purposes at the above ocation under a deed \_\_\_/ lease \_\_\_/ other contract  $\chi$  / dated <u>October</u> , 1980 , to the

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any election they wish to make or are required to make by Code § 22-4-3 must be filed with the Department Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessen or before the day of the mailing or delivery of this Permit Application to the Department of Hines at arleston, West Virginia.

WES WASHINGTON STREET INFLESTON, WV 25311

DEDHOME: (304) 348-3092

(ET BOM)

Agent



## PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:

ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

ILLING COM	TRACTO	R (IF	KNOWN)		Uni	on Drillin	g, Inc.		A March 1	
				Addres	s <u>Dra</u>	wer 40				
					Buc	khannon, W	V 26201	•		
		_				•		2		
OLOGICAL 7	ARGET	FORMAT	ION,		<u>sensor</u>	<u> </u>		Datamu V /	Cabla taale	, .
								Rotary X /		
								feet,		
Approxi	mate c	oal sea	am dept	hs:	None	Is	coal being mi	ned in the area	? Yes/	/ No X /
SING AND T	" אוא ד מווי	PRACE & I	V.				•	•		e s Por language
			 IFICATI	ONS	N.	FOOTAGE	INTERVALS	CEMENT FILL-UP	₽A(	CKERS
SING OR BING TYPE			. Watah	0 0	N			OR SACKS (Cubic feet)		A SAME
	Size	Grade	per it	New	USEGH I	.01. 01.111116	Dere in well	N .	Kinds	1 Marine
nductor						1150'	1150'	Combila		7000
esh water	8 5/8							To surface	6:	, 25(2)-7
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oduction	41/3						5400'	725 sks os	Depths set	
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appli previ the c 200 f There is no	cable ously onsent eet of A ERMACTN Led as	to the paid or requir the presented the presented to the	neclam n the s red by l raposed ste Form	ation ame we Code § well.  IV-2 vlatin	requir 21, th 22-4- shall grivet V-2 fi	ne fee requi 8a from the not be req poetpart o	red by Code S owner of any	orm IV-9, "Recl d Regulation 23 22-4-12a, and water well or d cturing or stime r which a permit ith.	(b) if applications wit	icable, ; bin :ll
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operati	ons have	not con	nmenced b	6-3	80-81	suzsiaressurangenagehorosop	₹			•
		11								
<del></del>	July Direc	SAN AN	&/Gas C	)ivision	enveronens, 7					
Th	ie foll	owing	vaiver who ha	must l	be com	pleted by the declaration	he coal operát	tar and by any c § 22-6-20, if t	coal owner the permit	
LE	to De	-20246				WAIVE				
							7 7000	ee / of the	coal under	this well
cation has	exami	ned the well	is prop locatio	osed was	been :	ocation. I. added to the	e mine map. Ted. the well of	The undersigned operator has congregulations.	has no objemplied with	ction to
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