

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

June 26, 2014

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-1706524, issued to KEY OIL COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: TARGA / MAXWELL NO, 17

Farm Name: MORRIS, I.L. (IKE)

API Well Number: 47-1706524 Permit Type: Vertical Well

Date Issued: 06/26/2014

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
- 3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
- 4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
- 7. Well work activities shall not constitute a hazard to the safety of persons.
- 8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

) Well Operato	r KEY	OIL COM	IPANY	306	347	DODD- RIDGE		NEW MILTON
				Ope ID	rator	County		Quadrangle
) Operator's V	/ell Numb	oer: <u>TA</u>	ARGA/MAXWEL	L #17			3) Elevation	: <u>1005'</u>
) Well Type: (a	a) Oil <u>X</u>	or G	GasX					
			iction X / U	nderground S	torage			
			o/ S					
Froposed ToApproximateApproximate	tal Depth fresh wa salt wate	i: 300 iter strata er depths		Formation 125'	at Prop	esed To	otal Depth: <u>C</u>	GORDON 6-21-1
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1) Describe processing	oposed v	vell work CA ATIONS	in detail	DRILL, STIMI	JLATE RAM INTE	RVALS	CEMEI	. Ft.)
2) TYPE S Conductor	oposed v	CATIONS Grade	in detail ASING AND TU Weight per ft	BING PROGE FOOTAGE For Drilling 35 168	RAM INTE	, PROD RVALS	S CEMEI	. Ft.)
2) TYPE S Conductor Fresh Water	PECIFIC Size 13 3/8	CA ATIONS Grade ERW	in detail ASING AND TU Weight per ft 48	BING PROGE FOOTAGE For Drilling 35 168	RAM INTE	, PROD RVALS	CEMEIFill -up (Cu	. Ft.)
2) TYPE S Conductor Fresh Water Coal	PECIFIC Size 13 3/8	CA ATIONS Grade ERW	in detail ASING AND TU Weight per ft 48	BING PROGE FOOTAGE For Drilling 35 168	RAM INTE	, PROD RVALS	CEMEIFill -up (Cu	. Ft.)
2) TYPE S Conductor Fresh Water Coal Intermediate	PECIFIC Size 13 3/8 9 5/8	CATIONS Grade ERW ERW	ASING AND TU Weight per ft 48 29	BING PROGE FOOTAGE For Drilling 35 168 180	RAM INTE	RVALS	Fill -up (Cu 70 SKS.TO SURFACE	. Ft.)
1) Describe pr	Size 13 3/8 9 5/8	CATIONS Grade ERW ERW	Weight per ft 48 29	BING PROGE FOOTAGE For Drilling 35 168 180	RAM INTE	RVALS n Well	70 SKS.TO SURFACE	. Ft.)

^{**} BLUE MONDAY, KEENER, BIG INJUN, WEIR, GANTZ, GORDON

WW-2A (Rev. 6-07)

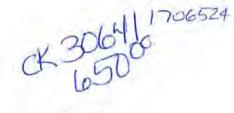
depprivacyofficer@wv.gov

1). Date: April 1	1, 2014		_	
2.) Operator's Wel	l Number		GA/MAXWELL #17	
and any and a second	State	Count	Permit	
3 \ ADI Mall No :	47-	017	45	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Ow	ner(s) to be served		5) (a) Coal Ope	erator		
(a) Name	I. L. MORRIS	W	Name	NONE		
Address	P O BOX 397		Address			
	GLENVILLE, WV	26351				
(b) Name			(b) Coal Or	wner(s) with [Declaration	
Address			Name			
			Address			
(c) Name	/		Name			
Address			Address			
6) Inspector	DOUGLAS NEV	MI ON	(c) Coal Le	ssee with De	claration	
Address			_ (c) coal Le	SSCC WITH DC	Claration	
Address	4060 DUTCHM					
Talliania	MACFARLAN,	VVV 26148	Address	+		
Telephone	304-932-8049			TAKE NOTIO	E THAT	
Assistant and Tall			MED ABOVE			a sutical all and are
	ne lease or leases or	other continuing	contract or contra	icts by which i	noid the right t	o extract oil and gas
OR Included is the	ne information require	d by Chanter 22	Article 6 Section	a 8(d) of the Co	ode of West Vi	rginia (see page 2)
						copies of this notice and
	ation plat, and accom					
		ce (Affidavit attac				A
_			al receipt attached	d)		
400		tice of Publicatio			60 493045 Sec 1	
		Chapter 22-6 and	d 35 CSR 4, and	agree to t	he terms and	conditions of any perm
issued under this		hat I have nerso	nally examined a	and am familia	with the infor	mation submitted on thi
						responsible for obtaining
	believe that the infor					1999
	are that there are sig	inificant penaltie	s for submitting f	alse information	on, including the	he possibility of fine and
imprisonment.		2	MENT OF COME	~2.00		
A THE	OFFICIAL SEAL KERRI LIPSCOMB		KEY OIL COME			
I FLANCE	NOTARY PUBLIC	By:	PRESIDENT	Donem		-0
FEREN	P.O Box 97	Its: 6	22 GARTON PL	۸٦٨	RECEI	VEU Gas
	My Commission Express No. 16, 2022	Address			HEO.	
	***************************************	Telephone	WESTON, WV : 304-269-7102	20432	Mice Of	
Subscribed and	sworn before me this	11 th day of			. 2014NY	V TA
Subscribed and s	sworn belore the this	- day of	ACINE		2011	ed.
	Chart	Lessand	_	Notar	y Public . The	nois Internation
My Commission	Expires November	er 16, 2022		.,,,,,,,	WY Det	Liotection
Oil and Gas Privacy					Environme	partment of protection
The Office of Oil and	d Gas processes your pe	rsonal information	such as name addre	ess and nhone no	umber, as a nart	of our regulatory duties
Your personal inform	mation may be disclosed	to other State agen	cies or third parties	in the normal cor	urse of business	or as needed to comply
	gulatory requirements, in					
information, if you h	ave any questions about	our use of your per	isonal information, p	nease contact DE	Er s Chief Privac	y Onicer at

SURFACE OWNER WAIVER



County	DODDRIDGE	Operator	KEY OIL COMPANY
		Operator well number	TARGA/MAXWELL #17

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

<u>Time Limits and methods for filing comments.</u> The law requires these materials to be served on or before the date the operator files his Application. You have FIFTEN (15) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

<u>Comments must be in writing.</u> Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

<u>List of Water Testing Laboratories</u>. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ____ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PER	RSON		Compar		ON BY A CORPORATION, ETC.
A. Morris	Date	5/13/14	Name		==n/ED
Signature	5		By Its		Office of Oil and Dates
Print Name				Cianatura	5 4 50/g
				Signature	Dateof Departmental Protection

706524

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
PORTER MAXWELL	MICHAEL MURPHY	1/8	14/236
TARGA DEVELOPMENT, INC.	KEY OIL COMPANY	1/8	343/173

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated

Well Operator: KEY OIL COMPANY

By:Its:

PRESIDENT

RECEIVED

Office of Oil and Gas

MAY 3 U 2014

MV Department of Environmental Protection WW-2B1

Well No. TARGA/MAXWELL NO. 17

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

x Contractor Name	Reliance Laboratories, Inc.
Well operator's private laboratory	
Well Operator	Key Oil Company
Address	22 Garton Plaza
	Weston, WV 26452
Telephone	(304) 269-7102

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

**THERE APPEARS TO BE NO KNOWN WATER WELLS OR SPRINGS WITHIN 1000 FEETCEIVED
OF THE PROPOSED WELL LOCATION**

Office of Oil and Gas

MUST CHECK TO 2000' AND ETTER (TEST)
ONE IF THERE ARE ANY WATER WELLS OR SPRINGS MAY 8 V 1814
WITHIN THE 2000' RADIUS, WV Department of

Environmental Protection

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WW-9 Rev. 5/10

Pi	age	of	
API Number 47 -	017	100	
Operator's Well No.	TAR	GA/MAX	<u>WELL</u> NO. 17

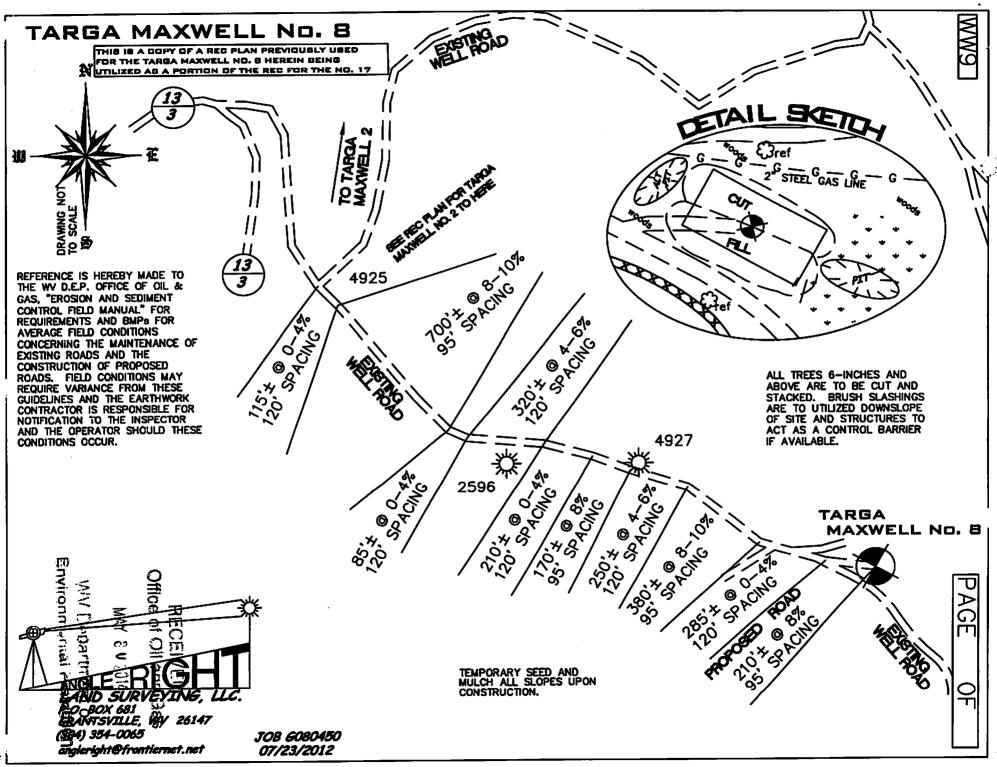
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

perator Na	me Key Oil Compa	ny		OP Code	
Same and the			Quadrangle		New Milton 7.5'
levation _	1,005'	County	Doddridge	District	New Milton
escription	of anticipated Pit Waste:	Drill Water,	Frac Blow Back	& Various	Formation Cuttings.
o von anti	cinate using more than 5.	000 bbls of water to	complete the proposed w	ell work? Yes	No XX
ill a synth	etic liner be used in the t	oit? yes	If so, what ml.?	6 mil. 201	No XX DC N 2014
roposed D	Reuse (at Off Site I	lication und Injection (UIC : API Number	rm WW-9 for disposal loc		
rilling me	dium anticipated for this	well? Air, freshwa			
	. 1				
-T1	Fleft in pit and plan to so	lidify what medium	will be used? Cement, lin	ne, sawdust	
on August provisions law or regular provisions law or regular provisions obtaining penalties for Company Company	1, 2005, by the Office of of the permit are enforced alation can lead to enforce certify under penalty of a form and all attachments information. I believe	Oil and Gas of the eable by law. Violement action. I law that I have pents thereto and the ve that the information, including the Jan Chapm President	ersonally examined and a at, based on my inquiry tion is true, accurate, and possibility of fine or imparts	m familiar with of those individ d complete. I au	
					DECEMED
My comm	nission expires	november	ment	Notary	Office of Off and Oak
My comm	nission expires	en Ly Novemb	ment en 11e, 2022		Public RECEIVED Office of Oil and Gas MAY 2 U 2014

Property Boundary Road = = = = = = = = = = = = = = = = = = =	===== -	Spring (Wet Spot Drain Pipe Waterway Cross Drail Artificial F Pit: cut wa Pit: compa	with stze in inches	•
roposed Revegetation Treatm			Prevegetation pH	5.5
	Tons/acre or to corre		minimum\	
	or equivalent) 1/3 TO 2	Tons/acre	mmmun)	
Mulch HAY	4	Seed Mixtures		
Are Seed Type	ea I Ibs/acre	-	Area II Seed Type	lbs/acre
			KY-31	40
KY-31	40	+ -	ALSIKE CLOVER	
ALSIKE CLOVER ANNUAL RYE	5 15	_	ANNUAL RYE	15
	engles Newlow	install Kr	5 to W. De	p regulations
Title: Oil r bas Field Reviewed?	1 na pector	Date:	3-21-2011	RECEIVED Office of Oil and
C 1025 L 101 C 10 C 10 C				MAY 2 U 7014

MAY & U 7014



WW9

PAGE OF

TARGA MAXWELL NO.

REFERENCE IS HEREBY MADE TO THE WY D.E.P. OFFICE OF OIL & GAS, "EROSION AND SEDIMENT CONTROL FIELD MANUAL" FOR REQUIREMENTS AND BMPs FOR AVERAGE FIELD CONDITIONS AVERAGE FIELD COMBITIONS
CONCERNING THE MAINTENANCE
OF EXISTING ROADS AND THE
CONSTRUCTION OF PROPOSED
ROADS. FIELD CONDITIONS MAY
REQUIRE VARIANCE FROM THESE
CHINDELINES AND THE PARTIMENSIA GUIDELINES AND THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION TO THE INSPECTOR AND THE OPERATOR SHOULD THESE CONDITIONS OCCUR.

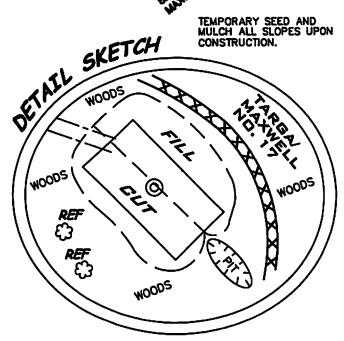
4927

160'± @ 16% 55' SPACING . 60 20 TARGA/ TARGA

MAXWELL No. 8

ALL TREES 6-INCHES AND ABOVE ARE TO BE CUT AND STACKED. BRUSH SLASHINGS ARE TO UTILIZED DOWNSLOPE OF SITE AND STRUCTURES TO ACT AS A CONTROL BARRIER IF AVAILABLE.

TEMPORARY SEED AND MULCH ALL SLOPES UPON CONSTRUCTION.



P.O. BOX 381 nartment of GRANTSVILE, W. 20147 BOAD 1854 DOSS HELD TO LECTION

03/24/2014 080450

angleright@frontiernet.net

RECEIVED Office of Oil and Gas

