

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

March 11, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-3906372, issued to RESERVE OIL & GAS, INC., 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: STATE POLICE #1

Farm Name: WV STATE POLICE

API Well Number: 47-3906372 Permit Type: Vertical Well

Date Issued: 03/11/2015

Promoting a healthy environment.

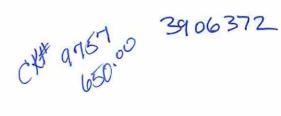
PERMIT CONDITIONS

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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.

WW - 2B (Rev. 8/10)



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

1) Well Operato	r: Reser	ve Oil &	Gas, Inc.	310-324	Kanawha	Spring Hill Corp.	Charleston West
				Operator ID	County	District	Quadrangle
2) Operator's W	/ell Numb	er: <u>State</u>	Police #1		3) Elevation:	583	
4) Well Type: (a	ı) Oil	or Ga	ıs				
(b) If Gas:	Produ	ction × / Unc	lerground Sto	rage	<u></u>	
		Deep	/ S	hallow <u>×</u>	_		
5) Proposed Ta 6) Proposed To 7) Approximate 8) Approximate	tal Depth fresh wa	: 4350 ter strata		ron/Rhinestreet Formation at F	Proposed Targ Proposed Tota	get Depth: 4 I Depth: Lowe	300 er Huron
9) Approximate	coal sea	m depths	S: None				
10) Approximate	e void de	pths,(coa	al, Karst, other):	N/A			===
11) Does land o	contain co	al seam	s tributary to act	ive mine? N	0		
			omplete			sheets if nee	eded)
ı	vith	2	stage ni	rogen	//	mul	Way
		915	frac.			Maria	13-10
13)		CA	SING AND TUE	ING PROGR	AM	00	
TYPE S	PECIFIC	ATIONS		FOOTAGE	INTERVALS	CEME	<u>VT</u>
	<u>Size</u>	<u>Grade</u>	Weight per ft	For Drilling	Left in Well	Fill -up (Cu.	Ft.)
Conductor	13 3/8"			20'		CTS	
Fresh Water	9 5/8"			270'		CTS x 40%	excess
Coal							
Intermediate	7"			1800'		CTS x 30% exce	ess in hole
Production	4 1/2"			4300'		120 s	ks
Tubing						eceived	
Liners					Office	of Oil & G	as
Packers: Kind	:				FEE	3 1 3 2015	
Size	-						
Dep	ths Set						 3/2015
							33, 13, 2010

WW-2A			1). Date:
(Rev. 6-14)			,
			2.) Operator's Well Number State Police #1
			State County Permit
			3.) API Well No.: 4/- 39 -
		STATE C	OF WEST VIRGINIA
DEPA	ARTMENT OF ENVI	RONMENT	TAL PROTECTION, OFFICE OF OIL AND GAS
	NOTICE AND	APPLICAT	TION FOR A WELL WORK PERMIT
	ner(s) to be served:	W	5) (a) Coal Operator
(a) Name	WV State Police	• 11-21	Name
Address	725 Jefferson Road		Address
(b) Name	South Charleston.	VVV 25509	(b) Coal Owner(s) with Declaration
Address			Name
71441000			Address
(c) Name			Name
Address			Address
	-		
6) Inspector	Terry Urban		(c) Coal Lessee with Declaration
Address	P.O. Box 1207	A.F.	NameAddress
Telephone	Clendenin. WV 250 304-549-5915	140	Address
relephone		SONS NA	AMED ABOVE TAKE NOTICE THAT:
x Included is th			g contract or contracts by which I hold the right to extract oil and gas
<u>OR</u>			
			2, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
application a loc	nat as required under C	napter 22-6 Iving docume	of the West Virginia Code I have served copies of this notice and nents pages 1 through on the above named parties by:
X			
-			stal receipt attached)
16	Publication (Notice		사용물이 발생하게 되었다면서 가는 그는
issued under this		ter 22-6 and	nd 35 CSR 4, and I agree to the terms and conditions of any permit
		I have perso	sonally examined and am familiar with the information submitted on
			ased on my inquiry of those individuals immediately responsible for
			in is true, accurate and complete. It is for submitting false information, including the possibility of fine and
imprisonment.	ire that there are significa	ant penalties	s for submitting false information, including the possibility of fine and
	W		Reserve Dil & Gas. Inc.
		By:	
	OFFICIAL SEAL E OF WEST VIRGINIA		: Vice President Office of Oil & Oil
	NOTARY PUBLIC Standard N. Brannon	/ ludi 655.	Spencer. WV 25276 FEB 1 3 2015
	HC 75 Box 410 hloe, WV 25235		304-927-5228
	ion Expires December 10, 2017	TIL	ddouglass@reserveoilandgas.com
Subscribed and s	worn before me this/	day of	of February , 2015

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov

My Commission Expires Oil and Gas Privacy Notice

Notary Public

SURFACE OWNER WAIVER

County	Kanawha	Operator	Reserve Oil & Gas, Inc.
	·	Operator well number	State Police #1
	INSTRUCTIONS TO SUR	FACE OWNERS NAMED ON PA	AGE 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

Time Limits and methods for filing comments. 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 a dequate delivery time or to a range 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 F orm WW2-B, a s urvey plat, and a s oil 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 PERSON		FOR EXECUTION BY A CORPORATION, ETC.		
	_ Date	Company Name	West Virginia State	Police
Signature		By Its		Date
			Deputo and of Staff	Date
	Received Office of Oil 8	Cae	Cott VI Con	2/13/15
Print Name	Office of Oil a	g Clas	Signature	Date
	FEB 1 3 20	15		

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Kanawha Operator Reserve Oil & Gas, Inc.	Operator's Well Number	State Police #1
INSTRUCTIONS TO CO	AL OPERATOR, OWNER	R, OR LESSEE
To the coal operator, owner, or less any objection you wish to make or are requ with the Chief of the Office of Oil and Gas by the Office. Mail objections to:	uired to make by WV Code	e 22-6-15, 16 or 17, must be filed
Chief, Office of Oil and Gas Department of Environmental Protection 601 57 th St. SE Charleston, WV 25304 (304) 926-0499 extension 1654		
	WAIVER	
The undersigned coal operatorlocation has examined this proposed well I location, the well location has been added work proposed to be done at this location, requirements of the West Virginia Code an FOR EXECUTION BY A NATURAL PERSON	ocation. If a mine map ex to the mine map. The und provided, the well operato d the governing regulation	ists which covers the area of well dersigned has no objection to the r has complied with all applicable
Date	Company Name	
Signature	By Its	Date
	Sign	ature Date
		rator.or lessee bcol/seam on this tract Received Office of Oil & Gas

03/13/2015

Operator's Well Number State Police #1

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
WV State Police	Reserve Oil & Gas Inc.	1/8	not yet recorded/attached

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 he reby a cknowledges 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 ac quired from the appr opriate aut hority before the affected activity is initiated.

Received

Well Operator:
By:Its:

Reserve Oil Gas, Inc.
Office of Oil & Gas

Vide President

FEB 1 3 2015

MEMORANDUM OF LEASE AGREEMENT

This MEMORANDUM made this 22 day of finning, 2015, by and between

West Virginia State Police 725 Jefferson Road South Charleston, WV 25309

herein referred to as "Lessor" and Reserve Oil and Gas. Inc, a West Virginia Corporation, herein referred to as "Lessee." Lessor and Lessee are sometimes herein referred to as the "parties."

WITNESSETH: that the parties hereto do hereby make and enter into this Memorandum of Lease Agreement memorializing the following:

These parties have this day entered into an Oil and Gas Agreement whereby the Lessor did lease to Lessee its interests in certain property consisting of 9.270 acres more or less, situated in Spring Hill Corp. District, Kanawha County, West Virginia, and being bounded now or formerly substantially as follows, to wit:

Tax Map_10 Parcel(s) 5, 6 as more fully described in Deed Book 465 Page 457.

WATERS OF: Davis Creek

ON THE NORTH BY: South Charleston Rec Center

ON THE EAST BY: Jefferson Road ON THE SOUTH BY: Kanawha Turnpike

ON THE WEST BY: Kenna Homes

for the purpose of drilling oil and/or gas wells thereon, all under and pursuant to the terms and provisions set out in said Oil and Gas Lease Agreement.

This Memorandum shall and does constitute notice to all to whom these presents may come that the above described property(s) are included in and affected by said Oil and Gas Lease Agreement of even date herewith

WITNESS the following signatures and seals:

THE WEST VIRGINIA STATE POLICE

Colonel C.R. (Jay) Smithers

Superintendent

RESERVE OIL & GAS, INC.

Jacob Scott Freshwater, Vice-President

03/13/2015

Received Office of Oil & Gas

ACKNOWLEDGEMENT

State of West Virginia County of Kanawha } To-wit: Virginia State Police. (Jay) Smithers, the Superintendent of the West Given under my hand this 23rd day of January, 2015. OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
MELINDA CRADDOCK
725 JEFFERSON ROAD
SOUTH CHARLESTON, WV 2830 My Commission expires: 3000 **ACKNOWLEDGEMENT** State of West Virginia County of Roane } To wit I, William Tooy Ing Jo, A Notary Public of said County do hereby certify that Jacob Scott Freshwater whose name is signed to the within writing has this day acknowledged the same to be his voluntary act and deed as such Officer and the voluntary act and deed of Reserve Oil & Gas, Inc. before me in my said county. Given under my hand this 28th day of January, 2015. Notary Public

My Commission expires April 27, 2017

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
WILLIAM T DOUGLASS, JR
204 SENECA VALLEY ESTATES
CHARLESTON, WV 25320
My commission expires April 27, 2017

Prepared by:

Reserve Oil & Gas, Inc. 929 Charleston Road Spencer, WV 25276

03/13/2015

Received
Office of Oil & Gas

WW-2B1
(5-12)

Well No.	State Police #1	
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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.

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

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Labora Sampling Contr		ALS Environmental Lab	91	
Well Operator	Reserve Oil & G	as Inc.		
Address	929 Charleston	Road		
	Spencer, WV 2	5276		
Telephone	304-927-5228			

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, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

No known water wells or springs within 2,000 feet of well location. WW-9 (5/13)

	Page of
API Number 47 -	
Operator's Well N	O. State Police #1

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_Reserve C	oil & Gas, Inc.	OP Code	
Watershed (HUC 10) Day	vis Creek & Kanawha River	Quadrangle Charleston West	
Elevation 583	County	District Spring Hil	l Corp.
Do you anticipate using m Will a pit be used for drill If so, please desc	cuttings? Yes × No Sel Water to employ cuttings? Yes × Gel Water	ete the proposed well work? Yes -13-15 r, Drill Cuttings, fresh water	
Will a synthetic I	iner be used in the pit? Yes x	No If so, what ml.? 20	
Proposed Dispose	al Method For Treated Pit Wastes:		
-	Reuse (at API NumberOff Site Disposal (Supply form WW	Number	
Will closed loop system be	e used? N/A		
		pased, etc. air, gel, fresh water	
-If oil based, wha	at type? Synthetic, petroleum, etc.		
		offsite, etc. leave in pit	
		used? (cement, lime, sawdust) soil/dirt	
	ž		
on August 1, 2005, by the provisions of the permit a law or regulation can lead I certify under p application form and all obtaining the information	Office of Oil and Gas of the West Vi are enforceable by law. Violations of to enforcement action. The enalty of law that I have personally attachments thereto and that, based	conditions of the GENERAL WATER Perginia Department of Environmental Profany term or condition of the general perexamined and am familiar with the indon my inquiry of those individuals rue, accurate, and complete. I am away lity of fine or imprisonment.	tection. I understand that the ermit and/or other applicable aformation submitted on this immediately responsible for are that there are significant Received
Company Official Signatu	ire A A		Office of Oil & Gas
	Name J. Scott Freshwater		FEB 1 3 2015
Company Official Title_\	1.1		
Subscribed and sworn before the subscribed and subscri	ore me this 13 day of day of December 10, 201	February , 20 15 Notary Public	

Form WW-9			Operator's W	_{Vell No.} State Poli
Proposed Revegetation Treat			Prevegetation pl	5.5
Lime 3	Tons/acre or to co	rrect to pH 6.5	5	
Fertilizer (10-20-20	or equivalent) 0.25	lbs/acre ((500 lbs minimum)	
_{Mulch} Hay	2	Tons/acre		
		Seed Mixt	tures	
Are				ea II
Seed Type Orchard Grass	lbs/acre 25	f	Seed Type adino Clover	lbs/acre 5
Red Top Clover	15		Y 31	40
Trou Top Glovel				
Attach: Drawing(s) of road, location, Photocopied section of involv			on.	
Plan Approved by:	~ / /	la		
/				
Comments:				

Received Office of Oil & Gas

Field Reviewed?

___) No

_) Yes

NOTE:

Any Trees 6" or larger in Diameter will be cut and piled. Brush will be used as Sediment Barriers.

Tempory seed and mulch all slopes upon construction.

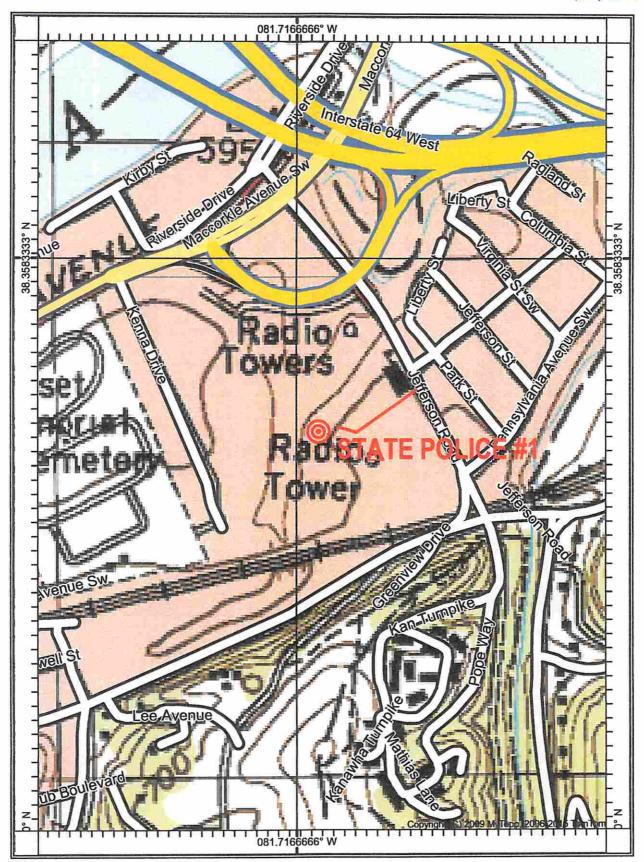
Stone over all Culverts and entrance off existing roadway.

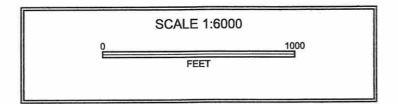
STATE POLICE #1

NOTE:

PIT SIZE: 25'X80' \(\frac{1}{2} \)
LOCATION SIZE: 100'X150' \(\frac{1}{2} \)







Office of Oil & Gas FEB 1 3 2015

03/13/2015

